

**2007 Gasification Database
Active and Planned
Commercial Gasification Plants**

**2007 Gasification Database
Plants sorted by Country**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	223	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1979
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Ultrafertil S.A.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Ultrafertil S.A.					Plant Name:	Araucária Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Ultrafertil S.A.	Facility Name:	Araucária Fertilizer Plant
Location: (City/State/Prov)	Araucária	Facility Type:	Chemical Plant
(Country)	Brazil	Facility Status:	Operating
(Region)	Central & South America/Caribbean		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,135.2 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Asphalt residue	1,135 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,575 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	246.4 <small>(Calculated)</small>	
			Fuel Input:	550.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	451.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling: <small>(MWth Duty)</small>
			<small>(Cooler Supplier)</small>		
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH				Constructor: Lurgi GmbH
			Engineer:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	372	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Opti Canada				Plt. Owner Type:				
Plt. Operator:	Opti Canada				Plant Name:	Long Lake Integrated Upgrading Project			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Opti Canada	Facility Name:	Opti Canada Refinery
Location: (City/State/Prov)	Port McMurray	Facility Type:	Refinery
(Country)	Canada	Facility Status:	Planning
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>		
Feed1:	Asphalt	3,100 mt/d				
Feed2:		0				
Feed3:		0				
Main Product:	Gaseous fuels <small>(Category)</small>					
Product1:	H2	0				
Product2:	Steam	0				
Product3:	Power	0				
			Syngas Cap.:	7,500,000 <small>(Nm3/d)</small>		<small>(Source)</small>
			Eq. IGCC Cap., MWe:	559.9 <small>(Calculated)</small>		
			Fuel Input:	0.0 <small>(MWt)</small>		<small>(Source)</small>
			Syngas Output:	1,025.0 <small>(MWt)</small>		<small>(Source)</small>

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0				
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:							
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>		<small>(Process)</small>		
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	0	<small>(MWout)</small>		
Steam Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 15 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1983
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Zhenhai Refining & Chemical Co. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Zhenhai Refining & Chemical Co. Plant Name: Zhenhai Ammonia Plant
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Zhenhai Refining & Chemical Co. Facility Name: Zhenhai Refinery
Location: (City/State/Prov) Ningbo, Zhejiang Facility Type: Refinery
(Country) China Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 722.5 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Visbreaker residue 900 mt/d Syngas Cap.: 2,100,000 Estimate
Feed2: () () (Nm³/d) (Source)
Feed3: () () Eq. IGCC Cap., MWe: 156.8
(Calculated)
Main Product: Chemicals Fuel Input: 350.0 Estimate
(Category) (MWt) (Source)
Product1: Ammonia 1,000 mt/d Syngas Output: 287.1 Estimate
Product2: () () (MWt) (Source)
Product3: () ()

Other Information

O₂ Supply: Oxygen () ()
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler () () Soot Handling: ()
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: () () Sulfur Removal: () ()
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: () () () ()
(No.) (Supplier) (Model) (MWout)
HRSG: () () () () Steam Turbine: () () () ()
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube Engineer: Ube Constructor: Ube

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 154 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** July 1987
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: China National Technology Import Co. (CNTIC) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: China National Technology Import Co. (CNTIC) **Plant Name:** Shaanxi Ammonia Plant
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: China National Technology Import Co. (CNTIC) **Facility Name:** Shaanxi Chemical Fertilizer Plant
Location: (City/State/Prov) Shaanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,050.0 (mt/d) Estimate (Source)
Feed1: Anthracite 1,200 mt/d **Syngas Cap.:** 2,282,492 (Nm3/d) Estimate (Source)
Feed2:
Feed3:
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 367.1 (MWt) Estimate (Source)
Product1: Ammonia mt/d **Syngas Output:** 312.0 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	224	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:		1987	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Qilu Petrochemical Ind.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Qilu Petrochemical Ind.					Plant Name:	Zibu Methanol/Oxochemicals Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Qilu Petrochemical Ind.	Facility Name:	Zibu Chemical Plant
Location: (City/State/Prov)	Zibu, Shandong	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	245.9 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	246 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	mt/d			
Product2:	Oxochemicals	mt/d			
Product3:					
			Syngas Cap.:	715,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	53.4 <small>(Calculated)</small>	
			Fuel Input:	119.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	97.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:				
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:	
			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>
			Steam Turbine:	
			<small>(No.)</small>	<small>(Supplier)</small>
				<small>(Model)</small>
				<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:	
			Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 8 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1988
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd. **Plant Name:** Ningxia Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd. **Facility Name:** Ningxia Chemical Works
Location: (City/State/Prov) Xishi District, Yinchuan, Ningxia **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 865.0 (mt/d) Estimate (Source)
Feed1: Visbreaker residue 1,000 mt/d **Syngas Cap.:** 2,500,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 186.6 (Calculated)
Feed3: **Fuel Input:** 416.8 (MWt) Estimate (Source)
Main Product: Gaseous fuels (Category) **Syngas Output:** 341.8 (MWt) Gasifier licensor data (Source)
Product1: Gases MMscf/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Ube **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	<input type="text" value="226"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="0"/> / <input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1991"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Fushun Detergent Co."/>		Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>			
Plt. Operator:	<input type="text" value="Unspecified operator"/>		Plant Name:	<input type="text" value="Fushun Oxochemicals Plant"/>			
Gas'n Tech.:	<input type="text" value="Shell Gasification Process"/>	<input type="text" value="Shell"/>	<input type="text" value="Entrained-flow gasification"/>				
	(Technology Name)	(Licensor)	(Technology Type)				
Vendor Contact:	<input type="text" value="Dr. Ir. Piet L. Zuideveld"/>		<input type="text" value="Piet.Zuideveld@shell.com"/>				
	(Contact)	(Email)					

Facility Information

Facility Owner:	<input type="text" value="Fushun Detergent Co."/>	Facility Name:	<input type="text" value="Fushun Chemical Plant"/>
Location: (City/State/Prov)	<input type="text" value="Fushun, Liaoning"/>	Facility Type:	<input type="text" value="Chemical Plant"/>
(Country)	<input type="text" value="China"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Asia/Australia"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Liquid"/>	<input type="text" value="Petroleum"/>	Rate (MAF):	<input type="text" value="20.6"/>	<input type="text" value="Estimate"/>
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	<input type="text" value="Vac. residue"/>	<input type="text" value="21 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	(Category)				
Product1:	<input type="text" value="Oxochemicals"/>	<input type="text" value="mt/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
Syngas Cap.:	<input type="text" value="60,000"/>	<input type="text" value="Gasifier licensor"/>			
	(Nm3/d)	(Source)			
Eq. IGCC Cap., MWe:	<input type="text" value="4.5"/>				
	(Calculated)				
Fuel Input:	<input type="text" value="10.0"/>	<input type="text" value="Gasifier licensor data"/>			
	(MWt)	(Source)			
Syngas Output:	<input type="text" value="8.2"/>	<input type="text" value="Gasifier licensor data"/>			
	(MWt)	(Source)			

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text" value="Fire-tube boiler"/>	<input type="text"/>	<input type="text"/>
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	(Supplier)
Sulfur Removal:	<input type="text"/>	<input type="text"/>	
	(Supplier)	(Process)	
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (Production)
Steam Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	<input type="text" value="Lurgi GmbH"/>		<input type="text"/>
Engineer:	<input type="text"/>		Constructor: <input type="text" value="Lurgi GmbH"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 11 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** April 1993
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lu Nan Chemical Industry (Group) Co./CNTIC **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lu Nan Chemical Industry (Group) Co./CNTIC **Plant Name:** Lu Nan Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Lu Nan Chemical Industry (Group) Co./CNTIC **Facility Name:** Lu Nan Chemical Complex
Location: (City/State/Prov) Tengxian, Shandong **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 246.0 (mt/d) Estimate (Source)
Feed1: Bit. coal 350 mt/d **Syngas Cap.:** 525,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 39.2 (Calculated)
Feed3: **Fuel Input:** 95.7 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 71.8 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 200 mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Bechtel **Engineer:** First Design Institute of China **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 160 **No. of Gasifiers: Op'g/Sp/Total** 6/ 2/ 8 **Gasifier Status:** Operating **Start Date:** 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Pacific Chemical (Group) Co., Ltd. **Plant Name:** Wujing Gas Plant No. 2
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) _____ (Email)

Facility Information

Facility Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Facility Name:** Wujing Coking and Chemical Plant
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** _____ (mt/d) _____ (Source)
Feed1: Bit. coal 800 mt/d
Feed2: _____
Feed3: _____
Main Product: Gaseous fuels (Category)
Product1: Fuel gas 3,000,000 Nm3/d
Product2: Town gas 500,000 Nm3/d
Product3: _____
Syngas Cap.: 3,000,000 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 224.0 (Calculated)
Fuel Input: 512.6 Estimate (MWt) (Source)
Syngas Output: 410.1 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** Design Institute of Shanghai **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	229	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1996
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Juijiang Petrochemical Co.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Juijiang Petrochemical Co.					Plant Name:	Juijiang Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Juijiang Petrochemical Co.	Facility Name:	Juijiang Fertilizer Plant
Location: (City/State/Prov)	Juijiang, Jiangxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	725.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	672 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
	<small>(Cooler Supplier)</small>			<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:		
	<small>(Supplier)</small>		<small>(Supplier)</small>	<small>(Constructor)</small>	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production)

Steam Turbine:
(No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: 391 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Chemical & Coking (Shanghai Pacific) **Plant Name:** Gas Plant No. 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Facility Name:** Gas Plant No. 2
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: Town gas 0
Product3: Acetic acid 0
Syngas Cap.: 765,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 57.1 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 104.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

22-Jul-04

Key Gasifier Information

Facility ID:	228	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Lanzhou Chemical Industrial Co.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Lanzhou Chemical Industrial Co.					Plant Name:	Lanzhou Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>		
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Lanzhou Chemical Industrial Co.	Facility Name:	Lanzhou Chemical Plant
Location: (City/State/Prov)	Lanzhou, Gansu	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural Gas	700 mt/d					
Feed2:							
Feed3:							
Main Product:	Chemicals <small>(Category)</small>						
Product1:	Ammonia	mt/d					
Product2:							
Product3:							
			Syngas Cap.:	2,100,000	Gasifier licensor		
				<small>(Nm3/d)</small>	<small>(Source)</small>		
			Eq. IGCC Cap., MWe:	156.8			
				<small>(Calculated)</small>			
			Fuel Input:	350.1	Gasifier licensor data		
				<small>(MWt)</small>	<small>(Source)</small>		
			Syngas Output:	287.1	Gasifier licensor data		
				<small>(MWt)</small>	<small>(Source)</small>		

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:				
				<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	185	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	Aug. 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Huainan General Chemical Works			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Huainan General Chemical Works			Plant Name:	Hefei City Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Huainan General Chemical Works	Facility Name:	Hefei City Chemical Plant
Location:	(City/State/Prov) Hefei City, Anhui	Facility Type:	Chemical Plant
	(Country) China	Facility Status:	Operating
	(Region) Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	655.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	898 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	667 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	104.5 <small>(Calculated)</small>	
			Fuel Input:	255.2 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	191.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				Soot Handling:
		<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	Steam Turbine:
					<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:		Engineer:	Ube	Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	42	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	2000	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Henan				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Henan				Plant Name:	Puyang Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Henan	Facility Name:	Puyang Chemical Fertilizer Plant
Location: (City/State/Prov)	Puyang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4 <small>(Calculated)</small>	
			Fuel Input:	367.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	312.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm <small>(Supplier)</small>	Claus <small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 394 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:** _____
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Zhong Yuan Dahua Group Ltd.
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:** _____
Location: (City/State/Prov) Puyang, Henan **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 2,282,492 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Fuel Input: 367.0 (MWt) _____ (Source)
Syngas Output: 312.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	122	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	May 2002
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Nanjing Chemical Industry Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Nanjing Chemical Industry Co.			Plant Name:	Nanjing Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Nanjing Chemical Industry Co.		Facility Name:	Nanjing Chemical Plant	
Location: (City/State/Prov)	Nanjing, Jiangsu		Facility Type:	Chemical Plant	
(Country)	China		Facility Status:	Operating	
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	769.0 (mt/d)	Estimate (Source)
Feed1:	Eureka pitch	385 mt/d			
Feed2:	Vacuum residue oil	385 mt/d			
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	2,200,000 (Nm3/d)	Gasifier contractor (Source)
Product1:	Ammonia	1,000 mt/d	Eq. IGCC Cap., MWe:	164.2 (Calculated)	
Product2:			Fuel Input:	346.0 (MWt)	Gasifier contractor (Source)
Product3:			Syngas Output:	300.8 (MWt)	Estimate (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Products & Chemicals, Inc. (ASU Supplier)	N2 feeds NH3 prod'n (ASU Integration)	
Syngas Cooler:	Direct water quench cooler (Cooler Type)		Soot Handling:	Flash & filtration
Gas Cleanup:	Linde AG (Supplier)	Rectisol (Process)	Sulfur Removal:	Outside Battery Limits (Process)
Gas Turbine:				
HRSG:			Steam Turbine:	
Prin. Contractor:	Snamprogetti		Engineer:	Snamprogetti
			Constructor:	Nanjing Chemical Industry Co.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID: 390 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2004
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Haolianghe Ammonia Plant **Plt. Owner Type:** _____
Plt. Operator: Haolianghe Ammonia Plant **Plant Name:** Haolianghe Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: _____ **Facility Name:** Haolianghe Ammonia Plant
Location: (City/State/Prov) Haolianghe **Facility Type:** _____
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: _____ 0
Product3: _____ 0
Syngas Cap.: 1,474,620 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 110.1 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 201.6 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	383	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	2004
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	China 1 (Expansion)			Plt. Owner Type:			
Plt. Operator:				Plant Name:	China 1		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	China 1 (Expansion)	Facility Name:	China 1
Location: (City/State/Prov)	Haolianghe, Heilongjiang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	0				Syngas Cap.:	2,045,000 <small>(Nm3/d)</small>
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	152.7 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt)</small>
Product1:	Methanol	0				Syngas Output:	279.6 <small>(MWt)</small>
Product2:		0					
Product3:		0					

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:			0	Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:				Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:	0		0	Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: 375 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Development **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Liuzhou Chemicals **Plt. Owner Type:** _____
Plt. Operator: Liuzhou Chemicals **Plant Name:** _____
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Liuzhou Chemicals **Facility Name:** _____
Location: (City/State/Prov) Liuzhou, Guanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 1,200 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 1,700,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 126.9 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 232.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 367 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Sinopec **Plt. Owner Type:** _____
Plt. Operator: Sinopec **Plant Name:** Sinopec, Zhijiang
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Sinopec **Facility Name:** _____
Location: (City/State/Prov) Zhijiang, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 2,000 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 273.4 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	388	No. of Gasifiers: Op'g/Sp/Total	1	/	0	/	1	Gasifier Status:	Operating	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:			
Plt. Owner:	China 4				Plt. Owner Type:						
Plt. Operator:					Plant Name:	China 4					
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>			Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	China 4	Facility Name:	China 4
Location: (City/State/Prov)		Facility Type:	
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0				
Feed2:	Petcoke		0				
Feed3:			0				
Main Product:	Chemicals <small>(Category)</small>						
Product1:	Ammonia		0				
Product2:	Urea		0				
Product3:			0				
	Syngas Cap.:	2,100,000					
		<small>(Nm3/d)</small>	<small>(Source)</small>				
	Eq. IGCC Cap., MWe:	156.8					
		<small>(Calculated)</small>					
	Fuel Input:	0.0					
		<small>(MWt)</small>	<small>(Source)</small>				
	Syngas Output:	287.1					
		<small>(MWt)</small>	<small>(Source)</small>				

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0	Soot Handling:			
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:			Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	Steam Turbine:		0	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 364 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Shuanghuan Chemical **Plt. Owner Type:** _____
Plt. Operator: Shuanghuan Chemical **Plant Name:** Shell Shuanghuan Chemical
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shuanghuan Chemical **Facility Name:** _____
Location: (City/State/Prov) Yingcheng, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 900 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 177.7 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	336	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Hubei Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Hubei Fertilizer Plant
Location: (City/State/Prov)	Yincheng, Hubei	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,550.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,500,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	261.3 <small>(Calculated)</small>	
			Fuel Input:	598.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	335	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Dong Ting Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Dong Ting Fertilizer Plant
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			Syngas Cap.:
Feed2:					3,410,000 <small>(Nm3/d)</small>
Feed3:					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	254.6 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>				Fuel Input:
Product1:	Ammonia	mt/d			582.7 <small>(MWt)</small>
Product2:					Gasifier licensor data <small>(Source)</small>
Product3:					Syngas Output:
					466.2 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:	
Gas Cleanup:				Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
				Steam Turbine:	
				<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID:	386	No. of Gasifiers: Op'g/Sp/Total	3/0/3	Gasifier Status:	Development	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	
Plt. Owner:	China 5			Plt. Owner Type:			
Plt. Operator:				Plant Name:	China 5		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	China 5	Facility Name:	China 5
Location: (City/State/Prov)		Facility Type:	
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Coal <small>(Category)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	0			Syngas Cap.:	2,080,000 <small>(Nm3/d)</small>
Feed2:		0			Eq. IGCC Cap., MWe:	155.3 <small>(Calculated)</small>
Feed3:		0			Fuel Input:	0.0 <small>(MWt)</small>
Main Product:	Chemicals <small>(Category)</small>				Syngas Output:	284.3 <small>(MWt)</small>
Product1:	Methanol	0				
Product2:		0				
Product3:		0				

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:			0	Soot Handling: 	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:			Sulfur Removal: 		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier) (Process)</small>		
Gas Turbine:	0		0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:	0		0	Steam Turbine: 0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		
	<small>(Contractor)</small>			<small>(Engineer)</small>	
			Constructor:		
	<small>(Contractor)</small>			<small>(Constructor)</small>	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	398	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Weihe Chemical Company			Plt. Owner Type:			
Plt. Operator:	Weihe Chemical Company			Plant Name:	Weihe Chemical		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Weihe Chemical Company		Facility Name:		
Location: (City/State/Prov)	Weinan, Shaanxi		Facility Type:		
(Country)	China		Facility Status:		
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)	(Source)
Feed1:	Coal	0			
Feed2:		0			
Feed3:		0			
Main Product:	Chemicals (Category)		Syngas Cap.:	2,900,000 (Nm3/d)	(Source)
Product1:	0		Eq. IGCC Cap., MWe:	216.5 (Calculated)	
Product2:	0		Fuel Input:	527.0 (MWt)	(Source)
Product3:	0		Syngas Output:	395.0 (MWt)	(Source)

Other Information

O2 Supply:							
(Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:		0	Soot Handling:				
(Cooler Type)	(Cooler Supplier)	(MWth Duty)					
Gas Cleanup:			Sulfur Removal:				
(Supplier)	(Process)	(Supplier)	(Process)				
Gas Turbine:	0	0					
(No.)	(Supplier)	(Model)	(MWout)				
HRSG:	0	0	Steam Turbine:	0	0		
(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 380 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yunzhanhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yunzhanhua Chemicals **Plant Name:** Huashan Yunzhanhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yunzhanhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Huashan, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID: 382 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Engineering **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yongcheng Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yongcheng Chemicals **Plant Name:** _____
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yongcheng Chemicals **Facility Name:** _____
Location: (City/State/Prov) Yongcheng, Henan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,150 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: 0
Product3: 0
Syngas Cap.: 3,100,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 231.4 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 424.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 403 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Construction **Start Date:** 2008
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:** _____
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Puyang Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:** _____
Location: (City/State/Prov) Puyang, Henan **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 3,410,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 254.6 (Calculated)
Fuel Input: 578.0 (MWt) _____ (Source)
Syngas Output: 463.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 401 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Construction **Start Date:** 2008
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Henan Yima Kaixiang Group **Plt. Owner Type:** _____
Plt. Operator: Kaixiang **Plant Name:** Kaixiang Chemical Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Kaixiang **Facility Name:** _____
Location: (City/State/Prov) Yima, Henan **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 1,720,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 128.4 (Calculated)
Fuel Input: 321.0 (MWt) _____ (Source)
Syngas Output: 257.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 399 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Construction **Start Date:** 2009
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Fujian **Plt. Owner Type:** _____
Plt. Operator: Fujian **Plant Name:** Fujian Refinery Ethylene Project (FREP)
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Fujian **Facility Name:** Fujian Refinery Ethylene Project (FREP)
Location: (City/State/Prov) Fujian **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Petroleum 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: Chemicals (Category)
Product1: _____ 0
Product2: _____ 0
Product3: _____ 0
Syngas Cap.: 6,350,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 474.0 (Calculated)
Fuel Input: 1,059.0 (MWt) _____ (Source)
Syngas Output: 858.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	404	No. of Gasifiers: Op'g/Sp/Total	2 /	0 /	2	Gasifier Status:	Development	Start Date:	2010			
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning			Application:	Syngas for Chemicals	
Plt. Owner:	Tianjin Bohai Chemical Group					Plt. Owner Type:						
Plt. Operator:	Tianjin Bohai Chemical Group					Plant Name:	Tianjin Chemical Plant					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	Tianjin Bohai Chemical Group			Facility Name:			
Location: (City/State/Prov)	Tianjin			Facility Type:			
(Country)	China			Facility Status:			
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>	 <small>(Source)</small>						
Feed1:	Coal	0				Syngas Cap.:	8,250,000 <small>(Nm3/d)</small>	 <small>(Source)</small>			
Feed2:		0				Eq. IGCC Cap., MWe:	615.9 <small>(Calculated)</small>				
Feed3:		0				Fuel Input:	1,405.0 <small>(MWt)</small>	 <small>(Source)</small>			
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	1,124.0 <small>(MWt)</small>	 <small>(Source)</small>			
Product1:		0									
Product2:		0									
Product3:		0									

Other Information

O2 Supply:	 <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>								
Syngas Cooler:	 <small>(Cooler Type)</small>	 <small>(Cooler Supplier)</small>	0 <small>(MWth Duty)</small>	Soot Handling:							
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>	 <small>(Process)</small>						
Gas Turbine:	0 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	0 <small>(MWout)</small>							
HRSG:	0 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	0 <small>(Production)</small>	Steam Turbine:	0 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	0 <small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:					

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	405	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Development	Start Date:		2010
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Chemicals	
Plt. Owner:	Unspecified Owner					Plt. Owner Type:				
Plt. Operator:	Unspecified Owner					Plant Name:	Guizhou Chemical Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified Owner			Facility Name:		
Location: (City/State/Prov)	Guizhou			Facility Type:		
(Country)	China			Facility Status:		
(Region)	Asia/Australia					

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>		
Feed1:	Coal			0		
Feed2:				0		
Feed3:				0		
Main Product:	Chemicals <small>(Category)</small>					
Product1:				0		
Product2:				0		
Product3:				0		
			Syngas Cap.:	4,125,000 <small>(Nm3/d)</small>		<small>(Source)</small>
			Eq. IGCC Cap., MWe:	307.9 <small>(Calculated)</small>		
			Fuel Input:	703.0 <small>(MWt)</small>		<small>(Source)</small>
			Syngas Output:	562.0 <small>(MWt)</small>		<small>(Source)</small>

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:				0	Soot Handling:		
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:							
	<small>(Supplier)</small>		<small>(Process)</small>	<small>(Sulfur Removal)</small>			
	<small>(Supplier)</small>		<small>(Process)</small>	<small>(Supplier)</small>			
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	406	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Chemicals	
Plt. Owner:	Unspecified Owner				Plt. Owner Type:					
Plt. Operator:	Unspecified Owner				Plant Name:	Inner Mongolia Chemical Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified Owner			Facility Name:	Inner Mongolia Chemical Plant		
Location: (City/State/Prov)	Inner Mongolia			Facility Type:			
(Country)	China			Facility Status:			
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>		
Feed1:	Coal		0			
Feed2:			0			
Feed3:			0			
Main Product:	Chemicals <small>(Category)</small>					
Product1:			0			
Product2:			0			
Product3:			0			
	Syngas Cap.:	24,750,000				
		<small>(Nm3/d)</small>	<small>(Source)</small>			
	Eq. IGCC Cap., MWe:	1,847.6				
		<small>(Calculated)</small>				
	Fuel Input:	4,216.0				
		<small>(MWt)</small>	<small>(Source)</small>			
	Syngas Output:	3,373.0				
		<small>(MWt)</small>	<small>(Source)</small>			

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:			0	Soot Handling: 	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal: 		
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>
Gas Turbine:	0		0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:	0		0	Steam Turbine: 0 0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
				<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	333	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Sokolovska Uhelna, A.S.		Plt. Owner Type:	Mining Company			
Plt. Operator:	Sokolovska Uhelna, A.S.		Plant Name:	Thermoselece Vresova			
Gas'n Tech.:	Siemens SFG Gasification Process (Technology Name)	Siemens Power Generation (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Harry Morehead (Contact)	harry.morehead@siemens.com (Email)					

Facility Information

Facility Owner:	Chemoprojekt, a.s.	Facility Name:	Thermoselece Vresova
Location: (City/State/Prov)	Vresova	Facility Type:	Lignite Processing
(Country)	Czech Republic	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):			
			(mt/d)	(Source)		
Feed1:	Lignite	1,968 mt/d				
Feed2:						
Feed3:						
Main Product:	Gaseous fuels (Category)					
Product1:						
Product2:						
Product3:						
			Syngas Cap.:	750,147 (Nm3/d)	Gasifier licensor (Source)	
			Eq. IGCC Cap., MWe:	56.0 (Calculated)		
			Fuel Input:	175.0 (MWt)	Estimate (Source)	
			Syngas Output:	140.0 (MWt)	Estimate (Source)	

Other Information

O2 Supply:	Oxygen (Oxidant)					
	(ASU Supplier)	(ASU Integration)				
Syngas Cooler:				Soot Handling:		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:		Rectisol (Process)	Sulfur Removal:			
	(Supplier)			(Supplier)	(Process)	
Gas Turbine:	2 (No.)	General Electric Co. (Supplier)	9E (Model)	400 (MWout)		
HRSG:						
	(No.)	(Supplier)	(Model)	(Production)		
Steam Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
Prin. Contractor:			Engineer:	Krupp Unde/Lurgi Envirotherm	Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 09-Dec-99

Key Gasifier Information

Facility ID:	103	No. of Gasifiers: Op'g/Sp/Total	12/	0/	12	Gasifier Status:	Operating	Start Date:	1971	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Gases	
Plt. Owner:	Falconbridge Dominicana				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Falconbridge Dominicana				Plant Name:	Santo Domingo Syngas Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Falconbridge Dominicana	Facility Name:	Santo Domingo Chemical Plant
Location: (City/State/Prov)	Santo Domingo	Facility Type:	Chemical Plant
(Country)	Dominican Republic	Facility Status:	Operating
(Region)	Central & South America/Caribbean		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	495.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	496 mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels <small>(Category)</small>				
Product1:	Reducing gas	MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	1,440,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	107.5 <small>(Calculated)</small>	
			Fuel Input:	240.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	196.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	None <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

08-Dec-99

Key Gasifier Information

Facility ID:	90	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Jan.	1965	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Kemira Chemicals Oy					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Kemira Chemicals Oy					Plant Name:	Oulu Syngas Plant-I				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Kemira Chemicals Oy					Facility Name:	Oulu Chemical Plant				
Location: (City/State/Prov)	Oulu					Facility Type:	Chemical Plant				
(Country)	Finland					Facility Status:	Operating				
(Region)	Europe										

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	105.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil			bbl/d	
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	300,000	Nm3/d		
Product2:					
Product3:					
				Syngas Cap.:	300,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	22.4 <small>(Calculated)</small>
				Fuel Input:	50.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	41.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Lurgi GmbH			Engineer:	
				Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 314 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: Jan. 1998
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Power
Plt. Owner: Lahden Lämpövoima Oy Plt. Owner Type: Utility
Plt. Operator: Lahden Lämpövoima Oy Plant Name: Kymijärvi ACFBG Plant
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier Foster Wheeler International Fluidized-bed gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: John Hemmings john_hemmings@fwc.com
(Contact) (Email)

Facility Information

Facility Owner: Lahden Lämpövoima Oy Facility Name: Kymijärvi Power Station
Location: (City/State/Prov) Lahti Facility Type: Electric Utility
(Country) Finland Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste Rate (MAF): (mt/d) (Source)
(Category) (Classification)
Feed1: Biofuels mt/d Syngas Cap.: 351,118 Estimate
(Nm3/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 26.2
(Calculated)
Feed3: Fuel Input: 60.0 Gasifier licensor data
(MWt) (Source)
Main Product: Power Syngas Output: 48.0 Estimate
(Category) (MWt) (Source)
Product1: Electricity 42 MWe
Product2: District heat
Product3:

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: 1 (No.) (Supplier) (Model) 49 (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

21-Feb-01

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	298	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	MSK-Radna			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	MSK-Radna			Plant Name:	Methanol Plant		
Gas'n Tech.:	GE Gasification Technology		GE		Entrained-flow gasification		
	<small>(Technology Name)</small>		<small>(Licensor)</small>		<small>(Technology Type)</small>		
Vendor Contact:	Tim Huskey			timothy.huskey@ge.com			
	<small>(Contact)</small>			<small>(Email)</small>			

Facility Information

Facility Owner:	MSK-Radna	Facility Name:	Kikinda Chemical Plant
Location: (City/State/Prov)	Kikinda	Facility Type:	Chemical Plant
(Country)	Former Yugoslavia	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous	Gas	Rate (MAF):		
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Natural gas	23 MMscf/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Methanol	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,540,000	Gasifier licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	115.0	
				<small>(Calculated)</small>	
			Fuel Input:	247.6	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	210.5	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Radiant syngas cooler		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier) (MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier) (Process)</small>		<small>(Supplier) (Process)</small>
Gas Turbine:			
	<small>(No.) (Supplier)</small>	<small>(Model) (MWout)</small>	
HRSG:			
	<small>(No.) (Supplier)</small>	<small>(Model) (Production)</small>	<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:	Technip		
	<small>(Engineer)</small>		<small>(Constructor)</small>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	119	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Operating	Start Date:	1977
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Oxochimie S.A.		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Oxochimie S.A.		Plant Name:	Lavéra Syngas Plant			
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Oxochimie S.A.	Facility Name:	Lavéra Plant
Location: (City/State/Prov)	Lavéra	Facility Type:	Chemical Plant
(Country)	France	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):		
			(mt/d)	(Source)	
Feed1:	Natural gas	9 MMscf/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	590,976 (Nm3/d)	Gasifier contractor (Source)
			Eq. IGCC Cap., MWe:	44.1 (Calculated)	
			Fuel Input:	98.5 (MWt)	Estimate (Source)
			Syngas Output:	80.8 (MWt)	Estimate (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)				
	(ASU Supplier)		(ASU Integration)		
Syngas Cooler:	Radiant syngas cooler (Cooler Type)	MAN GHH AG (Cooler Supplier)		Soot Handling:	
			(MWth Duty)		
Gas Cleanup:			Sulfur Removal:		
	(Supplier)	(Process)	(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:				Steam Turbine:	
	(No.)	(Supplier)	(Model)	(Production)	(No.)
			(Supplier)	(Model)	(MWout)
Prin. Contractor:		Engineer:	Uhde	Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="236"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="7"/> / <input type="text" value="0"/> / <input type="text" value="7"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1964"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals/Power"/>
Plt. Owner:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>			Plt. Owner Type:	<input type="text" value="Waste Processing"/>		
Plt. Operator:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>			Plant Name:	<input type="text" value="Schwarze Pumpe Power/Methanol Plant"/>		
Gas'n Tech.:	<input type="text" value="Lurgi Dry Ash Gasification Process"/>		<input type="text" value="Lurgi GmbH"/>	<input type="text" value="Moving-bed gasification"/>			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Pauli Bauman"/>		<input type="text" value="pauli.bauman@sasol.com"/>				
	<small>(Contact)</small>		<small>(Email)</small>				

Facility Information

Facility Owner:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>		Facility Name:	<input type="text" value="Secondary Raw Material Utilization Centre"/>	
Location:	<input type="text" value="Lausitz, Schwarze Pumpe"/>		Facility Type:	<input type="text" value="Waste Processing Plant"/>	
<small>(City/State/Prov)</small>			Facility Status:	<input type="text" value="Operating"/>	
<small>(Country)</small>	<input type="text" value="Germany"/>				
<small>(Region)</small>	<input type="text" value="Europe"/>				

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/>	<input type="text" value="Biomass/Waste"/>	Rate (MAF):	<input type="text" value="1,500.0"/>	<input type="text" value="Estimate"/>
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	<input type="text" value="Municipal waste"/>	<input type="text" value="1,850 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Power"/>		Syngas Cap.:	<input type="text" value="3,000,000"/>	<input type="text" value="Estimate"/>
	<small>(Category)</small>			<small>(Nm3/d)</small>	<small>(Source)</small>
Product1:	<input type="text" value="Electricity"/>	<input type="text" value="75 MW"/>	Eq. IGCC Cap., MWe:	<input type="text" value="224.0"/>	
Product2:	<input type="text" value="Methanol"/>	<input type="text" value="375 mt/d"/>		<small>(Calculated)</small>	
Product3:	<input type="text"/>	<input type="text"/>	Fuel Input:	<input type="text" value="494.1"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	<input type="text" value="410.1"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text" value="AGA"/>	<input type="text" value="Not integrated"/>	
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	<input type="text"/>	<input type="text"/>	<input type="text"/>	Soot Handling:
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	<input type="text" value="Lurgi Oel•Gas•Chemie GmbH"/>	<input type="text" value="Rectisol"/>	Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<input type="text"/>	<input type="text"/>
			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	<input type="text" value="1"/>	<input type="text" value="General Electric Co."/>	<input type="text" value="MS6001B"/>	<input type="text" value="44.5"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:	<input type="text" value="1"/>	<input type="text"/>	<input type="text" value="240 t/hr"/>	Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>	<input type="text" value="1"/>
				<small>(No.)</small>
				<small>(Supplier)</small>
				<small>(Model)</small>
				<small>(MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer:	<input type="text"/>
			Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 201 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 1966
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 344.0 (mt/d) Estimate (Source)
Feed1: Heavy fuel oil 344 mt/d **Syngas Cap.:** 1,000,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 74.7 (Calculated)
Feed3: **Fuel Input:** 166.7 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 136.7 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Foster Wheeler, BASF **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 281 **No. of Gasifiers: Op'g/Sp/Total** 5/ 0/ 5 **Gasifier Status:** Operating **Start Date:** 1968
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: Lurgi Multi Purpose Gasification Process (Technology Name) Lurgi Oel • Gas • Chemie GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 625.0 (mt/d) Estimate (Source)
Feed1: Oil 480 mt/d **Syngas Cap.:** 1,440,000 (Nm3/d) Gasifier licensor (Source)
Feed2: Slurry 144 mt/d **Eq. IGCC Cap., MWe:** 107.5 (Calculated)
Feed3:
Main Product: Power (Category) **Fuel Input:** 246.1 (MWt) Gasifier licensor data (Source)
Product1: Electricity 75 MW **Syngas Output:** 196.9 (MWt) Gasifier licensor data (Source)
Product2: Methanol 375 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	98	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Feb.	1969
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	DEA Mineraloel AG				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	DEA Mineraloel AG				Plant Name:	Wesseling Methanol Plant-VI				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	DEA Mineraloel AG	Facility Name:	Wesseling Chemical Plant
Location: (City/State/Prov)	Wesseling	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	447.2	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Heavy cracked residu	447			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Methanol	582			
Product2:					
Product3:					
Syngas Cap.:	1,300,000	Gasifier licensor			
	<small>(Nm3/d)</small>	<small>(Source)</small>			
Eq. IGCC Cap., MWe:	97.0				
	<small>(Calculated)</small>				
Fuel Input:	216.7	Gasifier licensor data			
	<small>(MWt)</small>	<small>(Source)</small>			
Syngas Output:	177.7	Gasifier licensor data			
	<small>(MWt)</small>	<small>(Source)</small>			

Other Information

O2 Supply:						
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler				Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:			Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:					Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>
					<small>(Supplier)</small>	<small>(Model)</small>
						<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

27-Aug-03

Key Gasifier Information

Facility ID:	104	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Operating	Start Date:	1973
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Veba Oil Refining & Petrochemicals GmbH					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Veba Oil Refining & Petrochemicals GmbH					Plant Name:	Gelsenkirchen-Scholven Ammonia/Methanol Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Veba Oil Refining & Petrochemicals GmbH	Facility Name:	Gelsenkirchen-Scholven Chemical Plant
Location: (City/State/Prov)	Gelsenkirchen	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,479.4 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	1,479 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,200 mt/d			
Product2:	Methanol	600 mt/d			
Product3:					
			Syngas Cap.:	4,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	321.0 <small>(Calculated)</small>	
			Fuel Input:	716.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	587.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>												
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling:	Separate handling unit						
Gas Cleanup:						Sulfur Removal:							
Gas Turbine:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>		0 <small>(Model)</small>			0 <small>(MWout)</small>					
HRSG:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>		0 <small>(Model)</small>			0 <small>(MWout)</small>					
						Steam Turbine:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>		0 <small>(Model)</small>		0 <small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH			Engineer:		Constructor:	Lurgi GmbH						

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 207 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1974
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 860.0 (mt/d) Estimate (Source)
Feed1: Vac. residue & heavy 860 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol mt/d
Product2:
Product3:
Syngas Cap.: 2,500,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 186.6 (Calculated)
Fuel Input: 416.8 (MWt) Estimate (Source)
Syngas Output: 341.8 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** BASF

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	210	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1977
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Celanese Chemical (Ruhrchemie)					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Celanese Chemical (Ruhrchemie)					Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Celanese Chemical (Ruhrchemie)	Facility Name:	Oberhausen Chemical Plant
Location: (City/State/Prov)	Oberhausen-Holten	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	330.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Heavy fuel oil & vac.	330 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	960,000	Gasifier licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	71.7	
				<small>(Calculated)</small>	
			Fuel Input:	160.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	131.2	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Radiant syngas cooler		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID:	285	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Operating	Start Date:	1978	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Hydro Agri Brunsbüttel GmbH					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Hydro Agri Brunsbüttel GmbH					Plant Name:	Brunsbüttel Ammonia Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hydro Agri Brunsbüttel GmbH	Facility Name:	Brunsbüttel Chemical Plant
Location: (City/State/Prov)	Brunsbüttel	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,600.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Hvy vis. residue	1,600 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	2,100 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	4,700,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	350.9 <small>(Calculated)</small>	
			Fuel Input:	803.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	642.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Integrated/N2 feeds NH3 prod'n <small>(ASU Supplier)</small>			Integrated/N2 feeds NH3 prod'n <small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling: Separate handling unit
Gas Cleanup:		Rectisol <small>(Supplier)</small>			Sulfur Removal: Claus <small>(Supplier)</small> Claus <small>(Process)</small>
Gas Turbine:	0 <small>(No.)</small>	N.A. <small>(Supplier)</small>	N.A. <small>(Model)</small>	0 <small>(MWout)</small>	
HRSG:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>	0 <small>(Production)</small>	Steam Turbine: 0 <small>(No.)</small> N.A. <small>(Supplier)</small> N.A. <small>(Model)</small> 0 <small>(MWout)</small>
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID:	45	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:		1985	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Mitteldeutsche Erdöl-Raffinerie GmbH					Plant Name:	Leuna Methanol Anlage				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH	Facility Name:	Mider Refinery
Location: (City/State/Prov)	Leuna	Facility Type:	Refinery
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	2,400.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Visbreaker residue	2,400 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	42	MMscf/d		
Product2:	Methanol	600,000	mt/yr		
Product3:	Electricity	MW			
			Syngas Cap.:	7,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	537.5 <small>(Calculated)</small>	
			Fuel Input:	1,162.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	984.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	
	<small>(Supplier)</small>		<small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 46 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1985
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Rheinbraun Plt. Owner Type:
Plt. Operator: Rheinbraun Plant Name: Ville Methanol Plant
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Rheinbraun Facility Name: Ville/Berrenrath Coal Briquetting Plant
Location: (City/State/Prov) Ville Facility Type: Other
(Country) Germany Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): 977.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Coal 977 mt/d Syngas Cap.: 2,231,500 Estimate
Feed2: (Nm3/d) (Source)
Feed3: Eq. IGCC Cap., MWe: 166.6
(Calculated)
Main Product: Chemicals Fuel Input: 381.3 Estimate
(Category) (MWt) (Source)
Product1: Methanol 1,000 mt/d Syngas Output: 305.1 Estimate
Product2: (MWt) (Source)
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Uhde Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	48	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	Sept. 1986
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	SAR GmbH		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	SAR GmbH		Plant Name:	SAR Plant-II			
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	SAR GmbH	Facility Name:	Oberhausen Chemical Plant
Location: (City/State/Prov)	Oberhausen-Holten	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	415.0 (mt/d)	Estimate (Source)
Feed1:	Vac. residue	730 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Oxochemicals	mt/d			
Product2:	H2	Nm3/d			
Product3:					
			Syngas Cap.:	1,200,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	89.6 (Calculated)	
			Fuel Input:	200.0 (MWt)	Estimate (Source)
			Syngas Output:	164.0 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)				
	(ASU Supplier)		(ASU Integration)		
Syngas Cooler:	Direct water quench/syngas cooler combination (Cooler Type)				Soot Handling:
			(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:	Shell (Supplier)	Sulfinol (Process)	Sulfur Removal:		
			(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					
	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine:
					(No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Uhde		Engineer:	Uhde	
			Constructor:	Uhde	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="43"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="0"/> / <input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value=""/> <input type="text" value="1991"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Gases"/>
Plt. Owner:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>			Plt. Owner Type:	<input type="text" value="Industrial Gas Supply"/>		
Plt. Operator:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>			Plant Name:	<input type="text" value="Stade Syngas Plant"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>	<input type="text" value="GE"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>				
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>	<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>	Facility Name:	<input type="text" value="Stade Chemical Plant"/>
Location:	<input type="text" value="Stade"/> <small>(City/State/Prov)</small>	Facility Type:	<input type="text" value="Chemical Plant"/>
	<input type="text" value="Germany"/> <small>(Country)</small>	Facility Status:	<input type="text" value="Operating"/>
	<input type="text" value="Europe"/> <small>(Region)</small>		

Feed/Product Information

Main Feed:	<input type="text" value="Gaseous"/> <small>(Category)</small>	<input type="text" value="Gas"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value=""/> <small>(mt/d)</small>	<input type="text" value=""/> <small>(Source)</small>
Feed1:	<input type="text" value="Natural gas"/>	<input type="text" value="3,855,000 MMscf/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>		Syngas Cap.:	<input type="text" value="264,000"/> <small>(Nm3/d)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
Product1:	<input type="text" value="CO"/>	<input type="text" value="mt/d"/>	Eq. IGCC Cap., MWe:	<input type="text" value="19.7"/> <small>(Calculated)</small>	
Product2:	<input type="text"/>	<input type="text"/>	Fuel Input:	<input type="text" value="42.5"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
Product3:	<input type="text"/>	<input type="text"/>	Syngas Output:	<input type="text" value="36.1"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> <small>(Oxidant)</small>	<input type="text"/> <small>(ASU Supplier)</small>	<input type="text"/> <small>(ASU Integration)</small>	Soot Handling:	<input type="text"/>	
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/> <small>(Cooler Type)</small>		<input type="text"/> <small>(Cooler Supplier)</small>	<input type="text"/> <small>(MWth Duty)</small>		
Gas Cleanup:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	Sulfur Removal:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	
Gas Turbine:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text"/> <small>(MWout)</small>		
HRSG:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text"/> <small>(Production)</small>	Steam Turbine:	
					<input type="text"/> <small>(No.)</small>	
					<input type="text"/> <small>(Supplier)</small>	
					<input type="text"/> <small>(Model)</small>	
					<input type="text"/> <small>(MWout)</small>	
Prin. Contractor:	<input type="text" value="Linde"/>		Engineer:	<input type="text"/>	Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	114	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1992	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power	
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processor			
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant			
Gas'n Tech.:	GSP Gasification Process <small>(Technology Name)</small>			Future Energy GmbH <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dirk Volkmann <small>(Contact)</small>			d.volkmann@future-energy.de <small>(Email)</small>						

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH			Facility Name:	Secondary Raw Material Utilization Centre					
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe			Facility Type:	Waste Processing					
(Country)	Germany			Facility Status:	Operating					
(Region)	Europe									

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	150.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>					
Feed1:	Waste oil/slurry tar	150 mt/d				Syngas Cap.:	1,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>		
Feed2:						Eq. IGCC Cap., MWe:	89.6 <small>(Calculated)</small>			
Feed3:						Fuel Input:	234.2 <small>(MWt)</small>	Estimate <small>(Source)</small>		
Main Product:	Power <small>(Category)</small>					Syngas Output:	164.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>		
Product1:	Electricity	75 MW								
Product2:	Methanol	375 mt/d								
Product3:										

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>							
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling: _____				
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>		Sulfur Removal: <small>(Supplier)</small>					
Gas Turbine:										
HRSG:						Steam Turbine: <small>(No.)</small>				
Prin. Contractor:			Engineer:					Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="240"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="Sept. 1996"/>	
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>		Project Reality:	<input type="text" value="Active-Real"/>		Application:	<input type="text" value="Syngas for Gases"/>	
Plt. Owner:	<input type="text" value="Rüdersdorfer Zement GmbH"/>				Plt. Owner Type:	<input type="text"/>				
Plt. Operator:	<input type="text" value="Rüdersdorfer Zement GmbH"/>				Plant Name:	<input type="text" value="Fuel Gas Plant"/>				
Gas'n Tech.:	<input type="text" value="Lurgi Circulating Fluidized Bed Gasification Process"/>				<input type="text" value="Lurgi Envirotherm GmbH"/>	<input type="text" value="Fluidized-bed gasification"/>				
	(Technology Name)				(Licensor)	(Technology Type)				
Vendor Contact:	<input type="text" value="Claus Greil"/>				<input type="text" value="claus_greil@lurgi.de"/>					
	(Contact)				(Email)					

Facility Information

Facility Owner:	<input type="text" value="Rüdersdorfer Zement GmbH"/>	Facility Name:	<input type="text" value="Rüdersdorf Cement Kiln"/>
Location: (City/State/Prov)	<input type="text" value="Rüdersdorf"/>	Facility Type:	<input type="text" value="Other"/>
(Country)	<input type="text" value="Germany"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Europe"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/>	<input type="text" value="Biomass/Waste"/>	Rate (MAF):	<input type="text" value="320.0"/>	<input type="text" value="Estimate"/>
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	<input type="text" value="Biomass"/>	<input type="text" value="320 mt/d"/>			
Feed2:	<input type="text" value="Wastes"/>	<input type="text"/>			
Feed3:	<input type="text" value="Carbon ash"/>	<input type="text"/>			
Main Product:	<input type="text" value="Gaseous fuels"/>				
	(Category)				
Product1:	<input type="text" value="Fuel gas"/>	<input type="text" value="100 MWth"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="732,000"/>	<input type="text" value="Estimate"/>
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	<input type="text" value="54.6"/>	
				(Calculated)	
			Fuel Input:	<input type="text" value="110.0"/>	<input type="text" value="Gasifier licensor data"/>
				(MWt)	(Source)
			Syngas Output:	<input type="text" value="100.0"/>	<input type="text" value="Gasifier licensor data"/>
				(MWt)	(Source)

Other Information

O2 Supply:	<input type="text" value="Air"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	(Process)
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	<input type="text"/>	Engineer:	<input type="text"/>
		Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 20-Dec-00

20-Dec-00

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	268	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1999	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power		
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processor				
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant				
Gas'n Tech.:	BGL Gasification Technology <small>(Technology Name)</small>			Allied Resources Corp. (Envirotherm) <small>(Licensor)</small>			Fixed-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Bill Jones <small>(Contact)</small>			bjones@safeguardintl.com <small>(Email)</small>							

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH			Facility Name:	Secondary Raw Material Utilization Centre						
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe			Facility Type:	Waste Processing						
(Country)	Germany			Facility Status:	Operating						
(Region)	Europe										

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	750.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>	
Feed1:	Household waste	600 mt/d				
Feed2:	Bit. coal	150 mt/d				
Feed3:						
Main Product:	Power <small>(Category)</small>					
Product1:	Electricity	75 MW				
Product2:	Methanol	375 mt/d				
Product3:						
			Syngas Cap.:	1,138,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	85.0 <small>(Calculated)</small>		
			Fuel Input:	194.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	155.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal: <small>(Supplier) (Process)</small>
Gas Turbine:			
HRSG:			
Steam Turbine:			
Prin. Contractor:			Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 108 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1978

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals

Plt. Owner: Fertilizer Corp. of India Ltd. Plt. Owner Type: Oil Refining & Chemicals

Plt. Operator: Fertilizer Corp. of India Ltd. Plant Name: Nangal Ammonia Plant

Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Fertilizer Corp. of India Ltd. Facility Name: Nangal Fertilizer Plant

Location: (City/State/Prov) Nangal, New Delhi Facility Type: Chemical Plant
(Country) India Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 722.5 Estimate
(Category) (Classification) (mt/d) (Source)

Feed1: Bunker C fuel oil 723 mt/d Syngas Cap.: 2,100,000 Gasifier licensor
(Nm³/d) (Source)

Feed2: Eq. IGCC Cap., MWe: 156.8
(Calculated)

Feed3:

Main Product: Chemicals Fuel Input: 350.1 Gasifier licensor data
(Category) (MWt) (Source)

Product1: Ammonia 600 mt/d Syngas Output: 287.1 Gasifier licensor data
(MWt) (Source)

Product2:

Product3:

Other Information

O₂ Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Fire-tube boiler Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal: (Supplier) (Process) (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Lurgi GmbH Engineer: Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 287 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1978
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: National Fertilizer Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: National Fertilizer Ltd. **Plant Name:** Panipat Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: National Fertilizer Ltd. **Facility Name:** Panipat Fertilizer Plant
Location: (City/State/Prov) Panipat, Haryana **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 722.5 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 723 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia mt/d
Product2:
Product3:
Syngas Cap.: 2,100,000 (Nm³/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 156.8 (Calculated)
Fuel Input: 350.1 (MWt) Gasifier licensor data (Source)
Syngas Output: 287.1 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	288	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1979	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	National Fertilizer Ltd.					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	National Fertilizer Ltd.					Plant Name:	Bathinda Ammonia Plant			
Gas'n Tech.:	Shell Gasification Process (Technology Name)					Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)					Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	National Fertilizer Ltd.	Facility Name:	Bathinda Fertilizer Plant
Location: (City/State/Prov)	Bathinda	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	722.5 (mt/d)	Estimate (Source)
Feed1:	Bunker C fuel oil	723 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	156.8 (Calculated)	
			Fuel Input:	350.1 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	287.1 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)				
	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Fire-tube boiler (Cooler Type)				Soot Handling:
		(Cooler Supplier)	(MWth Duty)		
Gas Cleanup:					Sulfur Removal:
	(Supplier)	(Process)	(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					Steam Turbine:
	(No.)	(Supplier)	(Model)	(Production)	(No.) (Supplier) (Model) (MWout)
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID: 289 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1979
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Neyveli Lignite Corp. Ltd. **Plt. Owner Type:** _____
Plt. Operator: Neyveli Lignite Corp. Ltd. **Plant Name:** Neyveli Syngas Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Neyveli Lignite Corp. Ltd. **Facility Name:** Neyveli Chemical Plant
Location: (City/State/Prov) Neyveli, Tamil Nadu **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 275.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 275 mt/d **Syngas Cap.:** 800,000 (Nm3/d) Gasifier licensor (Source)
Feed2: _____ **Eq. IGCC Cap., MWe:** 59.7 (Calculated)
Feed3: _____ **Fuel Input:** 133.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 109.4 (MWt) Gasifier licensor data (Source)
Product1: Syngas 800,000 Nm3/d
Product2: _____
Product3: _____

Other Information

O2 Supply: Oxygen (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
HRSG: _____ (No.) _____ (Supplier) _____ (Model) _____ (Production) **Steam Turbine:** _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	163	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Operating	Start Date:	July	1982	
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals				
Plt. Owner:	Gujarat Narmada Valley Fertilizers Co. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Gujarat Narmada Valley Fertilizers Co. Ltd.					Plant Name:	Narmada Ammonia/Methanol Plant				
Gas'n Tech.:	GE Gasification Technology (Technology Name)			GE (Licensor)		Entrained-flow gasification (Technology Type)					
Vendor Contact:	Tim Huskey (Contact)			timothy.huskey@ge.com (Email)							

Facility Information

Facility Owner:	Gujarat Narmada Valley Fertilizers Co. Ltd.	Facility Name:	Narmada Fertilizer Complex
Location: (City/State/Prov)	Bharuch, Gujarat	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	1,030.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Ref. residual oil	1,030 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Ammonia	1,350 mt/d			
Product2:	Methanol	60 mt/d			
Product3:					

Other Information

O2 Supply:	Oxygen	Linde AG	
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Linde AG	Rectisol	Sulfur Removal:
	(Supplier)	(Process)	(Supplier) (Process)
Gas Turbine:	0	N.A.	0
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	0	N.A.	0
	(No.)	(Supplier)	(Model) (Production)
			Steam Turbine:
			(No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Linde AG		Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: 159 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: IBIL Energy Systems Ltd. (IES) **Plt. Owner Type:**
Plt. Operator: IBIL Energy Systems Ltd. (IES) **Plant Name:** Sanghi IGCC Plant
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) (Email)

Facility Information

Facility Owner: IBIL Energy Systems Ltd. (IES) **Facility Name:** IES Power Plant
Location: (City/State/Prov) Kutch, Gujarat **Facility Type:** IPP
 (Country) India **Facility Status:** Construction
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 350.0 Estimate
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 350 mt/d **Syngas Cap.:** 804,000 Estimate
Feed2: **Eq. IGCC Cap., MWe:** 60.0
Feed3: (Calculated)
Main Product: Power **Fuel Input:** 136.4 Estimate
 (Category) (MWt) (Source)
Product1: Electricity 53 MW **Syngas Output:** 109.1 Estimate
Product2: Steam 40 t/hr (MWt) (Source)
Product3:

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 1 General Electric Co. 6B 35.9
 (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) (Production) **Steam Turbine:** 1 General Electric Co. 21.2
 (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Enviropower **Engineer:** Carbona Inc. **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	328	No. of Gasifiers: Op'g/Sp/Total	2/ 1/ 3	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Indian Oil Corp. Ltd.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Indian Oil Corp. Ltd.			Plant Name:	Paradip Gasification H2/Power Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Indian Oil Corp. Ltd.	Facility Name:	Paradip Refinery
Location: (City/State/Prov)	Nagapattinam, Orissa	Facility Type:	Refinery
(Country)	India	Facility Status:	Construction
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid (Category)	Petcoke (Classification)	Rate (MAF):	2,850.0 (mt/d)	Gasifier licensor data (Source)
Feed1:	Petcoke	3,500 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	H2	160 MMscf/d			
Product2:	Electricity	180 MW			
Product3:					
			Syngas Cap.:	6,500,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	485.2 (Calculated)	
			Fuel Input:	1,110.8 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	888.6 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)				
	(ASU Supplier)		(ASU Integration)		
Syngas Cooler:	Fire-tube boiler (Cooler Type)				Soot Handling:
	(Cooler Supplier)		(MWth Duty)		
Gas Cleanup:	Shell (Supplier)	Sulfinol (Process)	Sulfur Removal:		
			(Supplier)	(Process)	
Gas Turbine:	1 (No.)	General Electric Co. (Supplier)		180 (MWout)	
			(Model)		
HRSG:					Steam Turbine:
	(No.)	(Supplier)	(Model)	(Production)	(No.)
					(Supplier)
					(Model)
					(MWout)
Prin. Contractor:	Engineers India Ltd.		Engineer:	Krupp Uhde	Constructor:
					Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 191 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1958
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Praxair (EniChem) **Plt. Owner Type:** Industrial Gas Supply
Plt. Operator: Praxair (EniChem) **Plant Name:** Ravenna Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Praxair (EniChem) **Facility Name:** Ravenna Chemical Plant
Location: (City/State/Prov) Ravenna **Facility Type:** Chemical Plant
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 10 MMscf/d **Syngas Cap.:** 700,000 Estimate (Nm3/d) (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 112.6 Estimate (MWt) (Source)
Main Product: Chemicals (Category) **Syngas Output:** 95.7 Estimate (MWt) (Source)
Product1: CO Nm3/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="188"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="2"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1963"/>	
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>		Project Reality:	<input type="text" value="Active-Real"/>		Application:	<input type="text" value="Syngas for Chemicals"/>	
Plt. Owner:	<input type="text" value="PRAOIL"/>				Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>				
Plt. Operator:	<input type="text" value="PRAOIL"/>				Plant Name:	<input type="text" value="Gela Ragusa H2 Plant"/>				
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/>				<input type="text" value="GE"/>	<input type="text" value="Entrained-flow gasification"/>				
	(Technology Name)				(Licensor)	(Technology Type)				
Vendor Contact:	<input type="text" value="Tim Huskey"/>				<input type="text" value="timothy.huskey@ge.com"/>					
	(Contact)				(Email)					

Facility Information

Facility Owner:	<input type="text" value="PRAOIL"/>	Facility Name:	<input type="text" value="Gela Ragusa Refinery"/>		
Location: (City/State/Prov)	<input type="text" value="Gela Ragusa"/>	Facility Type:	<input type="text" value="Refinery"/>		
(Country)	<input type="text" value="Italy"/>	Facility Status:	<input type="text" value="Operating"/>		
(Region)	<input type="text" value="Europe"/>				

Feed/Product Information

Main Feed:	<input type="text" value="Gaseous"/>	<input type="text" value="Gas"/>	Rate (MAF):	<input type="text"/>	<input type="text"/>
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	<input type="text" value="Natural gas"/>	<input type="text" value="17 MMscf/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	(Category)				
Product1:	<input type="text" value="H2"/>	<input type="text" value="MMscf/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
Syngas Cap.:	<input type="text" value="1,150,000"/>	<input type="text" value="Gasifier licensor"/>			
	(Nm3/d)	(Source)			
Eq. IGCC Cap., MWe:	<input type="text" value="85.8"/>				
	(Calculated)				
Fuel Input:	<input type="text" value="184.9"/>		<input type="text" value="Estimate"/>		
	(MWt)		(Source)		
Syngas Output:	<input type="text" value="157.2"/>		<input type="text" value="Estimate"/>		
	(MWt)		(Source)		

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/>		<input type="text"/>
	(Cooler Type)		(Cooler Supplier) (MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	Sulfur Removal: (Supplier) (Process)
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (Production)
Steam Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	<input type="text"/>		<input type="text" value="Foster Wheeler"/>
Engineer:	<input type="text"/>		<input type="text"/>
Constructor:	<input type="text"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 54 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 1999
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: ISAB Energy **Plt. Owner Type:** Special Joint Venture
Plt. Operator: ISAB Energy **Plant Name:** ISAB Energy IGCC Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: ISAB S.p.A. **Facility Name:** Priolo Gargallo Refinery
Location: (City/State/Prov) Priolo Gargallo, Sicily **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 3,163.0 (mt/d) Gasifier contractor (Source)
Feed1: ROSE asphalt 3,168 mt/d
Feed2:
Feed3:
Syngas Cap.: 8,800,000 (Nm3/d) Gasifier contractor (Source)
Eq. IGCC Cap., MWe: 656.9 (Calculated)
Main Product: Power (Category) **Fuel Input:** 1,360.0 (MWt) Gasifier contractor (Source)
Product1: Electricity 512 MWe **Syngas Output:** 1,203.0 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Naphtha recovery & recy
Gas Cleanup: Dow Chemical Co. (Supplier) MDEA (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (O2 blown) (Process)
Gas Turbine: 2 (No.) Siemens/Ansaldo (Supplier) V94.2K (Model) 330 (MWout)
HRSG: 2 (No.) Siemens/Ansaldo (Supplier) (Model) (Production) **Steam Turbine:** 2 (No.) Siemens/Ansaldo (Supplier) (Model) 230 (MWout)
Prin. Contractor: Snamprogetti **Engineer:** Snamprogetti-Foster Wheeler **Constructor:** Snamprogetti-Foster Wheeler

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 55 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: April 2000
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Power
Plt. Owner: SARLUX srl Plt. Owner Type: Special Joint Venture
Plt. Operator: SARLUX srl Plant Name: SARLUX IGCC Project
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Saras S.p.A. Facility Name: Saras S.p.A. Raffinerie Sarde
Location: (City/State/Prov) Sarroch, Cagliari, Sardinia Facility Type: Refinery
(Country) Italy Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 3,545.0 Gasifier contractor
(Category) (Classification) (mt/d) (Source)
Feed1: Visbreaker residue 3,552 mt/d
Feed2: Syngas Cap.: 10,400,000 Gasifier contractor
Feed3: (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 776.4
(Calculated)
Main Product: Power
(Category) Fuel Input: 1,586.3 Gasifier contractor
(MWt) (Source)
Product1: Electricity 551 MWe Syngas Output: 1,271.2 Gasifier contractor
Product2: H2 960,000 Nm3/d (MWt) (Source)
Product3: Steam 185 mt/hr

Other Information

O2 Supply: Oxygen Air Liquide Across-the-fence/No integration
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler Soot Handling: Naphtha recovery & recy
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: UOP LLC Selexol Sulfur Removal: Lurgi Oel•Gas•Chemie Gm Claus (O2 blown)
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 3 General Electric Co. 9E 414
(No.) (Supplier) (Model) (MWout)
HRSG: 3 General Electric Co. 700 t/hr Steam Turbine: 3 General Electric Co. 152.4
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Snamprogetti Engineer: RTI Constructor: RTI

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	53	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	April 2001
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	api Energia S.p.A.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	API Raffineria di Ancona S.p.A.			Plant Name:	api Energia S.p.A. IGCC Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	API Raffineria di Ancona S.p.A.		Facility Name:	Falconara Marittima Refinery	
Location:	(City/State/Prov)	Falconara Marittima	Facility Type:	Refinery	
	(Country)	Italy	Facility Status:	Operating	
	(Region)	Europe			

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	1,440.0 (mt/d)	Gasifier licensor data (Source)
Feed1:	Vac. visbreaker resid		1,440 mt/d		
Feed2:					
Feed3:					
Main Product:	Power (Category)				
Product1:	Electricity	287 MWe			
Product2:	Steam	65 mt/hr			
Product3:					
			Syngas Cap.:	3,845,000 (Nm3/d)	Gasifier licensor data (Source)
			Eq. IGCC Cap., MWe:	287.0 (Calculated)	
			Fuel Input:	641.0 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	525.6 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	Praxair, Inc. (ASU Supplier)	Across-the-fence (ASU Integration)		
Syngas Cooler:	Direct water quench cooler (Cooler Type)		(Cooler Supplier)	(MWth Duty)	Soot Handling: Separate handling unit
Gas Cleanup:	UOP LLC (Supplier)	Selexol (Process)	Sulfur Removal:	Parsons Energy & Chemical (Supplier)	Claus (O2 blown) (Process)
Gas Turbine:	1 (No.)	ABB Lummus Global (Supplier)	13E2 (Model)	190 (MWout)	
HRSG:	1 (No.)	(Supplier)	280 mt/hr (Production)	Steam Turbine:	1 (No.)
				Ansaldo (Supplier)	100 (MWout)
Prin. Contractor:	ABB Lummus Global/SAE Sadelm		Engineer:	ABB Lummus Global/SAE Sade	
			Constructor:	ABB Lummus Global/SAE Sade	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	327	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:		2009
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	ATI Sulcis				Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	ATI Sulcis				Plant Name:	Sulcis IGCC Project				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	ATI Sulcis			Facility Name:	Portoscuso Power Plant		
Location: (City/State/Prov)	Portoscuso, Sardinia			Facility Type:	IPP		
(Country)	Italy			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	3,065.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	4,356 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	450 MW			
Product2:					
Product3:					
			Syngas Cap.:	7,000,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	522.6 <small>(Calculated)</small>	
			Fuel Input:	1,196.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	956.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		On-site/No integration <small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol-M <small>(Process)</small>	Sulfur Removal: <small>(Supplier)</small>
			Claus/SCOT <small>(Process)</small>
Gas Turbine:	2 <small>(No.)</small>	Ansaldo <small>(Supplier)</small>	V94.2 <small>(Model)</small>
		346 <small>(MWout)</small>	
HRSG:	2 <small>(No.)</small>		
Steam Turbine:	1 <small>(No.)</small>		239 <small>(MWout)</small>
Prin. Contractor:			Engineer: Fluor Daniel
			Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	70	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	May 1961
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Mitsubishi Petrochemicals			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Mitsubishi Petrochemicals			Plant Name:	Yokkaichi Syngas Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>			Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Mitsubishi Petrochemicals	Facility Name:	Yokkaichi Petrochemical Plant
Location: (City/State/Prov)	Yokkaichi	Facility Type:	Petrochemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	137.6	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Bunker C fuel oil	138 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Syngas	400,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	400,000	Gasifier licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	29.9	
				<small>(Calculated)</small>	
			Fuel Input:	66.7	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	54.7	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small> <small>(MWth Duty)</small>
Gas Cleanup:	Shell	Adip	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small> <small>(Model)</small>	<small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small> <small>(Model)</small> <small>(Production)</small>	<small>(No.)</small> <small>(Supplier)</small> <small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 179 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Ube Ammonia Industry Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Ube Ammonia Industry Co. Ltd. **Plant Name:** Ube City CO Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Ube Ammonia Industry Co. Ltd. **Facility Name:** Ube City Chemical Plant
Location: (City/State/Prov) Ube City **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 95.0 (mt/d) Estimate (Source)
Feed1: Petcoke 95 mt/d **Syngas Cap.:** 200,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 14.9 (Calculated)
Feed3: **Fuel Input:** 36.4 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 27.3 (MWt) Gasifier licensor data (Source)
Product1: CO 6,500,000 scf/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	215	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1982	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Daicel					Plt. Owner Type:	Unspecified			
Plt. Operator:	Daicel					Plant Name:	Methanol Plant			
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification			
	(Technology Name)					(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com				
	(Contact)					(Email)				

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified Chemical Plant
Location: (City/State/Prov)	Unspecified location	Facility Type:	Chemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	190.0	Estimate
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Vac. residue	190 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Methanol	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	550,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	41.1	
				(Calculated)	
			Fuel Input:	91.7	Estimate
				(MWt)	(Source)
			Syngas Output:	75.2	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Radiant syngas cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:			
Engineer:	Ube		
Constructor:	Ube		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	18	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	July	1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Ube Ammonia Industry Co. Ltd.				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Ube Ammonia Industry Co. Ltd.				Plant Name:	Ube City Ammonia Plant					
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>							

Facility Information

Facility Owner:	Ube Ammonia Industry Co. Ltd.	Facility Name:	Ube City Chemical Plant
Location: (City/State/Prov)	Ube City	Facility Type:	Chemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal & petcoke	1,650			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,250			
Product2:					
Product3:					
			Syngas Cap.:	2,150,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	160.5 <small>(Calculated)</small>	
			Fuel Input:	391.9 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	293.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		Integrated <small>(ASU Supplier)</small>		Integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				Soot Handling: _____	
Gas Cleanup:					Sulfur Removal: _____	
Gas Turbine:						
HRSG:						
Prin. Contractor:	Ube		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 121 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 2003
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nippon Petroleum Refining Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nippon Petroleum Refining Co. **Plant Name:** Negishi IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nippon Petroleum Refining Co. **Facility Name:** Negishi Refinery
Location: (City/State/Prov) Yokohama **Facility Type:** Refinery
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,000.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,992 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 342 MWnet
Product2:
Product3:
Syngas Cap.: 5,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 433.0 (Calculated)
Fuel Input: 967.0 (MWt) Gasifier licensor data (Source)
Syngas Output: 792.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell/JGC (Supplier) ADIP (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) OxyClaus/Scot (Process)
Gas Turbine: 1 (No.) Mitsubishi Heavy Industri 701F (Supplier) (Model) 301 (MWout)
HRSG: 1 (No.) Mitsubishi Heavy Industri (Supplier) Vertical (Model) 430 mt/hr (Production) **Steam Turbine:** 1 (No.) Mitsubishi Heavy Industri Down Flow (Supplier) (Model) 130 (MWout)
Prin. Contractor: JGC Corp. **Engineer:** JGC Corp. **Constructor:** JGC Corp.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID:	19	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:	May	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Fuels		
Plt. Owner:	Shell MDS (Malaysia) Sdn. Bhd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Shell MDS (Malaysia) Sdn. Bhd.					Plant Name:	Bintulu GTL Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Shell MDS (Malaysia) Sdn. Bhd.	Facility Name:	Bintulu Middle Distillate Synthesis Plant
Location: (City/State/Prov)	Bintulu, Sarawak	Facility Type:	Gas Plant
(Country)	Malaysia	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	100 MMscf/d				Syngas Cap.:	7,552,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	563.8 <small>(Calculated)</small>	
Feed3:						Fuel Input:	1,214.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Main Product:	FT liquids <small>(Category)</small>					Syngas Output:	1,032.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Mid-distillates	12,500 bbl/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>					
			<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler with integrated superheater <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Lurgi GmbH			Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

Key Gasifier Information

Facility ID: 56 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** April 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nuon Power Buggenum **Plt. Owner Type:** Utility
Plt. Operator: Nuon Power Buggenum **Plant Name:** Buggenum IGCC Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Nuon Power **Facility Name:** Willem-Alexander Centrale (WAC)
Location: (City/State/Prov) Haelen, Limburg **Facility Type:** Electric Utility
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Bit. coal 2,000 mt/d (max)
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 253 MWe
Product2:
Product3:
Syngas Cap.: 3,408,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 254.4 (Calculated)
Fuel Input: 702.6 (MWt) Gasifier licensor data (Source)
Syngas Output: 465.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Water-tube boiler with superheater (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus (O2 Blown)/SCOT (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.2 (Model) 156 (MWout)
HRSG: 1 (No.) Stork (Supplier) (Model) 300 (Production) **Steam Turbine:** 3 (No.) Siemens/KWU (Supplier) 1 HP/1IP/1 LP (Model) 128 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 57 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** Oct. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shell Nederland Raffinaderij BV **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell Nederland Raffinaderij BV **Plant Name:** Pernis Shell IGCC/Hydrogen Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell Nederland Raffinaderij BV **Facility Name:** Pernis Refinery
Location: (City/State/Prov) Rotterdam **Facility Type:** Refinery
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,650.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,650 mt/d **Syngas Cap.:** 4,662,200 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 348.0 (Calculated)
Feed3: **Fuel Input:** 799.5 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 637.3 (MWt) Gasifier licensor data (Source)
Product1: H2 100 MMscf/d
Product2: Electricity 110 MW
Product3: Steam 200 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) SFL Netherlands (Cooler Supplier) 94.5 (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Shell (Supplier) Claus (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6B (Model) 86 (MWout)
HRSG: 2 (No.) (Supplier) (Model) 290 mt/hr (Production) **Steam Turbine:** 2 (No.) GE/Nuovo Pignone (Supplier) (Model) 41 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** Fluor Daniel B.V. **Constructor:** Fluor Daniel B.V.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	242	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2000
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	EPZ					Plt. Owner Type:			
Plt. Operator:	EPZ					Plant Name:	Amercentrale Fuel Gas Plant		
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>				Lurgi Envirotherm GmbH <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>				

Facility Information

Facility Owner:	EPZ	Facility Name:	Amercentrale Plant
Location: (City/State/Prov)	Geertruidenberg	Facility Type:	
(Country)	Netherlands	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Demolition wood	500 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	85 MWth			
Product2:					
Product3:					
			Syngas Cap.:	614,300 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	45.9 <small>(Calculated)</small>	
			Fuel Input:	105.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	84.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>				
Syngas Cooler:	Water-tube <small>(Cooler Type)</small>	Baumgarte <small>(Cooler Supplier)</small>			Soot Handling: <small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Scrubber <small>(Process)</small>			Sulfur Removal: <small>(Supplier) (Process)</small>
Gas Turbine:					
HRSG:					
Prin. Contractor:		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	319	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1985
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Fuels
Plt. Owner:	Portucel					Plt. Owner Type:	Pulp & Paper Processing		
Plt. Operator:	Portucel					Plant Name:	Rodao ACFBG Unit		
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>		Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	John Hemmings <small>(Contact)</small>				john_hemmings@fwc.com <small>(Email)</small>				

Facility Information

Facility Owner:	Portucel	Facility Name:	Rodao Mill
Location: (City/State/Prov)	Rodao	Facility Type:	Pulp & Paper Mill
(Country)	Portugal	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Bark			mt/d			
Feed2:							
Feed3:							
Main Product:	Gaseous fuels <small>(Category)</small>						
Product1:	Syngas	15 MWth					
Product2:							
Product3:							
			Syngas Cap.:	87,800	Estimate		
				<small>(Nm3/d)</small>	<small>(Source)</small>		
			Eq. IGCC Cap., MWe:	6.6			
				<small>(Calculated)</small>			
			Fuel Input:	15.0	Gasifier licensor data		
				<small>(MWt)</small>	<small>(Source)</small>		
			Syngas Output:	15.0	Estimate		
				<small>(MWt)</small>	<small>(Source)</small>		

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:					Soot Handling:		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
					<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 374 **No. of Gasifiers: Op'g/Sp/Total** 18/ 0/ 18 **Gasifier Status:** Development **Start Date:** 2010
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Qatar Petroleum **Plt. Owner Type:** _____
Plt. Operator: Qatar Petroleum **Plant Name:** Pearl GTL
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Qatar Petroleum **Facility Name:** _____
Location: (City/State/Prov) _____ **Facility Type:** Chemical Plant
 (Country) Qatar **Facility Status:** Planning
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Natural Gas 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: FT liquids (Category)
Product1: Distillate 140,000 bpd
Product2: Naphtha 0
Product3: Paraffins 0
Syngas Cap.: 80,000,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 5,972.2 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 10,936.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	20	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	June	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Linde AG					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Linde AG					Plant Name:	Singapore Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Singapore Syngas Pte. Ltd. (Texaco/Messer)	Facility Name:	Pulau Merlimau Gas Plant
Location: (City/State/Prov)	Jurong Island	Facility Type:	Gas Plant
(Country)	Singapore	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	554.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Ref. residue	572 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	25 MMscf/d			
Product2:	CO	25 MMscf/d			
Product3:					
			Syngas Cap.:	1,610,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	120.2 <small>(Calculated)</small>	
			Fuel Input:	268.4 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	220.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Messer Griesheim <small>(ASU Supplier)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				
Gas Cleanup:					
Gas Turbine:					
HRSG:					
Prin. Contractor:			Engineer: Linde AG	Constructor: M.W. Kellogg/Chiyoda	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	271	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	2001
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	Esso Singapore Pty. Ltd.		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Esso Singapore Pty. Ltd.		Plant Name:	Chawan IGCC Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>	GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Esso Singapore Pty. Ltd.		Facility Name:	Chawan Refinery		
Location: (City/State/Prov)	Pulau Ayer Chawan, Jurong Island		Facility Type:	Refinery		
(Country)	Singapore		Facility Status:	Operating		
(Region)	Asia/Australia					

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	924.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Residual oil	924 mt/d				
Feed2:						
Feed3:						
Main Product:	Power <small>(Category)</small>		Syngas Cap.:	2,660,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>	
Product1:	Electricity	173 MW	Eq. IGCC Cap., MWe:	198.6 <small>(Calculated)</small>		
Product2:	H2	MMscf/d	Fuel Input:	450.0 <small>(MWt)</small>	Estimate <small>(Source)</small>	
Product3:	Steam	lb/hr	Syngas Output:	363.6 <small>(MWt)</small>	Estimate <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>	Soot Handling:			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>			
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>	 <small>(Process)</small>		
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6FA <small>(Model)</small>	173.2 <small>(MWout)</small>			
HRSG:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>	Steam Turbine:		
			 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>	
Prin. Contractor:	M.W. Kellogg		Engineer:	M.W. Kellogg		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jun-03

Key Gasifier Information

Facility ID:	<input type="text" value="3"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="15"/> / <input type="text" value="2"/> / <input type="text" value="17"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1955"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Fuels"/>
Plt. Owner:	<input type="text" value="Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd."/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd."/>			Plant Name:	<input type="text" value="Sasol-I F-T Syngas Plant"/>		
Gas'n Tech.:	<input type="text" value="Sasol Lurgi Dry Ash Gasification Process"/> (Technology Name)		<input type="text" value="Lurgi GmbH"/> (Licensor)	<input type="text" value="Moving-bed gasification"/> (Technology Type)			
Vendor Contact:	<input type="text" value="Claus Greil"/> (Contact)		<input type="text" value="claus_greil@lurgi.de"/> (Email)				

Facility Information

Facility Owner:	<input type="text" value="Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd."/>			Facility Name:	<input type="text" value="Sasol-I Petrochemical Plant"/>		
Location: (City/State/Prov)	<input type="text" value="Sasolburg"/>			Facility Type:	<input type="text" value="Petrochemical Plant"/>		
(Country)	<input type="text" value="South Africa"/>			Facility Status:	<input type="text" value="Operating"/>		
(Region)	<input type="text" value="Africa/Middle East"/>						

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/> (Category)	<input type="text" value="Coal"/> (Classification)	Rate (MAF):	<input type="text" value="7,000.0"/> (mt/d)	<input type="text" value="Gasifier licensor data"/> (Source)	
Feed1:	<input type="text" value="Bit. coal"/>	<input type="text" value="10,000 mt/d"/>				
Feed2:	<input type="text"/>	<input type="text"/>				
Feed3:	<input type="text"/>	<input type="text"/>				
Main Product:	<input type="text" value="FT liquids"/> (Category)					
Product1:	<input type="text" value="FT liquids"/>	<input type="text" value="4,000 bbl/d"/>				
Product2:	<input type="text"/>	<input type="text"/>				
Product3:	<input type="text"/>	<input type="text"/>				
			Syngas Cap.:	<input type="text" value="7,100,000"/> (Nm3/d)	<input type="text" value="Gasifier operator"/> (Source)	
			Eq. IGCC Cap., MWe:	<input type="text" value="530.0"/> (Calculated)		
			Fuel Input:	<input type="text" value="1,169.4"/> (MWt)	<input type="text" value="Estimate"/> (Source)	
			Syngas Output:	<input type="text" value="970.6"/> (MWt)	<input type="text" value="Gasifier operator data"/> (Source)	

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> (Oxidant)	<input type="text" value="Air Liquide"/> (ASU Supplier)	<input type="text" value="Not integrated"/> (ASU Integration)						
Syngas Cooler:	<input type="text" value="Direct-quench/fire-tube"/> (Cooler Type)		<input type="text"/> (Cooler Supplier)	<input type="text"/> (MWth Duty)	Soot Handling: <input type="text"/>				
Gas Cleanup:	<input type="text" value="Lurgi Oel•Gas•Chemie GmbH"/> (Supplier)	<input type="text" value="Rectisol"/> (Process)	Sulfur Removal:	<input type="text" value="Lurgi Oel•Gas•Chemie Gm"/> (Supplier)	<input type="text" value="Claus"/> (Process)				
Gas Turbine:	<input type="text" value="0"/> (No.)	<input type="text"/> (Supplier)	<input type="text"/> (Model)	<input type="text"/> (MWout)					
HRSG:	<input type="text" value="0"/> (No.)	<input type="text"/> (Supplier)	<input type="text"/> (Model)	<input type="text"/> (Production)	Steam Turbine:	<input type="text" value="0"/> (No.)	<input type="text"/> (Supplier)	<input type="text"/> (Model)	<input type="text"/> (MWout)
Prin. Contractor:	<input type="text" value="Lurgi/M.W. Kellogg"/>		Engineer:	<input type="text"/>	Constructor:	<input type="text"/>			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID:	145	No. of Gasifiers: Op'g/Sp/Total	40/ 0/ 40	Gasifier Status:	Operating	Start Date:	1977
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Fuels/Chemicals
Plt. Owner:	Sasol (Pty) Ltd.			Plt. Owner Type:	Synthetic Fuels & Chemicals		
Plt. Operator:	Sasol Synfuels (Pty) Ltd.			Plant Name:	Sasol Synfuels		
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom (Technology Name)		Sasol Lurgi GmbH (Licensor)	Fixed-bed gasification (Technology Type)			
Vendor Contact:	Pauli Bauman (Contact)			pauli.bauman@sasol.com (Email)			

Facility Information

Facility Owner:	Sasol (Pty) Ltd.	Facility Name:	Sasol Synfuels
Location: (City/State/Prov)	Secunda, Mpumalanga	Facility Type:	Petrochemical Plant
(Country)	South Africa	Facility Status:	Operating
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	24,780.0 (mt/d)	Operator/licensor (Source)
Feed1:	Subbit. coal	1,475 mt/hr			
Feed2:					
Feed3:					
Main Product:	FT liquids (Category)				
Product1:	Gas				
Product2:	Chemicals				
Product3:					
			Syngas Cap.:	39,600,000 (Nm3/d)	Operator/licensor (Source)
			Eq. IGCC Cap., MWe:	2,956.2 (Calculated)	
			Fuel Input:	8,810.0 (MWt)	Operator/licensor (Source)
			Syngas Output:	7,048.0 (MWt)	Operator/licensor (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	Not integrated (ASU Integration)
Syngas Cooler:	No SG cooler; series of air & water coolers (Cooler Type)		
			Soot Handling: N.A.
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal: Sasol/Linde (Supplier)
			Sulfolin (Stretford variant) (Process)
Gas Turbine:	0 (No.)	N.A. (Supplier)	0 (Model)
			0 (MWout)
HRSG:	0 (No.)		N.A. (Supplier)
		N.A. (Model)	0 (Production)
			0 (No.)
			N.A. (Supplier)
			0 (Model)
			0 (MWout)
Prin. Contractor:	Lurgi		
Engineer:	Fluor Daniel, Inc.		
Constructor:	Fluor Daniel, Inc.		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID: 146 **No. of Gasifiers: Op'g/Sp/Total** 40/ 0/ 40 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels/Chemicals
Plt. Owner: Sasol (Pty) Ltd. **Plt. Owner Type:** Synthetic Fuels & Chemicals
Plt. Operator: Sasol Synfuels (Pty) Ltd. **Plant Name:** Gasification East Plant
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. **Facility Name:** Sasol Synfuels
Location: (City/State/Prov) Secunda, Mpumalanga **Facility Type:** Petrochemical Plant
 (Country) South Africa **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 24,780.0 Operator/licensor
 (Category) (Classification) (mt/d) (Source)
Feed1: Subbit. coal 1,475 mt/hr **Syngas Cap.:** 39,600,000 Operator/licensor
Feed2: **Syngas Cap.:** (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 2,956.2 (Calculated)
Main Product: FT liquids (Category) **Fuel Input:** 8,810.0 Operator/licensor (MWt) (Source)
Product1: Gas **Syngas Output:** 7,048.0 Operator/licensor (MWt) (Source)
Product2: Chemicals
Product3:

Other Information

O2 Supply: Oxygen Air Liquide Not integrated
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: No SG cooler; series of air & water coolers **Soot Handling:** N.A.
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol **Sulfur Removal:** Sasol/Linde Sulfolin (Stretford variant)
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi **Engineer:** Fluor Daniel, Inc. **Constructor:** Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: 96 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Oct. 1969
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Naju Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Naju Chemical Plant
Location: (City/State/Prov) Naju, Seoul **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 172.2 (mt/d) Estimate (Source)
Feed1: Vac. Residue 225 mt/d **Syngas Cap.:** 700,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 83.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 68.4 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 318 mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Shell (Supplier) Sulfinol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 230 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Yochon Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Yochon Chemical Plant
Location: (City/State/Prov) Yochon **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 132.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 132 mt/d **Syngas Cap.:** 384,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 28.7 (Calculated)
Feed3: **Fuel Input:** 64.0 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 52.5 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID:	300	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:		1997	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	BP Samsung					Plt. Owner Type:	Unspecified				
Plt. Operator:	BP Samsung					Plant Name:	CO Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	South Korea	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	206.4 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Naphtha	206 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	CO	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	600,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	44.8 <small>(Calculated)</small>	
			Fuel Input:	100.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	82.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>				
	<small>(Cooler Supplier)</small>			<small>(MWth Duty)</small>	
Gas Cleanup:					
	<small>(Supplier)</small>			<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
			Steam Turbine:		
				<small>(No.)</small>	<small>(Supplier)</small>
				<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Linde				
		Engineer:			
		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-03

Key Gasifier Information

Facility ID:	58	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	Sept.	1997	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Power		
Plt. Owner:	Elcogas SA				Plt. Owner Type:	Special Joint Venture					
Plt. Operator:	Elcogas SA				Plant Name:	Puertollano GCC Plant					
Gas'n Tech.:	Krupp Koppers PRENFLO Gasification Technology <small>(Technology Name)</small>				Krupp Uhde <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	H. Max Hooper <small>(Contact)</small>				hooperm@usa.kud.thyssenkrupp.com <small>(Email)</small>						

Facility Information

Facility Owner:	Elcogas SA	Facility Name:	Puertollano Power Plant
Location: (City/State/Prov)	Puertollano	Facility Type:	Electric Utility
(Country)	Spain	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Coal & petcoke	2,600 mt/d				Syngas Cap.:	4,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	321.0 <small>(Calculated)</small>	
Feed3:						Fuel Input:	734.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	587.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Electricity	335 MWe						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Convective syngas cooler <small>(Cooler Type)</small>	Steinmüller <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>
Gas Cleanup:	Krupp Uhde <small>(Supplier)</small>	MDEA <small>(Process)</small>	Sulfur Removal: Claus <small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	Siemens/KWU <small>(Supplier)</small>	V94.3 <small>(Model)</small>
			182.3 <small>(MWout)</small>
HRSG:	1 <small>(No.)</small>	Babcock & Wilcox <small>(Supplier)</small>	
Steam Turbine:	1 <small>(No.)</small>	Siemens/KWU <small>(Supplier)</small>	135.4 <small>(MWout)</small>
Prin. Contractor:	Krupp Uhde		Engineer: Krupp Uhde
			Constructor: B&W/Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	214	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1980
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Akzo Nobel/Berol-Kemi					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Akzo Nobel					Plant Name:	Stenungsund Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Akzo Nobel/Berol-Kemi	Facility Name:	Stenungsund Chemical Plant
Location: (City/State/Prov)	Stenungsund	Facility Type:	Chemical Plant
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	70.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Heavy fuel oil	70 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	14.9 <small>(Calculated)</small>		
			Fuel Input:	33.3 <small>(MWt)</small>	Estimate <small>(Source)</small>	
			Syngas Output:	27.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>				Soot Handling:	Total recycle to gasifier
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Davy Powergas		Engineer:		Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

23-Feb-01

Key Gasifier Information

Facility ID: 275 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: June 1993
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Power
Plt. Owner: Sydkraft AB Plt. Owner Type: Utility
Plt. Operator: Sydkraft AB Plant Name: Värnamo IGCC Demonstration Plant
Gas'n Tech.: Foster Wheeler Pressurized Circulating Fluidized Bed Gasifier Foster Wheeler International Fluidized-bed gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Lawford C. Howells Lawford_Howells@fwc.com
(Contact) (Email)

Facility Information

Facility Owner: Sydkraft AB Facility Name: Malmö/Värnamo Plant
Location: (City/State/Prov) Malmö/Värnamo Facility Type: Electric Utility
(Country) Sweden Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste Rate (MAF): 55.0 Gasifier licensor data
(Category) (Classification) (mt/d) (Source)
Feed1: Biofuels 55 mt/d
Feed2:
Feed3:
Main Product: Power
(Category)
Product1: Electricity 6 MWe
Product2: District heat 9 MWth
Product3:
Syngas Cap.: 105,000 Estimate
(Nm3/d) (Source)
Eq. IGCC Cap., MWe: 7.8
(Calculated)
Fuel Input: 18.0 Gasifier licensor data
(MWt) (Source)
Syngas Output: 14.4 Estimate
(MWt) (Source)

Other Information

O2 Supply: Air
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 1 Alstom UK Typhoon 4.2
(No.) (Supplier) (Model) (MWout)
HRSG: Steam Turbine: 1 Nadrowski 2
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 162 No. of Gasifiers: Op'g/Sp/Total 2/ 0/ 2 Gasifier Status: Operating Start Date: Aug. 1984
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Chinese Petroleum Corp. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Chinese Petroleum Corp. Plant Name: Kaohsiung Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Chinese Petroleum Corp. Facility Name: Kaohsiung Petrochemical Complex
Location: (City/State/Prov) Kaohsiung Facility Type: Petrochemical Plant
(Country) Taiwan Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 1,000.0 Estimate
Feed1: Bitumen 1,000 mt/d Syngas Cap.: 2,143,000 Gasifier licensor
Feed2: Eq. IGCC Cap., MWe: 160.0 (Calculated)
Feed3: Fuel Input: 390.7 Estimate
Main Product: Chemicals (Category)
Product1: H2 158,200 Nm3/hr Syngas Output: 293.0 Gasifier licensor data
Product2: CO 4,530 Nm3/hr
Product3: Methanol SG 26,500 Nm3/hr

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench/syngas cooler combination (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Linde AG Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID:	385	No. of Gasifiers: Op'g/Sp/Total	1	/	0	/	1	Gasifier Status:	Operating	Start Date:	Feb.	2004
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals			
Plt. Owner:	BP/Formosa							Plt. Owner Type:				
Plt. Operator:	BP/Formosa							Plant Name:	Mai Liao Refinery			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>							timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:		Facility Name:	Mai Liao Refinery
Location: (City/State/Prov)	Mai Liao	Facility Type:	Refinery
(Country)	Taiwan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Naphtha	0				Syngas Cap.:	1,080,000 <small>(Nm3/d)</small>
Feed2:		0				Eq. IGCC Cap., MWe:	80.6 <small>(Calculated)</small>
Feed3:		0				Fuel Input:	0.0 <small>(MWt)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	147.6 <small>(MWt)</small>
Product1:	Methanol	0					
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0			Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0		Steam Turbine:	0	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	294	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:		1959
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Taminco			Plt. Owner Type:	Industrial Gas Supply			
Plt. Operator:	Taminco			Plant Name:	Billingham Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)					

Facility Information

Facility Owner:	Air Products (ICI)		Facility Name:	Unspecified facility	
Location: (City/State/Prov)	Billingham, England		Facility Type:	Chemical Plant	
(Country)	United Kingdom		Facility Status:	Operating	
(Region)	Europe				

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):				
				(mt/d)	(Source)		
Feed1:	Natural gas		9 MMscf/d			Syngas Cap.:	600,000 Estimate
Feed2:						(Nm3/d)	(Source)
Feed3:						Eq. IGCC Cap., MWe:	44.8
						(Calculated)	
Main Product:	Chemicals (Category)					Fuel Input:	96.5 Estimate
Product1:	Oxochemicals	mt/d				(MWt)	(Source)
Product2:						Syngas Output:	82.0 Estimate
Product3:						(MWt)	(Source)

Other Information

O2 Supply:	Oxygen (Oxidant)						
	(ASU Supplier)		(ASU Integration)				
Syngas Cooler:	Direct water quench cooler (Cooler Type)					Soot Handling:	
			(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:					Sulfur Removal:		
	(Supplier)	(Process)			(Supplier)	(Process)	
Gas Turbine:							
	(No.)	(Supplier)	(Model)	(MWout)			
HRSG:					Steam Turbine:		
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:			Engineer:	ICI	Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	283	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	1977
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hoechst Celanese		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Hoechst Celanese		Plant Name:	Houston Oxochemicals Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>	Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>		Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hoechst Celanese		Facility Name:	Houston Chemical Plant			
Location:	(City/State/Prov)	Houston, TX	Facility Type:	Chemical Plant			
	(Country)	United States	Facility Status:	Operating			
	(Region)	North America					

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):			
				(mt/d)	(Source)	
Feed1:	Natural gas	820,850 Nm3/d	Syngas Cap.:	2,100,000	Gasifier licensor	
Feed2:				(Nm3/d)	(Source)	
Feed3:			Eq. IGCC Cap., MWe:	156.8		
				(Calculated)		
Main Product:	Chemicals <small>(Category)</small>		Fuel Input:	337.8	Gasifier licensor data	
Product1:	Oxochemicals	mt/d		(MWt)	(Source)	
Product2:			Syngas Output:	287.1	Gasifier licensor data	
Product3:				(MWt)	(Source)	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
		(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:	
		(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:			Sulfur Removal:			
	(Supplier)	(Process)		(Supplier)	(Process)	
Gas Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:					Steam Turbine:	
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)
					(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	286	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1978
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Exxon Chemical Co.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Exxon Chemical Co.					Plant Name:	Baton Rouge Oxochemicals Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Exxon Chemical Co.	Facility Name:	Baton Rouge Chemical Plant
Location: (City/State/Prov)	Baton Rouge, LA	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	196.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Heavy fuel oil	196 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	570,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	42.6 <small>(Calculated)</small>		
			Fuel Input:	95.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	77.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:		
	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
					<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	213	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1979
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hoechst Celanese		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Hoechst Celanese		Plant Name:	Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Hoechst Celanese		Facility Name:	Bay City Chemical Plant		
Location: (City/State/Prov)	Bay City, TX		Facility Type:	Chemical Plant		
(Country)	United States		Facility Status:	Operating		
(Region)	North America					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	175.0 (mt/d)	Estimate (Source)	
Feed1:	Naphtha & fuel oil		175 mt/d	Syngas Cap.:	500,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:				Eq. IGCC Cap., MWe:	37.3 (Calculated)	
Feed3:				Fuel Input:	83.4 (MWt)	Estimate (Source)
Main Product:	Chemicals (Category)			Syngas Output:	68.4 (MWt)	Gasifier licensor data (Source)
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Radiant syngas cooler (Cooler Type)		(Cooler Supplier)	(MWth Duty)	Soot Handling:	Total recycle to gasifier
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier)	(Process)	
Gas Turbine:	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine:	(No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Foster Wheeler		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	296	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1983	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Sunoco					Plt. Owner Type:	Unspecified			
Plt. Operator:	Sunoco					Plant Name:	Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	6 MMscf/d				Syngas Cap.:	400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>	
Feed3:						Fuel Input:	64.4 <small>(MWt)</small>	Estimate <small>(Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	54.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Oxochemicals	mt/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>							
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>					
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:		
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:					Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>				<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:					Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>	
						<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Dvay McKee				Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: 297 **No. of Gasifiers: Op'g/Sp/Total** 2/0/2 **Gasifier Status:** Operating **Start Date:** 1983
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Dow (former Union Carbide) **Plt. Owner Type:** Unspecified
Plt. Operator: Dow (former Union Carbide) **Plant Name:** Texas City Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified facility
Location: (City/State/Prov) Unspecified location **Facility Type:** Unknown
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 12 MMscf/d **Syngas Cap.:** 830,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 62.0 (Calculated)
Feed3: **Fuel Input:** 133.5 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 113.5 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals (mt/d)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Davy McKee **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 24 **No. of Gasifiers: Op'g/Sp/Total** 12/ 2/ 14 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Dakota Gasification Co. **Plt. Owner Type:** Utility
Plt. Operator: Dakota Gasification Co. **Plant Name:** Great Plains Synfuels Plant
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Dakota Gasification Co. **Facility Name:** Great Plains Synfuels Plant
Location: (City/State/Prov) Bismarck, ND **Facility Type:** Electric Utility
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 8,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Lignite 14,000 t/d **Syngas Cap.:** 13,900,000 (Nm3/d) Estimate (Source)
Feed2: Ref. residue 50 t/d **Eq. IGCC Cap., MWe:** 1,037.7 (Calculated)
Feed3:
Main Product: Gaseous fuels (Category) **Fuel Input:** 2,533.7 (MWt) Estimate (Source)
Product1: SNG 160 MMscf/d **Syngas Output:** 1,900.3 (MWt) Estimate (Source)
Product2: CO2 5,000 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) NH3-based SO2 scrubber (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: C-E Lummus/Kaiser **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	32	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Motiva Enterprises LLC					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Motiva Enterprises LLC					Plant Name:	Convent H2 Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Motiva Enterprises LLC	Facility Name:	Star Enterprise Convent Refinery
Location: (City/State/Prov)	Convent, LA	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	650.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	H-Oil bottoms	650 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	63 MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	1,880,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	140.3 <small>(Calculated)</small>	
			Fuel Input:	313.4 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	257.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:	
Gas Cleanup:				Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Fluor Daniel			Engineer:	
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

14-Jul-04

Key Gasifier Information

Facility ID:	33	No. of Gasifiers: Op'g/Sp/Total	1/	1/	2	Gasifier Status:	Operating	Start Date:	Dec.	1995	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Global Energy, Inc.					Plt. Owner Type:	Developer				
Plt. Operator:	Global Energy, Inc./ConocoPhillips					Plant Name:	Wabash River Energy Ltd.				
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process <small>(Technology Name)</small>					ConocoPhillips <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Phil R. Amick <small>(Contact)</small>					Phil.Amick@ConocoPhillips.com <small>(Email)</small>					

Facility Information

Facility Owner:	Global Energy/Cinergy	Facility Name:	Wabash River Generating Station Unit No. 1
Location: (City/State/Prov)	West Terre Haute, IN	Facility Type:	Electric Utility
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petcoke <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Petcoke	2,000 mt/d				Syngas Cap.:	4,320,000 Estimate <small>(Nm3/d)</small> <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	322.5 <small>(Calculated)</small>
Feed3:						Fuel Input:	738.2 Estimate <small>(MWt)</small> <small>(Source)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	590.6 Estimate <small>(MWt)</small> <small>(Source)</small>
Product1:	Electricity	262 MWe (net)					
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	On-site/No integration <small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube cooler <small>(Cooler Type)</small>	Deutsche Babcock-Bor <small>(Cooler Supplier)</small>		Soot Handling: Separate handling unit/Re
Gas Cleanup:	Dow Chemical Co. <small>(Supplier)</small>	MDEA <small>(Process)</small>	Sulfur Removal:	
			<small>(Supplier)</small>	Claus <small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	7FA <small>(Model)</small>	192 <small>(MWout)</small>
HRSG:	1 <small>(No.)</small>	Foster Wheeler <small>(Supplier)</small>		342 mt/hr <small>(Production)</small>
			1 <small>(No.)</small>	Westinghouse <small>(Supplier)</small>
				104 <small>(MWout)</small>
Prin. Contractor:	Destec Engineering Inc.		Engineer:	Dow Engineering Co.
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production)

Steam Turbine:
(No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 29 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Sept. 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Frontier Oil & Refining Co. (Texaco Inc.) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Frontier Oil & Refining Co. **Plant Name:** El Dorado Gasification Power Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Frontier Oil & Refining Co. **Facility Name:** Frontier El Dorado Refinery
Location: (City/State/Prov) El Dorado, KS **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 100.0 (mt/d) Estimate (Source)
Feed1: Petcoke 151 mt/d
Feed2: Ref. waste 14 mt/d
Feed3: Natural gas 7,000 MMBtu/d
Eq. IGCC Cap., MWe: 6.0 (Calculated)
Syngas Cap.: 80,559 (Nm3/d) Gasifier licensor (Source)
Fuel Input: 14.7 (MWt) Estimate (Source)
Syngas Output: 11.0 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category)
Product1: Electricity 35 MW
Product2: HP steam 180,000 lb/hr
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 1 (No.) General Electric Co. (Supplier) 6B (Model) 35 (MWout)
HRSG: 1 (No.) (Supplier) (Model) 90 st/hr (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Fluor Daniel **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID:	36	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	April 1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application: Syngas for Chemicals	
Plt. Owner:	T & P Syngas (Texaco/Praxair)			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	Praxair			Plant Name:	Texas City Syngas Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	T & P Syngas (Texaco/Praxair)	Facility Name:	Texas City Industrial Gas Utility Island
Location: (City/State/Prov)	Texas City, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):		
				(mt/d)	(Source)
Feed1:	Natural gas	32 MMscf/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>		Syngas Cap.:	1,920,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
Product1:	H2	40 MMscf/d	Eq. IGCC Cap., MWe:	143.3 <small>(Calculated)</small>	
Product2:	CO	24 MMscf/d	Fuel Input:	348.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Product3:			Syngas Output:	278.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>		Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Texaco <small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:
			<small>(Supplier)</small>
Gas Turbine:	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
		<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:	Howe-Baker		Engineer: Praxair/Texaco
			Constructor: Howe-Baker

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 299 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1998
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Texas Eastman **Plt. Owner Type:** Unspecified
Plt. Operator: Texas Eastman **Plant Name:** Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified facility
Location: (City/State/Prov) Unspecified location **Facility Type:** Unknown
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 5 MMscf/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Oxochemicals mt/d
Product2:
Product3:
Syngas Cap.: 350,000 Nm3/d Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 26.1 (Calculated)
Fuel Input: 56.2 Estimate (MWt) (Source)
Syngas Output: 47.8 Gasifier licensor data (MWt) (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Kvaerner John Brown **Constructor:** Kellogg Brown & Root

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="35"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="1"/> / <input type="text" value="2"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="July"/> <input type="text" value="2000"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Gases"/>
Plt. Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plant Name:	<input type="text" value="Coffeyville Syngas Plant"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>	<input type="text" value="GE"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>				
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>	<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>	Facility Name:	<input type="text" value="Coffeyville Nitrogen Plant"/>
Location: (City/State/Prov)	<input type="text" value="Coffeyville, KS"/>	Facility Type:	<input type="text" value="Petrochemical Plant"/>
(Country)	<input type="text" value="United States"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="North America"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/> <small>(Category)</small>	<input type="text" value="Petcoke"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value="1,100.0"/> <small>(mt/d)</small>	<input type="text" value="Gasifier operator data"/> <small>(Source)</small>
Feed1:	<input type="text" value="Petcoke"/>	<input type="text" value="1,100 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				
Product1:	<input type="text" value="Ammonia"/>	<input type="text" value="1,000 mt/d"/>			
Product2:	<input type="text" value="UAN"/>	<input type="text" value="1,545 mt/d"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="2,141,200"/> <small>(Nm3/d)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="159.8"/> <small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="390.3"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Syngas Output:	<input type="text" value="292.7"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> <small>(Oxidant)</small>	<input type="text" value="BOC Gases"/> <small>(ASU Supplier)</small>	<input type="text" value="Across-the-fence"/> <small>(ASU Integration)</small>
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/> <small>(Cooler Type)</small>		<input type="text"/> <small>(Cooler Supplier)</small>
			<input type="text"/> <small>(MWth Duty)</small>
Gas Cleanup:	<input type="text" value="UOP LLC"/> <small>(Supplier)</small>	<input type="text" value="Selexol"/> <small>(Process)</small>	Sulfur Removal:
			<input type="text" value="Tessenderlo Kerley"/> <small>(Supplier)</small>
			<input type="text" value="Claus/Ammonium thiosul"/> <small>(Process)</small>
Gas Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
HRSG:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(Production)</small>
			Steam Turbine:
			<input type="text" value="0"/> <small>(No.)</small>
			<input type="text" value="N.A."/> <small>(Supplier)</small>
			<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
Prin. Contractor:	<input type="text" value="Black & Veatch Pritchard"/>		
Engineer:	<input type="text"/>		
Constructor:	<input type="text"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 31 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Valero **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Valero **Plant Name:** Delaware Clean Energy Cogeneration Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Premcor, Inc. **Facility Name:** Premcor Delaware City Refinery
Location: (City/State/Prov) Delaware City, DE **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 1,775.0 (mt/d) Estimate (Source)
Feed1: Fluid petcoke 2,100 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 160 MW (net)
Product2: Steam 791,000 lb/hr
Product3:

Syngas Cap.: 3,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 283.7 (Calculated)
Fuel Input: 692.7 (MWt) Estimate (Source)
Syngas Output: 519.5 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6FA (Model) 180 (MWout)
HRSG: 2 (No.) Nooter-Erikson (Supplier) (Model) 359 mt/hr (Production) **Steam Turbine:** 2 (No.) (Supplier) (Model) 80 (MWout)
Prin. Contractor: Parsons Process Group Inc. **Engineer:** Parsons Process Group Inc. **Constructor:** Parsons Process Group Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date:

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:
(Country) Facility Status:
(Region)

Feed/Product Information

Main Feed: Rate (MAF):
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1: MW

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID:	408	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	Duke Energy Indiana				Plt. Owner Type:	Utility				
Plt. Operator:	Duke Energy Indiana				Plant Name:	Edwardsport IGCC				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Duke Energy Indiana	Facility Name:		
Location: (City/State/Prov)	Edwardsport, IN	Facility Type:		
(Country)	United States	Facility Status:		
(Region)	North America			

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0				
Feed2:			0				
Feed3:			0				
Main Product:	Power <small>(Category)</small>						
Product1:	Electricity		630	MW			
Product2:			0				
Product3:			0				
		Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>				
		Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>				
		Fuel Input:	1,530.0 <small>(MWt)</small>				
		Syngas Output:	1,150.0 <small>(MWt)</small>				

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0				
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	<small>Soot Handling:</small>			
Gas Cleanup:							
	<small>(Supplier)</small>	<small>(Process)</small>	<small>Sulfur Removal:</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	0	<small>Steam Turbine:</small>	
				<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 416 No. of Gasifiers: Op'g/Sp/Total 4/ 1/ 5 Gasifier Status: Development Start Date: 2012

Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application:

Plt. Owner: Rentech Development Plt. Owner Type:

Plt. Operator: Rentech Development Plant Name: Rentech Strategic Fuels and Chemicals Center

Gas'n Tech.: E-GAS (Destec/Dow) Gasification Process (Technology Name) ConocoPhillips (Licensor) Entrained-flow gasification (Technology Type)

Vendor Contact: Phil R. Amick (Contact) Phil.Amick@ConocoPhillips.com (Email)

Facility Information

Facility Owner: Rentech Development Facility Name:

Location: (City/State/Prov) Adams County, MS Facility Type:

(Country) United States Facility Status:

(Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) Rate (MAF): 0.0 (mt/d) (Source)

Feed1: Coal 0

Feed2: 0

Feed3: 0

Main Product: FT liquids (Category)

Product1: FT Liquids 0

Product2: CO2 for EOR 0

Product3: 0

Syngas Cap.: 10,480,000 (Nm3/d) (Source)

Eq. IGCC Cap., MWe: 782.4 (Calculated)

Fuel Input: 1,780.0 (MWt) (Source)

Syngas Output: 1,420.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) Soot Handling:

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)

HRSG: 0 (No.) (Supplier) (Model) 0 (Production) Steam Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-07

Key Gasifier Information

Facility ID:	358	No. of Gasifiers: Op'g/Sp/Total	2/ 1/ 3	Gasifier Status:	Development	Start Date:	2013
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Power
Plt. Owner:	Excelsior Energy		Plt. Owner Type:	Technology Developer			
Plt. Operator:	Excelsior Energy		Plant Name:	Mesaba Energy Project			
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process (Technology Name)		ConocoPhillips (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Phil R. Amick (Contact)		Phil.Amick@ConocoPhillips.com (Email)				

Facility Information

Facility Owner:	Excelsior Energy		Facility Name:	Mesaba Energy Project	
Location: (City/State/Prov)	Minnesota		Facility Type:		
(Country)	United States		Facility Status:		
(Region)	North America				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)	(Source)
Feed1:	Coal	5,000 t/d	Syngas Cap.:	9,849,600 (Nm ³ /d)	(Source)
Feed2:		0	Eq. IGCC Cap., MWe:	735.3 (Calculated)	
Feed3:		0	Fuel Input:	1,683.1 (MWt)	(Source)
Main Product:	Power (Category)		Syngas Output:	1,346.6 (MWt)	(Source)
Product1:	Electricity	600 MW			
Product2:		0			
Product3:		0			

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:	Fire-tube cooler (Cooler Type)	(Cooler Supplier)	0 (MWth Duty)	Soot Handling:	Dry Barrier			
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier)	(Process)			
Gas Turbine:	2 (No.)	(Supplier)	0 (Model)	(MWout)				
HRSG:	2 (No.)	(Supplier)	0 (Production)	Steam Turbine:	1 (No.)	(Supplier)	0 (Model)	(MWout)
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: **Facility Type:**
(City/State/Prov)

Facility Status:
(Country)

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

**2007 Gasification Database
Plants sorted by Feedstock**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	236	No. of Gasifiers: Op'g/Sp/Total	7/ 0/ 7	Gasifier Status:	Operating	Start Date:	1964
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb			Plt. Owner Type:	Waste Processing		
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb			Plant Name:	Schwarze Pumpe Power/Methanol Plant		
Gas'n Tech.:	Lurgi Dry Ash Gasification Process (Technology Name)		Lurgi GmbH (Licensor)	Moving-bed gasification (Technology Type)			
Vendor Contact:	Pauli Bauman (Contact)		pauli.bauman@sasol.com (Email)				

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH		Facility Name:	Secondary Raw Material Utilization Centre	
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe		Facility Type:	Waste Processing Plant	
(Country)	Germany		Facility Status:	Operating	
(Region)	Europe				

Feed/Product Information

Main Feed:	Solid (Category)	Biomass/Waste (Classification)	Rate (MAF):	1,500.0 (mt/d)	Estimate (Source)
Feed1:	Municipal waste	1,850 mt/d			
Feed2:					
Feed3:					
Main Product:	Power (Category)		Syngas Cap.:	3,000,000 (Nm3/d)	Estimate (Source)
Product1:	Electricity	75 MW	Eq. IGCC Cap., MWe:	224.0 (Calculated)	
Product2:	Methanol	375 mt/d	Fuel Input:	494.1 (MWt)	Estimate (Source)
Product3:			Syngas Output:	410.1 (MWt)	Estimate (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	AGA (ASU Supplier)	Not integrated (ASU Integration)	
Syngas Cooler:				Soot Handling:
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal:	
			(Supplier)	(Process)
Gas Turbine:	1 (No.)	General Electric Co. (Supplier)	MS6001B (Model)	44.5 (MWout)
HRSG:	1 (No.)		240 t/hr (Production)	Steam Turbine:
	(Supplier)	(Model)		1 (No.)
				(Supplier)
				(Model)
				(MWout)
Prin. Contractor:		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 316 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: Oct. 1983
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Fuels
Plt. Owner: Oy W. Schauman Ab Mills Plt. Owner Type: Pulp & Paper Processing
Plt. Operator: Oy W. Schauman Ab Mills Plant Name: Pietarsaari ACFBG Unit
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier Foster Wheeler International Fluidized-bed gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: John Hemmings john_hemmings@fwc.com
(Contact) (Email)

Facility Information

Facility Owner: Oy W. Schauman Ab Mills Facility Name: Pietarsaari Kiln
Location: (City/State/Prov) Pietarsaari Facility Type: Pulp & Paper Mill
(Country) Finland Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste Rate (MAF):
(Category) (Classification) (mt/d) (Source)
Feed1: Biofuels mt/d Syngas Cap.: 204,819 Estimate
Feed2: (Source)
Feed3: (Nm³/d)
Eq. IGCC Cap., MWe: 15.3 (Calculated)
Main Product: Gaseous fuels Fuel Input: 35.0 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Syngas 35 MWth Syngas Output: 28.0 Estimate
Product2: (MWt) (Source)
Product3:

Other Information

O₂ Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):** /
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3:

Main Product:
(Category) **Fuel Input:**
(MWt) (Source)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

23-Feb-01

Key Gasifier Information

Facility ID:	275	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	June	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Sydkraft AB					Plt. Owner Type:	Utility				
Plt. Operator:	Sydkraft AB					Plant Name:	Värnamo IGCC Demonstration Plant				
Gas'n Tech.:	Foster Wheeler Pressurized Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>			Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Lawford C. Howells <small>(Contact)</small>					Lawford_Howells@fwc.com <small>(Email)</small>					

Facility Information

Facility Owner:	Sydkraft AB	Facility Name:	Malmö/Värnamo Plant
Location: (City/State/Prov)	Malmö/Värnamo	Facility Type:	Electric Utility
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	55.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Biofuels	55 mt/d			Syngas Cap.:
Feed2:					105,000 Estimate <small>(Nm3/d) (Source)</small>
Feed3:					Eq. IGCC Cap., MWe:
					7.8 <small>(Calculated)</small>
Main Product:	Power <small>(Category)</small>				Fuel Input:
Product1:	Electricity	6 MWe			18.0 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:	District heat	9 MWth			Syngas Output:
Product3:					14.4 Estimate <small>(MWt) (Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>
Syngas Cooler:	 <small>(Cooler Type)</small>	 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal:
			 <small>(Supplier)</small>
Gas Turbine:	1 <small>(No.)</small>	Alstom UK <small>(Supplier)</small>	Typhoon <small>(Model)</small>
			4.2 <small>(MWout)</small>
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>
			 <small>(Production)</small>
Steam Turbine:	1 <small>(No.)</small>	Nadrowski <small>(Supplier)</small>	2 <small>(Model)</small>
			 <small>(MWout)</small>
Prin. Contractor:	 <small>(Supplier)</small>	Engineer:	 <small>(Supplier)</small>
		Constructor:	 <small>(Supplier)</small>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	240	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	Sept.	1996	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Gases		
Plt. Owner:	Rüdersdorfer Zement GmbH				Plt. Owner Type:						
Plt. Operator:	Rüdersdorfer Zement GmbH				Plant Name:	Fuel Gas Plant					
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process				Lurgi Envirotherm GmbH	Fluidized-bed gasification					
	(Technology Name)				(Licensor)	(Technology Type)					
Vendor Contact:	Claus Greil				claus_greil@lurgi.de						
	(Contact)				(Email)						

Facility Information

Facility Owner:	Rüdersdorfer Zement GmbH	Facility Name:	Rüdersdorf Cement Kiln
Location: (City/State/Prov)	Rüdersdorf	Facility Type:	Other
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid	Biomass/Waste	Rate (MAF):	320.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Biomass	320 mt/d			
Feed2:	Wastes				
Feed3:	Carbon ash				
Main Product:	Gaseous fuels				
	(Category)				
Product1:	Fuel gas	100 MWth			
Product2:					
Product3:					
			Syngas Cap.:	732,000	Estimate
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	54.6	
				(Calculated)	
			Fuel Input:	110.0	Gasifier licensor data
				(MWt)	(Source)
			Syngas Output:	100.0	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Air		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Supplier)
			(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (Production)
			(No.) (Supplier) (Model) (MWout)
Prin. Contractor:			
		(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Dec-00

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	242	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:		2000
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Gases	
Plt. Owner:	EPZ				Plt. Owner Type:					
Plt. Operator:	EPZ				Plant Name:	Amercentrale Fuel Gas Plant				
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>				Lurgi Envirotherm GmbH <small>(Licensor)</small>		Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	EPZ		Facility Name:	Amercentrale Plant	
Location: (City/State/Prov)	Geertruidenberg		Facility Type:		
(Country)	Netherlands		Facility Status:	Operating	
(Region)	Europe				

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Demolition wood	500 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	85 MWth			
Product2:					
Product3:					
			Syngas Cap.:	614,300 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	45.9 <small>(Calculated)</small>	
			Fuel Input:	105.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	84.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Water-tube <small>(Cooler Type)</small>	Baumgarte <small>(Cooler Supplier)</small>		Soot Handling: 	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Scrubber <small>(Process)</small>	Sulfur Removal: <small>(Supplier) (Process)</small>		
Gas Turbine:					
		<small>(No.) (Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
		<small>(No.) (Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
Steam Turbine:					
		<small>(No.) (Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

21-Feb-01

Key Gasifier Information

Facility ID: 280 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Corenso United Oy Ltd. **Plt. Owner Type:** Pulp & Paper Processing
Plt. Operator: Corenso United Oy Ltd. **Plant Name:** Varkaus ACFBG Plant
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier (Technology Name) Foster Wheeler International (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: John Hemmings (Contact) john_hemmings@fwc.com (Email)

Facility Information

Facility Owner: Corenso United Oy Ltd. **Facility Name:** Varkaus Gas Plant
Location: (City/State/Prov) Varkaus **Facility Type:** Pulp & Paper Mill
 (Country) Finland **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** (mt/d) (Source)
 (Category) (Classification)
Feed1: Packaging wastes mt/d
Feed2:
Feed3:
Main Product: Gaseous fuels (Category)
Product1: Syngas Nm3/d
Product2:
Product3:
Syngas Cap.: 234,133 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 17.5 (Calculated)
Fuel Input: 40.0 Gasifier licensor data (MWt) (Source)
Syngas Output: 32.0 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) (Production) 12.5 kg/s **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jun-03

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID: 145 **No. of Gasifiers: Op'g/Sp/Total** 40/ 0/ 40 **Gasifier Status:** Operating **Start Date:** 1977
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels/Chemicals
Plt. Owner: Sasol (Pty) Ltd. **Plt. Owner Type:** Synthetic Fuels & Chemicals
Plt. Operator: Sasol Synfuels (Pty) Ltd. **Plant Name:** Sasol Synfuels
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. **Facility Name:** Sasol Synfuels
Location: (City/State/Prov) Secunda, Mpumalanga **Facility Type:** Petrochemical Plant
 (Country) South Africa **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 24,780.0 Operator/licensor
 (Category) (Classification) (mt/d) (Source)
Feed1: Subbit. coal 1,475 mt/hr **Syngas Cap.:** 39,600,000 Operator/licensor
Feed2: **Syngas Cap.:** (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 2,956.2 (Calculated)
Main Product: FT liquids (Category) **Fuel Input:** 8,810.0 Operator/licensor (MWt) (Source)
Product1: Gas **Syngas Output:** 7,048.0 Operator/licensor (MWt) (Source)
Product2: Chemicals
Product3:

Other Information

O2 Supply: Oxygen Air Liquide Not integrated
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: No SG cooler; series of air & water coolers Soot Handling: N.A.
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: Sasol/Linde Sulfolin (Stretford variant)
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi **Engineer:** Fluor Daniel, Inc. **Constructor:** Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID:	146	No. of Gasifiers: Op'g/Sp/Total	40/	0/	40	Gasifier Status:	Operating	Start Date:	1982	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Fuels/Chemicals	
Plt. Owner:	Sasol (Pty) Ltd.				Plt. Owner Type:	Synthetic Fuels & Chemicals				
Plt. Operator:	Sasol Synfuels (Pty) Ltd.				Plant Name:	Gasification East Plant				
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom <small>(Technology Name)</small>			Sasol Lurgi GmbH <small>(Licensor)</small>		Fixed-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Pauli Bauman <small>(Contact)</small>			pauli.bauman@sasol.com <small>(Email)</small>						

Facility Information

Facility Owner:	Sasol (Pty) Ltd.	Facility Name:	Sasol Synfuels
Location: (City/State/Prov)	Secunda, Mpumalanga	Facility Type:	Petrochemical Plant
(Country)	South Africa	Facility Status:	Operating
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	24,780.0	Operator/licensor
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Subbit. coal	1,475 mt/hr			
Feed2:					
Feed3:					
Main Product:	FT liquids				
	<small>(Category)</small>				
Product1:	Gas				
Product2:	Chemicals				
Product3:					
			Syngas Cap.:	39,600,000	Operator/licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	2,956.2	
				<small>(Calculated)</small>	
			Fuel Input:	8,810.0	Operator/licensor
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	7,048.0	Operator/licensor
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen	Air Liquide	Not integrated
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	No SG cooler; series of air & water coolers		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Soot Handling:	N.A.		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>
Sulfur Removal:	Sasol/Linde	Sulfolin (Stretford variant)	
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
		<small>(Production)</small>	<small>(MWout)</small>
HRSG:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
		<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
		<small>(Production)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi		
Engineer:	Fluor Daniel, Inc.		
Constructor:	Fluor Daniel, Inc.		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 24 **No. of Gasifiers: Op'g/Sp/Total** 12/ 2/ 14 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Dakota Gasification Co. **Plt. Owner Type:** Utility
Plt. Operator: Dakota Gasification Co. **Plant Name:** Great Plains Synfuels Plant
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Dakota Gasification Co. **Facility Name:** Great Plains Synfuels Plant
Location: (City/State/Prov) Bismarck, ND **Facility Type:** Electric Utility
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 8,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Lignite 14,000 t/d **Syngas Cap.:** 13,900,000 (Nm3/d) Estimate (Source)
Feed2: Ref. residue 50 t/d **Eq. IGCC Cap., MWe:** 1,037.7 (Calculated)
Feed3:
Main Product: Gaseous fuels (Category) **Fuel Input:** 2,533.7 (MWt) Estimate (Source)
Product1: SNG 160 MMscf/d **Syngas Output:** 1,900.3 (MWt) Estimate (Source)
Product2: CO2 5,000 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) NH3-based SO2 scrubber (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: C-E Lummus/Kaiser **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	18	No. of Gasifiers: Op'g/Sp/Total	3/1/4	Gasifier Status:	Operating	Start Date:	July 1984
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Ube Ammonia Industry Co. Ltd.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Ube Ammonia Industry Co. Ltd.			Plant Name:	Ube City Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Ube Ammonia Industry Co. Ltd.		Facility Name:	Ube City Chemical Plant	
Location:	(City/State/Prov)	Ube City	Facility Type:	Chemical Plant	
	(Country)	Japan	Facility Status:	Operating	
	(Region)	Asia/Australia			

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal & petcoke		1,650 mt/d		
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,250	mt/d		
Product2:					
Product3:					
				Syngas Cap.:	2,150,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	160.5 <small>(Calculated)</small>
				Fuel Input:	391.9 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	293.9 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		Soot Handling:
Gas Cleanup:			Sulfur Removal:
Gas Turbine:			
HRSG:			Steam Turbine:
Prin. Contractor:	Ube	Engineer:	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:
Product2:
Product3:

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	154	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	July	1987	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	China National Technology Import Co. (CNTIC)					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	China National Technology Import Co. (CNTIC)					Plant Name:	Shaanxi Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom <small>(Technology Name)</small>					Sasol Lurgi GmbH <small>(Licensor)</small>	Fixed-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Pauli Bauman <small>(Contact)</small>					pauli.bauman@sasol.com <small>(Email)</small>					

Facility Information

Facility Owner:	China National Technology Import Co. (CNTIC)	Facility Name:	Shaanxi Chemical Fertilizer Plant
Location: (City/State/Prov)	Shaanxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	1,050.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492	Estimate
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4	
				<small>(Calculated)</small>	
			Fuel Input:	367.1	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	312.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Direct-quench/fire-tube				Soot Handling:
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm	Claus
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	11	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	April 1993
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Lu Nan Chemical Industry (Group) Co./CNTIC			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Lu Nan Chemical Industry (Group) Co./CNTIC			Plant Name:	Lu Nan Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Lu Nan Chemical Industry (Group) Co./CNTIC	Facility Name:	Lu Nan Chemical Complex
Location: (City/State/Prov)	Tengxian, Shandong	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	246.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bit. coal	350 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	200 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	525,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	39.2 <small>(Calculated)</small>	
			Fuel Input:	95.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	71.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>						
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling:				
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>	 <small>(Process)</small>				
Gas Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>					
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>	Steam Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>
Prin. Contractor:	Bechtel		Engineer:	First Design Institute of China		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 56 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** April 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nuon Power Buggenum **Plt. Owner Type:** Utility
Plt. Operator: Nuon Power Buggenum **Plant Name:** Buggenum IGCC Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Nuon Power **Facility Name:** Willem-Alexander Centrale (WAC)
Location: (City/State/Prov) Haelen, Limburg **Facility Type:** Electric Utility
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Bit. coal 2,000 mt/d (max)
Feed2:
Feed3:
Syngas Cap.: 3,408,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 254.4 (Calculated)
Main Product: Power (Category) **Fuel Input:** 702.6 (MWt) Gasifier licensor data (Source)
Product1: Electricity 253 MWe **Syngas Output:** 465.9 (MWt) Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Water-tube boiler with superheater (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus (O2 Blown)/SCOT (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.2 (Model) 156 (MWout)
HRSG: 1 (No.) Stork (Supplier) (Model) 300 (Production) **Steam Turbine:** 3 (No.) Siemens/KWU (Supplier) 1 HP/1IP/1 LP (Model) 128 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

27-Aug-03

Key Gasifier Information

Facility ID: 160 **No. of Gasifiers: Op'g/Sp/Total** 6/ 2/ 8 **Gasifier Status:** Operating **Start Date:** 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Pacific Chemical (Group) Co., Ltd. **Plant Name:** Wujing Gas Plant No. 2
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) _____ (Email)

Facility Information

Facility Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Facility Name:** Wujing Coking and Chemical Plant
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** _____ (mt/d) _____ (Source)
Feed1: Bit. coal 800 mt/d
Feed2: _____
Feed3: _____
Main Product: Gaseous fuels (Category)
Product1: Fuel gas 3,000,000 Nm3/d
Product2: Town gas 500,000 Nm3/d
Product3: _____
Syngas Cap.: 3,000,000 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 224.0 (Calculated)
Fuel Input: 512.6 Estimate (MWt) (Source)
Syngas Output: 410.1 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** Design Institute of Shanghai **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 274 **No. of Gasifiers: Op'g/Sp/Total** 13/ 13/ 26 **Gasifier Status:** Operating **Start Date:** 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Sokolovska Uhelna, A.S. **Plt. Owner Type:** Mining
Plt. Operator: Sokolovska Uhelna, A.S. **Plant Name:** Vresova IGCC Plant
Gas'n Tech.: Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sokolovska Uhelna, A.S. **Facility Name:** Vresova Town Gas Plant
Location: (City/State/Prov) Vresova **Facility Type:** Lignite Processing Plant
 (Country) Czech Republic **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 2,040.0 Estimate
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 2,040 mt/d **Syngas Cap.:** 4,700,000 Estimate
Feed2: **Syngas Cap.:** (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 350.9 (Calculated)
Main Product: Power (Category) **Fuel Input:** 795.5 Estimate (MWt) (Source)
Product1: Electricity 350 MW **Syngas Output:** 636.4 Estimate (MWt) (Source)
Product2: Steam t/hr
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 9E (Model) 400 (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: MWe (net)

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	14	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Operating	Start Date:	Feb.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Weihe Fertilizer Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Weihe Fertilizer Co.					Plant Name:	Shaanxi Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Weihe Fertilizer Co.	Facility Name:	Weihe Chemical Fertilizer Plant
Location: (City/State/Prov)	Xian, Shaanxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	953.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	1,640 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	900	mt/d		
Product2:					
Product3:					
				Eq. IGCC Cap., MWe:	152.3 <small>(Calculated)</small>
				Syngas Cap.:	2,040,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Fuel Input:	371.9 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	278.9 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>			
					<small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				
					<small>(Cooler Supplier) (MWth Duty)</small>
Gas Cleanup:					
					<small>(Supplier) (Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:	Ube				
			<small>Engineer:</small>		<small>Constructor:</small>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-03

12-Aug-03

Key Gasifier Information

Facility ID: 58 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** Sept. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Elcogas SA **Plt. Owner Type:** Special Joint Venture
Plt. Operator: Elcogas SA **Plant Name:** Puertollano GCC Plant
Gas'n Tech.: Krupp Koppers PRENFLO Gasification Technology (Technology Name) Krupp Uhde (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: H. Max Hooper (Contact) hooperm@usa.kud.thyssenkrupp.com (Email)

Facility Information

Facility Owner: Elcogas SA **Facility Name:** Puertollano Power Plant
Location: (City/State/Prov) Puertollano **Facility Type:** Electric Utility
 (Country) Spain **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Coal & petcoke 2,600 mt/d
Feed2:
Feed3:
Syngas Cap.: 4,300,000 Nm³/d Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 321.0 (Calculated)
Main Product: Power (Category)
Fuel Input: 734.8 MWt Gasifier licensor data (Source)
Product1: Electricity 335 MWe
Syngas Output: 587.8 MWt Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Convective syngas cooler (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Krupp Uhde (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) Claus (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.3 (Model) 182.3 (MWout)
HRSG: 1 (No.) Babcock & Wilcox (Supplier) (Model) (Production) **Steam Turbine:** 1 (No.) Siemens/KWU (Supplier) (Model) 135.4 (MWout)
Prin. Contractor: Krupp Uhde **Engineer:** Krupp Uhde **Constructor:** B&W/Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: 391 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Chemical & Coking (Shanghai Pacific) **Plant Name:** Gas Plant No. 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Facility Name:** Gas Plant No. 2
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: Town gas 0
Product3: Acetic acid 0
Syngas Cap.: 765,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 57.1 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 104.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** ()

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	185	No. of Gasifiers: Op'g/Sp/Total	3/0/3	Gasifier Status:	Operating	Start Date:	Aug. 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Huainan General Chemical Works			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Huainan General Chemical Works			Plant Name:	Hefei City Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>	GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>	timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Huainan General Chemical Works	Facility Name:	Hefei City Chemical Plant
Location: (City/State/Prov)	Hefei City, Anhui	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	655.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	898 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	667 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	104.5 <small>(Calculated)</small>	
			Fuel Input:	255.2 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	191.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				
Gas Cleanup:					
Gas Turbine:					
HRSG:					
Prin. Contractor:			Engineer:	Ube	
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	42	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	2000
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Henan				Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Henan				Plant Name:	Puyang Ammonia Plant			
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>				

Facility Information

Facility Owner:	Henan	Facility Name:	Puyang Chemical Fertilizer Plant
Location: (City/State/Prov)	Puyang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4 <small>(Calculated)</small>	
			Fuel Input:	367.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	312.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm <small>(Supplier)</small>	Claus <small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 394 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:**
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Zhong Yuan Dahua Group Ltd.
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:**
Location: (City/State/Prov) Puyang, Henan **Facility Type:**
 (Country) China **Facility Status:**
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 2,282,492 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Fuel Input: 367.0 (MWt) (Source)
Syngas Output: 312.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 16-Jan-02

Key Gasifier Information

Facility ID:	159	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	2002	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Power	
Plt. Owner:	IBIL Energy Systems Ltd. (IES)				Plt. Owner Type:					
Plt. Operator:	IBIL Energy Systems Ltd. (IES)				Plant Name:	Sanghi IGCC Plant				
Gas'n Tech.:	GTI (IGT) U-GAS Gasification Process			Carbona/Enviropower		Fluidized-bed gasification				
	(Technology Name)			(Licensor)		(Technology Type)				
Vendor Contact:	J.G. Patel									
	(Contact)				(Email)					

Facility Information

Facility Owner:	IBIL Energy Systems Ltd. (IES)	Facility Name:	IES Power Plant	
Location: (City/State/Prov)	Kutch, Gujarat	Facility Type:	IPP	
(Country)	India	Facility Status:	Construction	
(Region)	Asia/Australia			

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	350.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Lignite	350 mt/d			
Feed2:					
Feed3:					
Main Product:	Power				
	(Category)				
Product1:	Electricity	53 MW			
Product2:	Steam	40 t/hr			
Product3:					
			Syngas Cap.:	804,000	Estimate
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	60.0	
				(Calculated)	
			Fuel Input:	136.4	Estimate
				(MWt)	(Source)
			Syngas Output:	109.1	Estimate
				(MWt)	(Source)

Other Information

O2 Supply:	Air		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Supplier) (Process)
Gas Turbine:	1	General Electric Co.	6B
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	1		90 t/hr
	(No.)	(Supplier)	(Production)
Steam Turbine:	1	General Electric Co.	21.2
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Enviropower		
	(Contractor)	(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: 390 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2004
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Haolianghe Ammonia Plant **Plt. Owner Type:** _____
Plt. Operator: Haolianghe Ammonia Plant **Plant Name:** Haolianghe Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: _____ **Facility Name:** Haolianghe Ammonia Plant
Location: (City/State/Prov) Haolianghe **Facility Type:** _____
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 1,474,620 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 110.1 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 201.6 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 383 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2004
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: China 1 (Expansion) **Plt. Owner Type:**
Plt. Operator: **Plant Name:** China 1
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: China 1 (Expansion) **Facility Name:** China 1
Location: (City/State/Prov) Haolianghe, Heilongjiang **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: 0
Product3: 0
Syngas Cap.: 2,045,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 152.7 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 279.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	375	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Development	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Liuzhou Chemicals				Plt. Owner Type:				
Plt. Operator:	Liuzhou Chemicals				Plant Name:				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Liuzhou Chemicals	Facility Name:	
Location: (City/State/Prov)	Liuzhou, Guanxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Coal <small>(Category)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
	Coal <small>(Classification)</small>			1,200 mt/d <small>(Source)</small>			
Feed1:	Coal			1,200 mt/d			
Feed2:				0			
Feed3:				0			
Main Product:	Chemicals <small>(Category)</small>						
Product1:	Ammonia	0					
Product2:		0					
Product3:		0					
					Syngas Cap.:	1,700,000 <small>(Nm3/d)</small>	
					Eq. IGCC Cap., MWe:	126.9 <small>(Calculated)</small>	
					Fuel Input:	0.0 <small>(MWt)</small>	
					Syngas Output:	232.0 <small>(MWt)</small>	

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0				
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:							
	<small>(Supplier)</small>	<small>(Process)</small>		Sulfur Removal:			
					<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0		0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
					<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 384 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases/Chemicals
Plt. Owner: China 2 **Plt. Owner Type:** _____
Plt. Operator: _____ **Plant Name:** China 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: China 2 **Facility Name:** China 2
Location: (City/State/Prov) Jinling, Nanjing **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: _____ 0
Product3: _____ 0
Syngas Cap.: 1,275,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 95.2 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 174.3 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 20-Jul-04

Key Gasifier Information

Facility ID:	366	No. of Gasifiers: Op'g/Sp/Total	0/	0/	0	Gasifier Status:	Development	Start Date:	2005
Project Count:	0	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Sinopec-Shell				Plt. Owner Type:				
Plt. Operator:	Sinopec-Shell				Plant Name:				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sinopec-Shell	Facility Name:	
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	2,000 t/d				Syngas Cap.:	
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt) (Source)</small>
Product1:		0				Syngas Output:	273.4 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0		Soot Handling:		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0		Steam Turbine:	0	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 367 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Sinopec **Plt. Owner Type:** _____
Plt. Operator: Sinopec **Plant Name:** Sinopec, Zhijiang
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Sinopec **Facility Name:** _____
Location: (City/State/Prov) Zhijiang, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 2,000 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 273.4 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	388	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	
Plt. Owner:	China 4	Plt. Owner Type:					
Plt. Operator:							
Gas'n Tech.:	GE Gasification Technology	GE	Entrained-flow gasification				
	(Technology Name)	(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey	timothy.huskey@ge.com					
	(Contact)	(Email)					

Facility Information

Facility Owner:	China 4	Facility Name:	China 4
Location: (City/State/Prov)		Facility Type:	
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0	
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Coal	0			
Feed2:	Petcoke	0			
Feed3:		0			
Main Product:	Chemicals				
	(Category)				
Product1:	Ammonia	0			
Product2:	Urea	0			
Product3:		0			
				2,100,000	
				(Nm3/d)	(Source)
			156.8		
			(Calculated)		
			0.0		
			(MWt)	(Source)	
			287.1		
			(MWt)	(Source)	

Other Information

O2 Supply:			
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:			0
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Process)
Gas Turbine:	0		0
	(No.)	(Supplier)	(Model)
			(MWout)
HRSG:	0		0
	(No.)	(Supplier)	(Model)
			(Production)
Steam Turbine:	0		0
	(No.)	(Supplier)	(Model)
			(MWout)
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

 (Country) **Facility Status:**

 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1: **Product2:**
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID: <input type="text" value="386"/>	No. of Gasifiers: Op'g/Sp/Total <input type="text" value="3"/> / <input type="text" value="0"/> / <input type="text" value="3"/>	Gasifier Status: <input type="text" value="Development"/>	Start Date: <input type="text" value="2006"/>
Project Count: <input type="text" value="1"/>	Plt. Type: <input type="text" value="Commercial"/>	Project Reality: <input type="text" value="Planning"/>	Application: <input type="text"/>
Plt. Owner: <input type="text" value="China 5"/>	Plt. Owner Type: <input type="text"/>		
Plt. Operator: <input type="text"/>	Plant Name: <input type="text" value="China 5"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>	<input type="text" value="GE"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>	<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>	

Facility Information

Facility Owner: <input type="text" value="China 5"/>	Facility Name: <input type="text" value="China 5"/>
Location: (City/State/Prov) <input type="text"/>	Facility Type: <input type="text"/>
(Country) <input type="text" value="China"/>	Facility Status: <input type="text" value="Planning"/>
(Region) <input type="text" value="Asia/Australia"/>	

Feed/Product Information

Main Feed:	<input type="text" value="Coal"/> <small>(Category)</small>	Rate (MAF): <input type="text" value="0.0"/> <small>(mt/d)</small>	<input type="text"/> <small>(Source)</small>
Feed1:	<input type="text" value="Coal"/> <input type="text" value="0"/>	Syngas Cap.: <input type="text" value="2,080,000"/> <small>(Nm3/d) (Source)</small>	
Feed2:	<input type="text"/> <input type="text" value="0"/>	Eq. IGCC Cap., MWe: <input type="text" value="155.3"/> <small>(Calculated)</small>	
Feed3:	<input type="text"/> <input type="text" value="0"/>	Fuel Input: <input type="text" value="0.0"/> <small>(MWt) (Source)</small>	
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>	Syngas Output: <input type="text" value="284.3"/> <small>(MWt) (Source)</small>	
Product1:	<input type="text" value="Methanol"/> <input type="text" value="0"/>		
Product2:	<input type="text"/> <input type="text" value="0"/>		
Product3:	<input type="text"/> <input type="text" value="0"/>		

Other Information

O2 Supply:	<input type="text"/> <small>(Oxidant)</small>	<input type="text"/> <small>(ASU Supplier)</small>	<input type="text"/> <small>(ASU Integration)</small>
Syngas Cooler:	<input type="text"/> <small>(Cooler Type)</small>	<input type="text"/> <small>(Cooler Supplier)</small>	<input type="text" value="0"/> <small>(MWth Duty)</small>
Gas Cleanup:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	Sulfur Removal: <input type="text"/> <small>(Supplier) (Process)</small>
Gas Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model) (MWout)</small>
HRSG: <input type="text" value="0"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text" value="0"/> <small>(Production)</small>
	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model) (MWout)</small>
Prin. Contractor: <input type="text"/>	Engineer: <input type="text"/>	Constructor: <input type="text"/>	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	335	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Dong Ting Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Dong Ting Fertilizer Plant
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			Syngas Cap.:
Feed2:					3,410,000 <small>(Nm3/d)</small>
Feed3:					Gasifier licensor <small>(Source)</small>
					Eq. IGCC Cap., MWe:
					254.6 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>				Fuel Input:
Product1:	Ammonia	mt/d			582.7 <small>(MWt)</small>
Product2:					Gasifier licensor data <small>(Source)</small>
Product3:					Syngas Output:
					466.2 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
	<small>(Cooler Supplier)</small>			<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Prin. Contractor:					
	<small>(Supplier)</small>		<small>(Engineer)</small>	<small>(Constructor)</small>	<small>(Manufacturer)</small>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	336	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Hubei Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Hubei Fertilizer Plant
Location: (City/State/Prov)	Yincheng, Hubei	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,550.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,500,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	261.3 <small>(Calculated)</small>	
			Fuel Input:	598.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		Soot Handling:
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>		<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 364 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Shuanghuan Chemical **Plt. Owner Type:** _____
Plt. Operator: Shuanghuan Chemical **Plant Name:** Shell Shuanghuan Chemical
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shuanghuan Chemical **Facility Name:** _____
Location: (City/State/Prov) Yingcheng, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 900 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 177.7 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	333	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Sokolovska Uhelna, A.S.					Plt. Owner Type:	Mining Company		
Plt. Operator:	Sokolovska Uhelna, A.S.					Plant Name:	Thermoselece Vresova		
Gas'n Tech.:	Siemens SFG Gasification Process <small>(Technology Name)</small>			Siemens Power Generation <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Harry Morehead <small>(Contact)</small>					harry.morehead@siemens.com <small>(Email)</small>			

Facility Information

Facility Owner:	Chemoprojekt, a.s.	Facility Name:	Thermoselece Vresova
Location: (City/State/Prov)	Vresova	Facility Type:	Lignite Processing
(Country)	Czech Republic	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Lignite	1,968 mt/d				Syngas Cap.:	750,147 <small>(Nm3/d)</small>
Feed2:						Gasifier licensor	<small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	56.0 <small>(Calculated)</small>
Main Product:	Gaseous fuels <small>(Category)</small>					Fuel Input:	175.0 Estimate <small>(MWt)</small>
Product1:						Syngas Output:	140.0 Estimate <small>(MWt)</small>
Product2:							<small>(Source)</small>
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			Rectisol <small>(Process)</small>	Sulfur Removal:			
	<small>(Supplier)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	9E <small>(Model)</small>	400 <small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:			Engineer:	Krupp Unde/Lurgi Envirotherm		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID: 403 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Construction **Start Date:** 2008
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:**
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Puyang Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:**
Location: (City/State/Prov) Puyang, Henan **Facility Type:**
(Country) China **Facility Status:**
(Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 0.0
(Category) (Classification) (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals
(Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 3,410,000
(Nm3/d) (Source)
Eq. IGCC Cap., MWe: 254.6
(Calculated)
Fuel Input: 578.0
(MWt) (Source)
Syngas Output: 463.0
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: 0 **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 0
(No.) (Supplier) (Model) (MWout)
HRSG: 0 0 **Steam Turbine:** 0 0
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 327 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Development **Start Date:** 2009
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: ATI Sulcis **Plt. Owner Type:** Special Joint Venture
Plt. Operator: ATI Sulcis **Plant Name:** Sulcis IGCC Project
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: ATI Sulcis **Facility Name:** Portoscuso Power Plant
Location: (City/State/Prov) Portoscuso, Sardinia **Facility Type:** IPP
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 3,065.0 (mt/d) Gasifier licensor data (Source)
Feed1: Coal 4,356 mt/d **Syngas Cap.:** 7,000,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 522.6 (Calculated)
Feed3: **Fuel Input:** 1,196.1 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category) **Syngas Output:** 956.9 (MWt) Gasifier licensor data (Source)
Product1: Electricity 450 MW
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: 2 (No.) Ansaldo (Supplier) V94.2 (Model) 346 (MWout)
HRSG: 2 (No.) (Supplier) (Model) (Production) **Steam Turbine:** 1 (No.) (Supplier) (Model) 239 (MWout)
Prin. Contractor: **Engineer:** Fluor Daniel **Constructor:**

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1:
Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 405 No. of Gasifiers: Op'g/Sp/Total 1/ 0/ 1 Gasifier Status: Development Start Date: 2010

Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application: Syngas for Chemicals

Plt. Owner: Unspecified Owner Plt. Owner Type:

Plt. Operator: Unspecified Owner Plant Name: Guizhou Chemical Plant

Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Unspecified Owner Facility Name:

Location: (City/State/Prov) Guizhou Facility Type:

(Country) China Facility Status:

(Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): 0.0
(Category) (Classification) (mt/d) (Source)

Feed1: Coal 0
Feed2: 0
Feed3: 0

Main Product: Chemicals
(Category)

Product1: 0
Product2: 0
Product3: 0

Syngas Cap.: 4,125,000
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 307.9
(Calculated)

Fuel Input: 703.0
(MWt) (Source)

Syngas Output: 562.0
(MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 Soot Handling:

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)

HRSG: 0 (No.) (Supplier) (Model) 0 (Production) Steam Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)

Prin. Contractor: Engineer: Constructor:

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Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

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Date Modified: 30-Aug-07

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: **Facility Type:**
(City/State/Prov)

Facility Status:
(Country)

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.: (Technology Name) (Licensor) (Technology Type)

Vendor Contact: (Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: (Category) (Classification) **Rate (MAF):** (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product: (Category)

Product1: MW

Product2:

Product3:

Syngas Cap.: (Nm3/d) (Source)

Eq. IGCC Cap., MWe: (Calculated)

Fuel Input: (MWt) (Source)

Syngas Output: (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

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Date Modified:

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Key Gasifier Information

Facility ID:	408	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	Duke Energy Indiana				Plt. Owner Type:	Utility				
Plt. Operator:	Duke Energy Indiana				Plant Name:	Edwardsport IGCC				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Duke Energy Indiana	Facility Name:	
Location: (City/State/Prov)	Edwardsport, IN	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Coal		0					
Feed2:			0					
Feed3:			0					
Main Product:	Power <small>(Category)</small>							
Product1:	Electricity		630	MW				
Product2:			0					
Product3:			0					
						Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>	
						Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>	
						Fuel Input:	1,530.0 <small>(MWt)</small>	
						Syngas Output:	1,150.0 <small>(MWt)</small>	

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:			0		Soot Handling:			
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:					Sulfur Removal:			
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0		Steam Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:		

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Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	406	No. of Gasifiers: Op'g/Sp/Total	3 / <td> <td style="width: 10%;">0/<td> <td style="width: 10%;">3</td> <td style="width: 15%;">Gasifier Status:</td> <td style="width: 15%;">Development</td> <td style="width: 10%;">Start Date:</td> <td style="width: 10%;">2011</td> </td></td></td>	<td style="width: 10%;">0/<td> <td style="width: 10%;">3</td> <td style="width: 15%;">Gasifier Status:</td> <td style="width: 15%;">Development</td> <td style="width: 10%;">Start Date:</td> <td style="width: 10%;">2011</td> </td></td>	0 / <td> <td style="width: 10%;">3</td> <td style="width: 15%;">Gasifier Status:</td> <td style="width: 15%;">Development</td> <td style="width: 10%;">Start Date:</td> <td style="width: 10%;">2011</td> </td>	<td style="width: 10%;">3</td> <td style="width: 15%;">Gasifier Status:</td> <td style="width: 15%;">Development</td> <td style="width: 10%;">Start Date:</td> <td style="width: 10%;">2011</td>	3	Gasifier Status:	Development	Start Date:	2011
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Chemicals				
Plt. Owner:	Unspecified Owner			Plt. Owner Type:							
Plt. Operator:	Unspecified Owner			Plant Name:	Inner Mongolia Chemical Plant						
Gas'n Tech.:	Shell Gasification Process			Shell	Entrained-flow gasification						
	<small>(Technology Name)</small>			<small>(Licensor)</small>	<small>(Technology Type)</small>						
Vendor Contact:	Dr. Ir. Piet L. Zuideveld			Piet.Zuideveld@shell.com							
	<small>(Contact)</small>			<small>(Email)</small>							

Facility Information

Facility Owner:	Unspecified Owner	Facility Name:	Inner Mongolia Chemical Plant
Location: (City/State/Prov)	Inner Mongolia	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0			
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Coal	0				Syngas Cap.:	24,750,000
							<small>(Nm3/d)</small> <small>(Source)</small>
Feed2:		0				Eq. IGCC Cap., MWe:	1,847.6
							<small>(Calculated)</small>
Feed3:		0				Fuel Input:	4,216.0
							<small>(MWt)</small> <small>(Source)</small>
Main Product:	Chemicals					Syngas Output:	3,373.0
	<small>(Category)</small>						<small>(MWt)</small> <small>(Source)</small>
Product1:		0					
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0	Soot Handling: 			
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal: 		
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small> <small>(Process)</small>		
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	Steam Turbine:		0	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>			<small>(No.)</small>	<small>(Supplier)</small> <small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	416	No. of Gasifiers: Op'g/Sp/Total	4/	1/	5	Gasifier Status:	Development	Start Date:	2012	
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:				
Plt. Owner:	Rentech Development				Plt. Owner Type:					
Plt. Operator:	Rentech Development				Plant Name:	Rentech Strategic Fuels and Chemicals Center				
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process (Technology Name)			ConocoPhillips (Licensor)			Entrained-flow gasification (Technology Type)			
Vendor Contact:	Phil R. Amick (Contact)				Phil.Amick@ConocoPhillips.com (Email)					

Facility Information

Facility Owner:	Rentech Development		Facility Name:		
Location: (City/State/Prov)	Adams County, MS		Facility Type:		
(Country)	United States		Facility Status:		
(Region)	North America				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)			
Feed1:	Coal			0			
Feed2:				0			
Feed3:				0			
Main Product:	FT liquids (Category)						
Product1:	FT Liquids			0			
Product2:	CO2 for EOR			0			
Product3:				0			
			Syngas Cap.:	10,480,000 (Nm3/d)			
			Eq. IGCC Cap., MWe:	782.4 (Calculated)			
			Fuel Input:	1,780.0 (MWt)			
			Syngas Output:	1,420.0 (MWt)			

Other Information

O2 Supply:							
	(Oxidant)	(ASU Supplier)	(ASU Integration)				
Syngas Cooler:				0			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:			
Gas Cleanup:							
	(Supplier)	(Process)	Sulfur Removal:				
	(Supplier)	(Process)	(Supplier)	(Process)			
Gas Turbine:	0		0				
	(No.)	(Supplier)	(Model)	(MWout)			
HRSG:	0		0	0		0	
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)
	(No.)	(Supplier)	(Model)	(MWout)			
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID:	411	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2013	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	Tampa Electric Co.				Plt. Owner Type:	Utility				
Plt. Operator:	Tampa Electric Co.				Plant Name:	Polk County IGCC Expansion				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Tampa Electric Co.	Facility Name:	
Location: (City/State/Prov)	Mulberry, FL	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0			Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>
Feed2:			0			Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>
Feed3:			0			Fuel Input:	1,530.0 <small>(MWt)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	1,150.0 <small>(MWt)</small>
Product1:	Electricity		630	MW			
Product2:			0				
Product3:			0				

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:			0	Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>		<small>(Process)</small>		
Gas Turbine:	0		0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:	0		0	Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	412	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Development	Start Date:		2013	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Gases		
Plt. Owner:	Peabody Energy/ConocoPhillips				Plt. Owner Type:	Special Joint Venture					
Plt. Operator:	Peabody Energy/ConocoPhillips				Plant Name:	Peabody/ConocoPhillips SNG Plant					
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process <small>(Technology Name)</small>				ConocoPhillips <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Phil R. Amick <small>(Contact)</small>				Phil.Amick@ConocoPhillips.com <small>(Email)</small>						

Facility Information

Facility Owner:	Peabody Energy/ConocoPhillips	Facility Name:	
Location: (City/State/Prov)	Kentucky	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Coal		0			Syngas Cap.:	14,774,400 <small>(Nm3/d)</small>	
Feed2:			0			Eq. IGCC Cap., MWe:	1,102.9 <small>(Calculated)</small>	
Feed3:			0			Fuel Input:	2,524.6 <small>(MWt)</small>	
Main Product:	Gaseous fuels <small>(Category)</small>					Syngas Output:	2,019.9 <small>(MWt)</small>	
Product1:	SNG		0					
Product2:			0					
Product3:			0					

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:			0		Soot Handling:			
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>					
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID:	358	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Development	Start Date:	2013	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Power	
Plt. Owner:	Excelsior Energy					Plt. Owner Type:	Technology Developer			
Plt. Operator:	Excelsior Energy					Plant Name:	Mesaba Energy Project			
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process <small>(Technology Name)</small>					ConocoPhillips <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Phil R. Amick <small>(Contact)</small>					Phil.Amick@ConocoPhillips.com <small>(Email)</small>				

Facility Information

Facility Owner:	Excelsior Energy	Facility Name:	Mesaba Energy Project
Location: (City/State/Prov)	Minnesota	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	5,000 t/d				Syngas Cap.:	9,849,600 <small>(Nm3/d)</small>
Feed2:		0				Eq. IGCC Cap., MWe:	735.3 <small>(Calculated)</small>
Feed3:		0				Fuel Input:	1,683.1 <small>(MWt)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	1,346.6 <small>(MWt)</small>
Product1:	Electricity	600 MW					
Product2:		0					
Product3:		0					

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>							
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>					
Syngas Cooler:	Fire-tube cooler <small>(Cooler Type)</small>		0 <small>(Cooler Supplier)</small>			Soot Handling:	Dry Barrier	
Gas Cleanup:						Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>				<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	2 <small>(No.)</small>		0 <small>(Supplier)</small>					
		<small>(Model)</small>	<small>(MWout)</small>					
HRSG:	2 <small>(No.)</small>		0 <small>(Supplier)</small>			Steam Turbine:	1 <small>(No.)</small>	
		<small>(Model)</small>	<small>(Production)</small>			<small>(Supplier)</small>	<small>(Model)</small>	
						<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 191 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1958
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Praxair (EniChem) **Plt. Owner Type:** Industrial Gas Supply
Plt. Operator: Praxair (EniChem) **Plant Name:** Ravenna Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Praxair (EniChem) **Facility Name:** Ravenna Chemical Plant
Location: (City/State/Prov) Ravenna **Facility Type:** Chemical Plant
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 10 MMscf/d **Syngas Cap.:** 700,000 Estimate (Nm3/d) (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 112.6 Estimate (MWt) (Source)
Main Product: Chemicals (Category) **Syngas Output:** 95.7 Estimate (MWt) (Source)
Product1: CO Nm3/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: 294 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1959
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Taminco **Plt. Owner Type:** Industrial Gas Supply
Plt. Operator: Taminco **Plant Name:** Billingham Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Air Products (ICI) **Facility Name:** Unspecified facility
Location: (City/State/Prov) Billingham, England **Facility Type:** Chemical Plant
 (Country) United Kingdom **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 9 MMscf/d **Syngas Cap.:** 600,000 Estimate (Nm3/d) (Source)
Feed2: **Eq. IGCC Cap., MWe:** 44.8 (Calculated)
Feed3: **Fuel Input:** 96.5 Estimate (MWt) (Source)
Main Product: Chemicals (Category) **Syngas Output:** 82.0 Estimate (MWt) (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** ICI **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 188 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1963
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: PRAOIL **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: PRAOIL **Plant Name:** Gela Ragusa H2 Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: PRAOIL **Facility Name:** Gela Ragusa Refinery
Location: (City/State/Prov) Gela Ragusa **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 17 MMscf/d
Feed2:
Feed3:
Syngas Cap.: 1,150,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 85.8 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 184.9 Estimate (MWt) Estimate (Source)
Product1: H2 MMscf/d **Syngas Output:** 157.2 Estimate (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Foster Wheeler **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	283	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	1977
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hoechst Celanese			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Hoechst Celanese			Plant Name:	Houston Oxochemicals Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>		Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hoechst Celanese	Facility Name:	Houston Chemical Plant
Location: (City/State/Prov)	Houston, TX	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):			
				<small>(mt/d)</small>	<small>(Source)</small>	
Feed1:	Natural gas	820,850 Nm3/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>		
			Fuel Input:	337.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small> <small>(Supplier)</small> <small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:					Constructor:
			<small>(Engineer)</small>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: 119	No. of Gasifiers: Op'g/Sp/Total 1 / 0 / 1	Gasifier Status: Operating	Start Date: 1977
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Oxochimie S.A.	Plt. Owner Type: Oil Refining & Chemicals		
Plt. Operator: Oxochimie S.A.	Plant Name: Lavéra Syngas Plant		
Gas'n Tech.: GE Gasification Technology <small>(Technology Name)</small>	GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>	
Vendor Contact: Tim Huskey <small>(Contact)</small>	timothy.huskey@ge.com <small>(Email)</small>		

Facility Information

Facility Owner: Oxochimie S.A.	Facility Name: Lavéra Plant
Location: (City/State/Prov) Lavéra	Facility Type: Chemical Plant
(Country) France	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed: Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF): <small>(mt/d) (Source)</small>
Feed1: Natural gas	9 MMscf/d	Syngas Cap.: 590,976 Gasifier contractor <small>(Nm3/d) (Source)</small>
Feed2: 		Eq. IGCC Cap., MWe: 44.1 <small>(Calculated)</small>
Feed3: 		Fuel Input: 98.5 Estimate <small>(MWt) (Source)</small>
Main Product: Chemicals <small>(Category)</small>		Syngas Output: 80.8 Estimate <small>(MWt) (Source)</small>
Product1: Oxochemicals mt/d		
Product2: 		
Product3: 		

Other Information

O2 Supply: Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier) (ASU Integration)</small>	
Syngas Cooler: Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier) (MWth Duty)</small>	Soot Handling:
Gas Cleanup: <small>(Supplier) (Process)</small>	Sulfur Removal: <small>(Supplier) (Process)</small>	
Gas Turbine: <small>(No.) (Supplier) (Model) (MWout)</small>		
HRSG: <small>(No.) (Supplier) (Model) (Production)</small>	Steam Turbine: <small>(No.) (Supplier) (Model) (MWout)</small>	
Prin. Contractor: 	Engineer: Uhde	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	296	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1983
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Sunoco				Plt. Owner Type:	Unspecified			
Plt. Operator:	Sunoco				Plant Name:	Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	6 MMscf/d				Syngas Cap.:	400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>	
Feed3:						Fuel Input:	64.4 <small>(MWt)</small>	Estimate <small>(Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	54.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Oxochemicals	mt/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>							
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>					
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:		
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:					Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:					Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>	
Prin. Contractor:	Dvay McKee				Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID: 297 **No. of Gasifiers: Op'g/Sp/Total** 2/0/2 **Gasifier Status:** Operating **Start Date:** 1983

Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals

Plt. Owner: Dow (former Union Carbide) **Plt. Owner Type:** Unspecified

Plt. Operator: Dow (former Union Carbide) **Plant Name:** Texas City Syngas Plant

Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified facility

Location: (City/State/Prov) Unspecified location **Facility Type:** Unknown
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Gaseous Gas **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: Natural gas 12 MMscf/d

Feed2:

Feed3:

Main Product: Chemicals
(Category)

Product1: Oxochemicals mt/d

Product2:

Product3:

Syngas Cap.: 830,000 Gasifier licensor
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 62.0
(Calculated)

Fuel Input: 133.5 Estimate
(MWt) (Source)

Syngas Output: 113.5 Gasifier licensor data
(MWt) (Source)

Other Information

O2 Supply: Oxygen
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Radiant syngas cooler **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Davy McKee **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	298	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	MSK-Radna					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	MSK-Radna					Plant Name:	Methanol Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	MSK-Radna	Facility Name:	Kikinda Chemical Plant
Location: (City/State/Prov)	Kikinda	Facility Type:	Chemical Plant
(Country)	Former Yugoslavia	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	23 MMscf/d				Syngas Cap.:	1,540,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	115.0 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	247.6 Estimate <small>(MWt) (Source)</small>
Product1:	Methanol	mt/d				Syngas Output:	210.5 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Technip					Constructor:	
				<small>(Engineer)</small>	<small>(Constructor)</small>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.: (Technology Name) (Licensor) (Technology Type)

Vendor Contact: (Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: (Category) (Classification) **Rate (MAF):** (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product: (Category)

Product1:

Product2:

Product3:

Syngas Cap.: (Nm3/d) (Source)

Eq. IGCC Cap., MWe: (Calculated)

Fuel Input: (MWt) (Source)

Syngas Output: (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID:	19	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:	May	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Fuels		
Plt. Owner:	Shell MDS (Malaysia) Sdn. Bhd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Shell MDS (Malaysia) Sdn. Bhd.					Plant Name:	Bintulu GTL Plant				
Gas'n Tech.:	Shell Gasification Process (Technology Name)					Shell (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)					Piet.Zuideveld@shell.com (Email)					

Facility Information

Facility Owner:	Shell MDS (Malaysia) Sdn. Bhd.	Facility Name:	Bintulu Middle Distillate Synthesis Plant
Location: (City/State/Prov)	Bintulu, Sarawak	Facility Type:	Gas Plant
(Country)	Malaysia	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):					
				(mt/d)	(Source)			
Feed1:	Natural gas	100 MMscf/d				Syngas Cap.:	7,552,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:						Eq. IGCC Cap., MWe:	563.8 (Calculated)	
Feed3:						Fuel Input:	1,214.6 (MWt)	Gasifier licensor data (Source)
Main Product:	FT liquids (Category)					Syngas Output:	1,032.4 (MWt)	Gasifier licensor data (Source)
Product1:	Mid-distillates	12,500 bbl/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)							
			(ASU Integration)						
Syngas Cooler:	Fire-tube boiler with integrated superheater (Cooler Type)							Soot Handling:	
			(Cooler Supplier)	(MWth Duty)					
Gas Cleanup:						Sulfur Removal:			
	(Supplier)	(Process)				(Supplier)	(Process)		
Gas Turbine:									
	(No.)	(Supplier)	(Model)	(MWout)					
HRSG:					Steam Turbine:				
	(No.)	(Supplier)	(Model)	(Production)		(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Lurgi GmbH					Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	36	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	April	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	T & P Syngas (Texaco/Praxair)					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Praxair					Plant Name:	Texas City Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	T & P Syngas (Texaco/Praxair)	Facility Name:	Texas City Industrial Gas Utility Island
Location: (City/State/Prov)	Texas City, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	32 MMscf/d				Syngas Cap.:	1,920,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	143.3 <small>(Calculated)</small>
Feed3:						Fuel Input:	348.0 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	278.0 Estimate <small>(MWt) (Source)</small>
Product1:	H2	40 MMscf/d					
Product2:	CO	24 MMscf/d					
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>			Soot Handling: _____
Gas Cleanup:	Texaco <small>(Supplier)</small>		Sulfur Removal:	
		<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:			Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(No.)</small>	<small>(Supplier)</small>
		<small>(Model)</small>		<small>(Model)</small>
		<small>(Production)</small>		<small>(MWout)</small>
Prin. Contractor:	Howe-Baker		Engineer:	Praxair/Texaco
			Constructor:	Howe-Baker

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	126	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	Oct. 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	BOC Gases			Plt. Owner Type:	Industrial Gas Supply		
Plt. Operator:	BOC Gases			Plant Name:	Brisbane H2 Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	BOC Gases		Facility Name:	Brisbane Industrial Gas Complex		
Location:	(City/State/Prov)	Brisbane, Queensland	Facility Type:	Gas Plant		
	(Country)	Australia	Facility Status:	Operating		
	(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):			
				(mt/d)	(Source)	
Feed1:	Natural gas	15 MMscf/d				
Feed2:	Ref. off-gases					
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	H2	30 MMscf/d				
Product2:						
Product3:						
			Syngas Cap.:	805,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	60.1 <small>(Calculated)</small>		
			Fuel Input:	129.4 <small>(MWt)</small>	Estimate <small>(Source)</small>	
			Syngas Output:	110.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	BOC Gases <small>(ASU Supplier)</small>				
				(ASU Integration)		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:
				(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:						
	(Supplier)	(Process)	Sulfur Removal:			
				(Supplier)	(Process)	
Gas Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:						
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)
					(Model)	(MWout)
Prin. Contractor:			Engineer:	Kvaerner	Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	374	No. of Gasifiers: Op'g/Sp/Total	18/	0/	18	Gasifier Status:	Development	Start Date:		2010	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:			
Plt. Owner:	Qatar Petroleum				Plt. Owner Type:						
Plt. Operator:	Qatar Petroleum				Plant Name:	Pearl GTL					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	Qatar Petroleum	Facility Name:	
Location: (City/State/Prov)		Facility Type:	Chemical Plant
(Country)	Qatar	Facility Status:	Planning
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>						
Feed1:	Natural Gas		0			Syngas Cap.:	80,000,000 <small>(Nm3/d)</small>			
Feed2:			0			Eq. IGCC Cap., MWe:	5,972.2 <small>(Calculated)</small>			
Feed3:			0			Fuel Input:	0.0 <small>(MWt)</small>			
Main Product:	FT liquids <small>(Category)</small>					Syngas Output:	10,936.0 <small>(MWt)</small>			
Product1:	Distillate		140,000 bpd							
Product2:	Naphtha		0							
Product3:	Paraffins		0							

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:			0	Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:	0		0	Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
				<small>(Supplier)</small>	<small>(Model)</small>
				<small>(MWout)</small>	
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	179	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	1982
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Ube Ammonia Industry Co. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Ube Ammonia Industry Co. Ltd.					Plant Name:	Ube City CO Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Ube Ammonia Industry Co. Ltd.	Facility Name:	Ube City Chemical Plant
Location: (City/State/Prov)	Ube City	Facility Type:	Chemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petcoke <small>(Classification)</small>	Rate (MAF):	95.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Petcoke	95 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	CO	6,500,000 scf/d			
Product2:					
Product3:					
				Syngas Cap.:	200,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	14.9 <small>(Calculated)</small>
				Fuel Input:	36.4 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	27.3 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:					Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
Prin. Contractor:	Ube			Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

14-Jul-04

Key Gasifier Information

Facility ID:	33	No. of Gasifiers: Op'g/Sp/Total	1	1	2	Gasifier Status:	Operating	Start Date:	Dec.	1995	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Global Energy, Inc.					Plt. Owner Type:	Developer				
Plt. Operator:	Global Energy, Inc./ConocoPhillips					Plant Name:	Wabash River Energy Ltd.				
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process (Technology Name)					ConocoPhillips (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Phil R. Amick (Contact)					Phil.Amick@ConocoPhillips.com (Email)					

Facility Information

Facility Owner:	Global Energy/Cinergy	Facility Name:	Wabash River Generating Station Unit No. 1
Location: (City/State/Prov)	West Terre Haute, IN	Facility Type:	Electric Utility
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid (Category)	Petcoke (Classification)	Rate (MAF):				
				(mt/d)	(Source)		
Feed1:	Petcoke	2,000 mt/d					
Feed2:							
Feed3:							
Main Product:	Power (Category)						
Product1:	Electricity	262 MWe (net)					
Product2:							
Product3:							
			Syngas Cap.:	4,320,000	Estimate		
				(Nm3/d)	(Source)		
			Eq. IGCC Cap., MWe:	322.5			
				(Calculated)			
			Fuel Input:	738.2	Estimate		
				(MWt)	(Source)		
			Syngas Output:	590.6	Estimate		
				(MWt)	(Source)		

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	On-site/No integration (ASU Integration)	
Syngas Cooler:	Fire-tube cooler (Cooler Type)	Deutsche Babcock-Bor (Cooler Supplier)		Soot Handling: Separate handling unit/Re
Gas Cleanup:	Dow Chemical Co. (Supplier)	MDEA (Process)	Sulfur Removal:	Claus (Process)
Gas Turbine:	1 (No.)	General Electric Co. (Supplier)	7FA (Model)	192 (MWout)
HRSG:	1 (No.)	Foster Wheeler (Supplier)		342 mt/hr (Production)
			1 (No.)	Westinghouse (Supplier)
				104 (MWout)
Prin. Contractor:	Destec Engineering Inc.		Engineer:	Dow Engineering Co.
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 29 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Sept. 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Frontier Oil & Refining Co. (Texaco Inc.) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Frontier Oil & Refining Co. **Plant Name:** El Dorado Gasification Power Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Frontier Oil & Refining Co. **Facility Name:** Frontier El Dorado Refinery
Location: (City/State/Prov) El Dorado, KS **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 100.0 (mt/d) Estimate (Source)
Feed1: Petcoke 151 mt/d
Feed2: Ref. waste 14 mt/d
Feed3: Natural gas 7,000 MMBtu/d
Main Product: Power (Category)
Product1: Electricity 35 MW
Product2: HP steam 180,000 lb/hr
Product3:

Syngas Cap.: 80,559 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 6.0 (Calculated)
Fuel Input: 14.7 (MWt) Estimate (Source)
Syngas Output: 11.0 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)

Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: 1 (No.) General Electric Co. (Supplier) 6B (Model) 35 (MWout)

HRSG: 1 (No.) (Supplier) (Model) 90 (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Fluor Daniel **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="35"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="1"/> / <input type="text" value="2"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="July"/> <input type="text" value="2000"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Gases"/>
Plt. Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plant Name:	<input type="text" value="Coffeyville Syngas Plant"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>	<input type="text" value="GE"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>				
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>	<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>	Facility Name:	<input type="text" value="Coffeyville Nitrogen Plant"/>
Location: (City/State/Prov)	<input type="text" value="Coffeyville, KS"/>	Facility Type:	<input type="text" value="Petrochemical Plant"/>
(Country)	<input type="text" value="United States"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="North America"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/> <small>(Category)</small>	<input type="text" value="Petcoke"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value="1,100.0"/> <small>(mt/d)</small>	<input type="text" value="Gasifier operator data"/> <small>(Source)</small>
Feed1:	<input type="text" value="Petcoke"/>	<input type="text" value="1,100 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				
Product1:	<input type="text" value="Ammonia"/>	<input type="text" value="1,000 mt/d"/>			
Product2:	<input type="text" value="UAN"/>	<input type="text" value="1,545 mt/d"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="2,141,200"/> <small>(Nm3/d)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="159.8"/> <small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="390.3"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Syngas Output:	<input type="text" value="292.7"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> <small>(Oxidant)</small>	<input type="text" value="BOC Gases"/> <small>(ASU Supplier)</small>	<input type="text" value="Across-the-fence"/> <small>(ASU Integration)</small>
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/> <small>(Cooler Type)</small>		<input type="text"/> <small>(Cooler Supplier)</small>
			<input type="text"/> <small>(MWth Duty)</small>
Gas Cleanup:	<input type="text" value="UOP LLC"/> <small>(Supplier)</small>	<input type="text" value="Selexol"/> <small>(Process)</small>	Sulfur Removal:
			<input type="text" value="Tessenderlo Kerley"/> <small>(Supplier)</small>
			<input type="text" value="Claus/Ammonium thiosul"/> <small>(Process)</small>
Gas Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
HRSG:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(Production)</small>
			Steam Turbine:
			<input type="text" value="0"/> <small>(No.)</small>
			<input type="text" value="N.A."/> <small>(Supplier)</small>
			<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
Prin. Contractor:	<input type="text" value="Black & Veatch Pritchard"/>		
Engineer:	<input type="text"/>		
Constructor:	<input type="text"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	31	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2002
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Power	
Plt. Owner:	Valero				Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Valero				Plant Name:	Delaware Clean Energy Cogeneration Project			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Premcor, Inc.	Facility Name:	Premcor Delaware City Refinery
Location: (City/State/Prov)	Delaware City, DE	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Pecoke <small>(Classification)</small>	Rate (MAF):	1,775.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Fluid pecoke	2,100 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	160 MW (net)			
Product2:	Steam	791,000 lb/hr			
Product3:					
			Syngas Cap.:	3,800,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	283.7 <small>(Calculated)</small>	
			Fuel Input:	692.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	519.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		
Soot Handling:	Separate handling unit		
Gas Cleanup:		MDEA <small>(Supplier)</small>	
Sulfur Removal:		Claus/SCOT <small>(Supplier)</small>	
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6FA 180 <small>(Model) (MWout)</small>
HRSG:	2 <small>(No.)</small>	Nooter-Erikson <small>(Supplier)</small>	359 mt/hr <small>(Production)</small>
Steam Turbine:	2 <small>(No.)</small>		80 <small>(Model) (MWout)</small>
Prin. Contractor:	Parsons Process Group Inc.		
Engineer:	Parsons Process Group Inc.		
Constructor:	Parsons Process Group Inc.		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	328	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Indian Oil Corp. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Indian Oil Corp. Ltd.					Plant Name:	Paradip Gasification H2/Power Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Indian Oil Corp. Ltd.	Facility Name:	Paradip Refinery
Location: (City/State/Prov)	Nagapattinam, Orissa	Facility Type:	Refinery
(Country)	India	Facility Status:	Construction
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petcoke <small>(Classification)</small>	Rate (MAF):	2,850.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Petcoke	3,500 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	160	MMscf/d		
Product2:	Electricity	180	MW		
Product3:					
			Syngas Cap.:	6,500,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	485.2 <small>(Calculated)</small>	
			Fuel Input:	1,110.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	888.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling: 	
		<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>			
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:				
				<small>(Supplier)</small>		<small>(Process)</small>	
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>		180 <small>(Model)</small>			
						<small>(MWout)</small>	
HRSG:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
					<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Engineers India Ltd.		Engineer:	Krupp Uhde		Constructor:	Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	70	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	May 1961
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Mitsubishi Petrochemicals			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Mitsubishi Petrochemicals			Plant Name:	Yokkaichi Syngas Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Mitsubishi Petrochemicals	Facility Name:	Yokkaichi Petrochemical Plant
Location: (City/State/Prov)	Yokkaichi	Facility Type:	Petrochemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	137.6 (mt/d)	Estimate (Source)	
Feed1:	Bunker C fuel oil	138 mt/d			Syngas Cap.:	400,000 Gasifier licensor (Nm3/d) (Source)
Feed2:					Eq. IGCC Cap., MWe:	29.9 (Calculated)
Feed3:					Fuel Input:	66.7 Gasifier licensor data (MWt) (Source)
Main Product:	Chemicals (Category)				Syngas Output:	54.7 Gasifier licensor data (MWt) (Source)
Product1:	Syngas	400,000 Nm3/d				
Product2:						
Product3:						

Other Information

O2 Supply:						
	(Oxidant)	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Fire-tube boiler (Cooler Type)				Soot Handling:	
		(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:	Shell (Supplier)	Adip (Process)	Sulfur Removal:			
			(Supplier)	(Process)		
Gas Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:					Steam Turbine:	
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier) (Model) (MWout)
Prin. Contractor:		Engineer:		Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

08-Dec-99

Key Gasifier Information

Facility ID:	90	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Jan.	1965	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Kemira Chemicals Oy					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Kemira Chemicals Oy					Plant Name:	Oulu Syngas Plant-I				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Kemira Chemicals Oy					Facility Name:	Oulu Chemical Plant				
Location: (City/State/Prov)	Oulu					Facility Type:	Chemical Plant				
(Country)	Finland					Facility Status:	Operating				
(Region)	Europe										

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	105.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil			bbl/d	
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	300,000	Nm3/d		
Product2:					
Product3:					
				Syngas Cap.:	300,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	22.4 <small>(Calculated)</small>
				Fuel Input:	50.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	41.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Lurgi GmbH			Engineer:	
				Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	201	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1966
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	BASF AG					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	BASF AG					Plant Name:	Ludwigshafen Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	BASF AG	Facility Name:	Ludwigshafen Chemical Plant
Location: (City/State/Prov)	Ludwigshafen	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	344.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy fuel oil	344 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,000,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	74.7 <small>(Calculated)</small>	
			Fuel Input:	166.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	136.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		MAN GHH AG <small>(Cooler Supplier)</small>		Soot Handling: Partial recycle to gasifier
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:	Foster Wheeler, BASF	
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 281 **No. of Gasifiers: Op'g/Sp/Total** 5/ 0/ 5 **Gasifier Status:** Operating **Start Date:** 1968
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: Lurgi Multi Purpose Gasification Process (Technology Name) Lurgi Oel • Gas • Chemie GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 625.0 (mt/d) Estimate (Source)
Feed1: Oil 480 mt/d **Syngas Cap.:** 1,440,000 (Nm3/d) Gasifier licensor (Source)
Feed2: Slurry 144 mt/d **Eq. IGCC Cap., MWe:** 107.5 (Calculated)
Feed3:
Main Product: Power (Category) **Fuel Input:** 246.1 (MWt) Gasifier licensor data (Source)
Product1: Electricity 75 MW **Syngas Output:** 196.9 (MWt) Gasifier licensor data (Source)
Product2: Methanol 375 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	98	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Feb.	1969	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	DEA Mineraloel AG				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	DEA Mineraloel AG				Plant Name:	Wesseling Methanol Plant-VI					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	DEA Mineraloel AG	Facility Name:	Wesseling Chemical Plant
Location: (City/State/Prov)	Wesseling	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	447.2 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy cracked residu	447 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	582 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	97.0 <small>(Calculated)</small>	
			Fuel Input:	216.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	177.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:				
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:	
			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:	
			Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: 96 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Oct. 1969
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Naju Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Naju Chemical Plant
Location: (City/State/Prov) Naju, Seoul **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 172.2 (mt/d) Estimate (Source)
Feed1: Vac. Residue 225 mt/d **Syngas Cap.:** 700,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 83.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 68.4 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 318 mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Shell (Supplier) Sulfinol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 09-Dec-99

Key Gasifier Information

Facility ID: 103 No. of Gasifiers: Op'g/Sp/Total 12/0/12 Gasifier Status: Operating Start Date: 1971
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Gases
Plt. Owner: Falconbridge Dominicana Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Falconbridge Dominicana Plant Name: Santo Domingo Syngas Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Falconbridge Dominicana Facility Name: Santo Domingo Chemical Plant
Location: (City/State/Prov) Santo Domingo Facility Type: Chemical Plant
(Country) Dominican Republic Facility Status: Operating
(Region) Central & South America/Caribbean

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 495.5 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Bunker C fuel oil 496 mt/d Syngas Cap.: 1,440,000 Gasifier licensor
(Nm3/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 107.5
(Calculated)
Feed3: Fuel Input: 240.1 Gasifier licensor data
(MWt) (Source)
Main Product: Gaseous fuels Syngas Output: 196.9 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Reducing gas MMscf/d
Product2: Product3:

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: None (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 104 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1973
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Veba Oil Refining & Petrochemicals GmbH **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Veba Oil Refining & Petrochemicals GmbH **Plant Name:** Gelsenkirchen-Scholven Ammonia/Methanol Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Veba Oil Refining & Petrochemicals GmbH **Facility Name:** Gelsenkirchen-Scholven Chemical Plant
Location: (City/State/Prov) Gelsenkirchen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,479.4 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,479 mt/d **Syngas Cap.:** 4,300,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 321.0 (Calculated)
Feed3: **Fuel Input:** 716.8 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 587.8 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 1,200 mt/d
Product2: Methanol 600 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 207 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1974
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 860.0 (mt/d) Estimate (Source)
Feed1: Vac. residue & heavy 860 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol mt/d
Product2:
Product3:
Syngas Cap.: 2,500,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 186.6 (Calculated)
Fuel Input: 416.8 (MWt) Estimate (Source)
Syngas Output: 341.8 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** BASF

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	<input type="text" value="108"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="3"/> / <input type="text" value="0"/> / <input type="text" value="3"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1978"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Fertilizer Corp. of India Ltd."/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Fertilizer Corp. of India Ltd."/>			Plant Name:	<input type="text" value="Nangal Ammonia Plant"/>		
Gas'n Tech.:	<input type="text" value="Shell Gasification Process"/> <small>(Technology Name)</small>		<input type="text" value="Shell"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Dr. Ir. Piet L. Zuideveld"/> <small>(Contact)</small>			<input type="text" value="Piet.Zuideveld@shell.com"/> <small>(Email)</small>			

Facility Information

Facility Owner:	<input type="text" value="Fertilizer Corp. of India Ltd."/>			Facility Name:	<input type="text" value="Nangal Fertilizer Plant"/>
Location:	<input type="text" value="Nangal, New Delhi"/> <small>(City/State/Prov)</small>	Facility Type:	<input type="text" value="Chemical Plant"/>		
	<input type="text" value="India"/> <small>(Country)</small>	Facility Status:	<input type="text" value="Operating"/>		
	<input type="text" value="Asia/Australia"/> <small>(Region)</small>				

Feed/Product Information

Main Feed:	<input type="text" value="Liquid"/> <small>(Category)</small>	<input type="text" value="Petroleum"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value="722.5"/> <small>(mt/d)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
Feed1:	<input type="text" value="Bunker C fuel oil"/>	<input type="text" value="723 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				
Product1:	<input type="text" value="Ammonia"/>	<input type="text" value="600 mt/d"/>	Syngas Cap.:	<input type="text" value="2,100,000"/> <small>(Nm3/d)</small>	<input type="text" value="Gasifier licensor"/> <small>(Source)</small>
Product2:	<input type="text"/>	<input type="text"/>	Eq. IGCC Cap., MWe:	<input type="text" value="156.8"/> <small>(Calculated)</small>	
Product3:	<input type="text"/>	<input type="text"/>	Fuel Input:	<input type="text" value="350.1"/> <small>(MWt)</small>	<input type="text" value="Gasifier licensor data"/> <small>(Source)</small>
			Syngas Output:	<input type="text" value="287.1"/> <small>(MWt)</small>	<input type="text" value="Gasifier licensor data"/> <small>(Source)</small>

Other Information

O2 Supply:	<input type="text"/> <small>(Oxidant)</small>	<input type="text"/> <small>(ASU Supplier)</small>	<input type="text"/> <small>(ASU Integration)</small>			
Syngas Cooler:	<input type="text" value="Fire-tube boiler"/> <small>(Cooler Type)</small>	<input type="text"/> <small>(Cooler Supplier)</small>	<input type="text"/> <small>(MWth Duty)</small>	Soot Handling:	<input type="text"/>	
Gas Cleanup:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	Sulfur Removal:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	
Gas Turbine:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text"/> <small>(MWout)</small>		
HRSG:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text"/> <small>(Production)</small>		
			Steam Turbine:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	
				<input type="text"/> <small>(Model)</small>	<input type="text"/> <small>(MWout)</small>	
Prin. Contractor:	<input type="text" value="Lurgi GmbH"/>		Engineer:	<input type="text"/>	Constructor:	<input type="text" value="Lurgi GmbH"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	286	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1978
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Exxon Chemical Co.				Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Exxon Chemical Co.				Plant Name:	Baton Rouge Oxochemicals Plant			
Gas'n Tech.:	Shell Gasification Process (Technology Name)			Shell (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)				Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Exxon Chemical Co.	Facility Name:	Baton Rouge Chemical Plant
Location: (City/State/Prov)	Baton Rouge, LA	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	196.0 (mt/d)	Estimate (Source)	
Feed1:	Heavy fuel oil			196 mt/d		
Feed2:						
Feed3:						
Main Product:	Chemicals (Category)					
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	570,000 (Nm3/d)	Gasifier licensor (Source)	
			Eq. IGCC Cap., MWe:	42.6 (Calculated)		
			Fuel Input:	95.0 (MWt)	Gasifier licensor data (Source)	
			Syngas Output:	77.9 (MWt)	Gasifier licensor data (Source)	

Other Information

O2 Supply:	Oxygen (Oxidant)							
	(ASU Supplier)	(ASU Integration)						
Syngas Cooler:	Fire-tube boiler (Cooler Type)				Soot Handling:			
	(Cooler Supplier)	(MWth Duty)						
Gas Cleanup:					Sulfur Removal:			
	(Supplier)	(Process)			(Supplier)	(Process)		
Gas Turbine:								
	(No.)	(Supplier)	(Model)	(MWout)				
HRSG:					Steam Turbine:			
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	
Prin. Contractor:				Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID:	285	No. of Gasifiers: Op'g/Sp/Total	4/ 0/ 4	Gasifier Status:	Operating	Start Date:	1978
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hydro Agri Brunsbüttel GmbH			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Hydro Agri Brunsbüttel GmbH			Plant Name:	Brunsbüttel Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Hydro Agri Brunsbüttel GmbH	Facility Name:	Brunsbüttel Chemical Plant
Location: (City/State/Prov)	Brunsbüttel	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	1,600.0 (mt/d)	Estimate (Source)
Feed1:	Hvy vis. residue	1,600 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	4,700,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	Ammonia	2,100 mt/d	Eq. IGCC Cap., MWe:	350.9 (Calculated)	
Product2:			Fuel Input:	803.1 (MWt)	Gasifier licensor data (Source)
Product3:			Syngas Output:	642.5 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)		Integrated/N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler:	Fire-tube boiler (Cooler Type)		Soot Handling: Separate handling unit
Gas Cleanup:		Rectisol (Process)	Sulfur Removal:
Gas Turbine:	0 (No.)	N.A. (Supplier)	0 (Model)
			0 (MWout)
HRSG:	0 (No.)	N.A. (Supplier)	0 (Production)
			0 (Model)
			0 (MWout)
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID: 289 No. of Gasifiers: Op'g/Sp/Total 2/ 0/ 2 Gasifier Status: Operating Start Date: 1979

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals

Plt. Owner: Neyveli Lignite Corp. Ltd. Plt. Owner Type:

Plt. Operator: Neyveli Lignite Corp. Ltd. Plant Name: Neyveli Syngas Plant

Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Neyveli Lignite Corp. Ltd. Facility Name: Neyveli Chemical Plant

Location: (City/State/Prov) Neyveli, Tamil Nadu Facility Type: Chemical Plant
(Country) India Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 275.0 Estimate
(Category) (Classification) (mt/d) (Source)

Feed1: Bunker C fuel oil 275 mt/d
Feed2:
Feed3:

Main Product: Chemicals
(Category)

Product1: Syngas 800,000 Nm3/d
Product2:
Product3:

Syngas Cap.: 800,000 Gasifier licensor
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 59.7
(Calculated)

Fuel Input: 133.4 Gasifier licensor data
(MWt) (Source)

Syngas Output: 109.4 Gasifier licensor data
(MWt) (Source)

Other Information

O2 Supply: Oxygen
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Fire-tube boiler Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	288	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1979	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	National Fertilizer Ltd.				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	National Fertilizer Ltd.				Plant Name:	Bathinda Ammonia Plant					
Gas'n Tech.:	Shell Gasification Process (Technology Name)				Shell (Licensor)	Entrained-flow gasification (Technology Type)					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)				Piet.Zuideveld@shell.com (Email)						

Facility Information

Facility Owner:	National Fertilizer Ltd.	Facility Name:	Bathinda Fertilizer Plant
Location: (City/State/Prov)	Bathinda	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	722.5 (mt/d)	Estimate (Source)
Feed1:	Bunker C fuel oil	723 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	156.8 (Calculated)	
			Fuel Input:	350.1 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	287.1 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)			(ASU Supplier)		(ASU Integration)	
Syngas Cooler:	Fire-tube boiler (Cooler Type)					Soot Handling: 	
Gas Cleanup:						Sulfur Removal: 	
Gas Turbine:							
HRSG:							
Steam Turbine:							
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	223	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1979
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Ultrafertil S.A.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Ultrafertil S.A.					Plant Name:	Araucária Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Ultrafertil S.A.	Facility Name:	Araucária Fertilizer Plant
Location: (City/State/Prov)	Araucária	Facility Type:	Chemical Plant
(Country)	Brazil	Facility Status:	Operating
(Region)	Central & South America/Caribbean		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,135.2 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Asphalt residue	1,135 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Ammonia	1,575 mt/d				
Product2:						
Product3:						
			Syngas Cap.:	3,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	246.4 <small>(Calculated)</small>		
			Fuel Input:	550.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	451.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling: 	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	
					<small>(Supplier)</small>	<small>(Model)</small>	
						<small>(MWout)</small>	
Prin. Contractor:	Lurgi GmbH		Engineer:			Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	214	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1980
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Akzo Nobel/Berol-Kemi					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Akzo Nobel					Plant Name:	Stenungsund Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Akzo Nobel/Berol-Kemi	Facility Name:	Stenungsund Chemical Plant
Location: (City/State/Prov)	Stenungsund	Facility Type:	Chemical Plant
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	70.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy fuel oil	70 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	14.9 <small>(Calculated)</small>	
			Fuel Input:	33.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	27.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>				Soot Handling:	Total recycle to gasifier
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Davy Powergas		Engineer:		Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 215 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Daicel **Plt. Owner Type:** Unspecified
Plt. Operator: Daicel **Plant Name:** Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified Chemical Plant
Location: (City/State/Prov) Unspecified location **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 190.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 190 mt/d **Syngas Cap.:** 550,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 41.1 (Calculated)
Feed3: **Fuel Input:** 91.7 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 75.2 (MWt) Gasifier licensor data (Source)
Product1: Methanol mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Total recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Ube **Constructor:** Ube

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 163 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Operating **Start Date:** July 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plant Name:** Narmada Ammonia/Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Facility Name:** Narmada Fertilizer Complex
Location: (City/State/Prov) Bharuch, Gujarat **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,030.0 (mt/d) Estimate (Source)
Feed1: Ref. residual oil 1,030 mt/d
Feed2:
Feed3:
Syngas Cap.: 2,964,600 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 221.3 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 506.6 (MWt) Estimate (Source)
Product1: Ammonia 1,350 mt/d **Syngas Output:** 405.3 (MWt) Estimate (Source)
Product2: Methanol 60 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Linde AG **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	15	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1983	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Zhenhai Refining & Chemical Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Zhenhai Refining & Chemical Co.					Plant Name:	Zhenhai Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Zhenhai Refining & Chemical Co.	Facility Name:	Zhenhai Refinery
Location: (City/State/Prov)	Ningbo, Zhejiang	Facility Type:	Refinery
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	722.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	900 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	350.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	287.1 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
			Steam Turbine:		
				<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:	Ube		Engineer:	Ube	
			Constructor:	Ube	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	225	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Quimigal Adubos					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Quimigal Adubos					Plant Name:	Barreiro Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Quimigal Adubos	Facility Name:	Barreiro Chemical Plant
Location: (City/State/Prov)	Barreiro, Lavradio	Facility Type:	Chemical Plant
(Country)	Portugal	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	825.8 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	888 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	179.2 <small>(Calculated)</small>	
			Fuel Input:	400.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	328.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	
				<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH			Engineer:
				Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	162	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	Aug. 1984
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Chinese Petroleum Corp.		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Chinese Petroleum Corp.		Plant Name:	Kaohsiung Syngas Plant			
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Chinese Petroleum Corp.		Facility Name:	Kaohsiung Petrochemical Complex		
Location: (City/State/Prov)	Kaohsiung		Facility Type:	Petrochemical Plant		
(Country)	Taiwan		Facility Status:	Operating		
(Region)	Asia/Australia					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	1,000.0 (mt/d)	Estimate (Source)
Feed1:	Bitumen		1,000 mt/d		
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	2,143,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	H2	158,200 Nm3/hr	Eq. IGCC Cap., MWe:	160.0 (Calculated)	
Product2:	CO	4,530 Nm3/hr	Fuel Input:	390.7 (MWt)	Estimate (Source)
Product3:	Methanol SG	26,500 Nm3/hr	Syngas Output:	293.0 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)	Soot Handling:	
Syngas Cooler:	Direct water quench/syngas cooler combination (Cooler Type)		(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier)	(Process)
Gas Turbine:	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Linde AG		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	32	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:		1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Motiva Enterprises LLC				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Motiva Enterprises LLC				Plant Name:	Convent H2 Plant					
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification					
	(Technology Name)				(Licensor)	(Technology Type)					
Vendor Contact:	Tim Huskey				timothy.huskey@ge.com						
	(Contact)				(Email)						

Facility Information

Facility Owner:	Motiva Enterprises LLC	Facility Name:	Star Enterprise Convent Refinery
Location: (City/State/Prov)	Convent, LA	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	650.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	H-Oil bottoms	650 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	H2	63 MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	1,880,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	140.3	
				(Calculated)	
			Fuel Input:	313.4	Estimate
				(MWt)	(Source)
			Syngas Output:	257.0	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Fluor Daniel		
	(Contractor)	(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID:	45	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:		1985	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Mitteldeutsche Erdöl-Raffinerie GmbH					Plant Name:	Leuna Methanol Anlage				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>			Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH	Facility Name:	Mider Refinery
Location: (City/State/Prov)	Leuna	Facility Type:	Refinery
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	2,400.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Visbreaker residue	2,400 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	42 MMscf/d			
Product2:	Methanol	600,000 mt/yr			
Product3:	Electricity	MW			
			Syngas Cap.:	7,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	537.5 <small>(Calculated)</small>	
			Fuel Input:	1,162.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	984.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			Soot Handling: NSRU	
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	
				<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	9	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1985	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	China National Petrochemical Corp./Sinopec				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	China National Petrochemical Corp./Sinopec				Plant Name:	Urumqi Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	China National Petrochemical Corp./Sinopec	Facility Name:	Urumqi Refinery
Location: (City/State/Prov)	Urumqi	Facility Type:	Refinery
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	740.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	740 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	358.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	286.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Ube		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	48	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1986
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	SAR GmbH				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	SAR GmbH				Plant Name:	SAR Plant-II				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	SAR GmbH	Facility Name:	Oberhausen Chemical Plant
Location: (City/State/Prov)	Oberhausen-Holten	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	415.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	730 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:	H2	Nm3/d			
Product3:					
			Syngas Cap.:	1,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	89.6 <small>(Calculated)</small>	
			Fuel Input:	200.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	164.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench/syngas cooler combination <small>(Cooler Type)</small>				Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:	Uhde		Engineer:	Uhde	
			Constructor:	Uhde	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: 114 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 1992
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: GSP Gasification Process (Technology Name) Future Energy GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dirk Volkmann (Contact) d.volkmann@future-energy.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 150.0 (mt/d) Estimate (Source)
Feed1: Waste oil/slurry tar 150 mt/d **Syngas Cap.:** 1,200,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 89.6 (Calculated)
Feed3: **Fuel Input:** 234.2 (MWt) Estimate (Source)
Main Product: Power (Category) **Syngas Output:** 164.0 (MWt) Gasifier licensor data (Source)
Product1: Electricity 75 MW
Product2: Methanol 375 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	10	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1995	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Dalian Chemical Industrial Corp.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Dalian Chemical Industrial Corp.				Plant Name:	Dalian Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Dalian Chemical Industrial Corp.	Facility Name:	Dalian Fertilizer Plant
Location: (City/State/Prov)	Dalian, Liaoning	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	740.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	4,700 bbl/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,096,500 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.5 <small>(Calculated)</small>	
			Fuel Input:	358.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	286.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Linde AG <small>(ASU Supplier)</small>					
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling: 	
Gas Cleanup:	Linde AG <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:				
Gas Turbine:							
HRSG:							
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 230 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Yochon Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Yochon Chemical Plant
Location: (City/State/Prov) Yochon **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 132.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 132 mt/d **Syngas Cap.:** 384,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 28.7 (Calculated)
Feed3: **Fuel Input:** 64.0 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 52.5 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	227	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Inner Mongolia Fertilizer Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Inner Mongolia Fertilizer Co.			Plant Name:	Hohhot Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>		Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Inner Mongolia Fertilizer Co.	Facility Name:	Hohhot Fertilizer Plant
Location:	(City/State/Prov) Hohhot, Inner Mongolia	Facility Type:	Chemical Plant
	(Country) China	Facility Status:	Operating
	(Region) Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	725.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	672 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>		Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Product1:	Ammonia	mt/d	Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
Product2:			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product3:			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	
		Sulfur Removal:	
		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 57 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** Oct. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shell Nederland Raffinaderij BV **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell Nederland Raffinaderij BV **Plant Name:** Pernis Shell IGCC/Hydrogen Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell Nederland Raffinaderij BV **Facility Name:** Pernis Refinery
Location: (City/State/Prov) Rotterdam **Facility Type:** Refinery
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 1,650.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,650 mt/d **Syngas Cap.:** 4,662,200 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 348.0 (Calculated)
Feed3: **Fuel Input:** 799.5 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 637.3 (MWt) Gasifier licensor data (Source)
Product1: H2 100 MMscf/d
Product2: Electricity 110 MW
Product3: Steam 200 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) SFL Netherlands (Cooler Supplier) 94.5 (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Shell (Supplier) Claus (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6B (Model) 86 (MWout)
HRSG: 2 (No.) (Supplier) (Model) 290 mt/hr (Production) **Steam Turbine:** 2 (No.) GE/Nuovo Pignone (Supplier) (Model) 41 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** Fluor Daniel B.V. **Constructor:** Fluor Daniel B.V.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 22-Jul-04

22-Jul-04

Key Gasifier Information

Facility ID:	228	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Lanzhou Chemical Industrial Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Lanzhou Chemical Industrial Co.			Plant Name:	Lanzhou Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Lanzhou Chemical Industrial Co.			Facility Name:	Lanzhou Chemical Plant		
Location: (City/State/Prov)	Lanzhou, Gansu			Facility Type:	Chemical Plant		
(Country)	China			Facility Status:	Operating		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):			
			(mt/d)	(Source)		
Feed1:	Natural Gas	700 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals (Category)					
Product1:	Ammonia	mt/d				
Product2:						
Product3:						
				Syngas Cap.:	2,100,000 (Nm3/d)	Gasifier licensor (Source)
				Eq. IGCC Cap., MWe:	156.8 (Calculated)	
				Fuel Input:	350.1 (MWt)	Gasifier licensor data (Source)
				Syngas Output:	287.1 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:			
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Fire-tube boiler (Cooler Type)		
		(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	
		Sulfur Removal:	
		(Supplier)	(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (Production)
		Steam Turbine:	
		(No.)	(Supplier) (Model) (MWout)
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	54	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	July	1999	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	ISAB Energy			Plt. Owner Type:	Special Joint Venture						
Plt. Operator:	ISAB Energy			Plant Name:	ISAB Energy IGCC Project						
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>						
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>							

Facility Information

Facility Owner:	ISAB S.p.A.	Facility Name:	Priolo Gargallo Refinery
Location: (City/State/Prov)	Priolo Gargallo, Sicily	Facility Type:	Refinery
(Country)	Italy	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	3,163.0	Gasifier contractor
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	ROSE asphalt	3,168 mt/d			
Feed2:					
Feed3:					
Main Product:	Power		Syngas Cap.:	8,800,000	Gasifier contractor
	<small>(Category)</small>			<small>(Nm3/d)</small>	<small>(Source)</small>
Product1:	Electricity	512 MWe	Eq. IGCC Cap., MWe:	656.9	
				<small>(Calculated)</small>	
Product2:			Fuel Input:	1,360.0	Gasifier contractor
Product3:				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	1,203.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen	Air Liquide	Across-the-fence/No integration			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler		Soot Handling:			
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	Naphtha recovery & recy			
Gas Cleanup:	Dow Chemical Co.	MDEA	Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>	Lurgi Oel•Gas•Chemie Gm			
			<small>(Supplier)</small>			
			Claus (O2 blown)			
			<small>(Process)</small>			
Gas Turbine:	2	Siemens/Ansaldo	V94.2K	330		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:	2	Siemens/Ansaldo				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		
			Steam Turbine:	2		
				<small>(No.)</small>		
				<small>(Supplier)</small>		
				<small>(Model)</small>		
				<small>(MWout)</small>		
Prin. Contractor:	Snamprogetti		Engineer:	Snamprogetti-Foster Wheeler	Constructor:	Snamprogetti-Foster Wheeler

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	270	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	April	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	ExxonMobil					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	ExxonMobil					Plant Name:	Baytown Syngas Plant				
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	ExxonMobil	Facility Name:	Baytown Chemical Plant
Location: (City/State/Prov)	Baytown, TX	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	875.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Deasphalter pitch	1,100 mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels				
	(Category)				
Product1:	Syngas	2,540,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	2,540,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	189.6	
				(Calculated)	
			Fuel Input:	423.4	Estimate
				(MWt)	(Source)
			Syngas Output:	347.2	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen	Air Products & Chemicals, Inc.	Across-the-fence
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	(Supplier)	(Process)	(Supplier) (Process)
Gas Turbine:	0	N.A.	0
	(No.) (Supplier)	(Model)	(MWout)
HRSG:	0	N.A.	0
	(No.) (Supplier)	(Model)	(Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Parsons		
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 20 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** June 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Linde AG **Plt. Owner Type:** Special Joint Venture
Plt. Operator: Linde AG **Plant Name:** Singapore Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Singapore Syngas Pte. Ltd. (Texaco/Messer) **Facility Name:** Pulau Merlimau Gas Plant
Location: (City/State/Prov) Jurong Island **Facility Type:** Gas Plant
 (Country) Singapore **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 554.0 (mt/d) Estimate (Source)
Feed1: Ref. residue 572 mt/d
Feed2:
Feed3:
Syngas Cap.: 1,610,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 120.2 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 268.4 (MWt) Estimate (Source)
Product1: H2 25 MMscf/d **Syngas Output:** 220.1 (MWt) Gasifier licensor data (Source)
Product2: CO 25 MMscf/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Messer Griesheim (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde AG **Constructor:** M.W. Kellogg/Chiyoda

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: 55	No. of Gasifiers: Op'g/Sp/Total 3 / 0 / 3	Gasifier Status: Operating	Start Date: April 2000
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Power
Plt. Owner: SARLUX srl	Plt. Owner Type: Special Joint Venture		
Plt. Operator: SARLUX srl	Plant Name: SARLUX IGCC Project		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>	GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>
Vendor Contact:	Tim Huskey <small>(Contact)</small>	timothy.huskey@ge.com <small>(Email)</small>	

Facility Information

Facility Owner: Saras S.p.A.	Facility Name: Saras S.p.A. Raffinerie Sarde
Location: (City/State/Prov) Sarroch, Cagliari, Sardinia	Facility Type: Refinery
(Country) Italy	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF): 3,545.0 <small>(mt/d)</small>	Gasifier contractor <small>(Source)</small>
Feed1:	Visbreaker residue	3,552 mt/d		
Feed2:				
Feed3:				
Main Product:	Power <small>(Category)</small>		Syngas Cap.: 10,400,000 <small>(Nm3/d)</small>	Gasifier contractor <small>(Source)</small>
Product1:	Electricity	551 MWe	Eq. IGCC Cap., MWe: 776.4 <small>(Calculated)</small>	
Product2:	H2	960,000 Nm3/d	Fuel Input: 1,586.3 <small>(MWt)</small>	Gasifier contractor <small>(Source)</small>
Product3:	Steam	185 mt/hr	Syngas Output: 1,271.2 <small>(MWt)</small>	Gasifier contractor <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	Across-the-fence/No integration <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		Soot Handling: Naphtha recovery & recy
		 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>
Gas Cleanup:	UOP LLC <small>(Supplier)</small>	Selexol <small>(Process)</small>	Sulfur Removal: Lurgi Oel•Gas•Chemie Gm <small>(Supplier)</small>
			Claus (O2 blown) <small>(Process)</small>
Gas Turbine:	3 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	9E <small>(Model)</small>
			414 <small>(MWout)</small>
HRSG:	3 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	700 t/hr <small>(Production)</small>
			Steam Turbine: 3 <small>(No.)</small>
		General Electric Co. <small>(Supplier)</small>	152.4 <small>(MWout)</small>
Prin. Contractor:	Snamprogetti		Engineer: RTI
			Constructor: RTI

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	53	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	April	2001	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	api Energia S.p.A.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	API Raffineria di Ancona S.p.A.					Plant Name:	api Energia S.p.A. IGCC Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	API Raffineria di Ancona S.p.A.			Facility Name:	Falconara Marittima Refinery		
Location: (City/State/Prov)	Falconara Marittima			Facility Type:	Refinery		
(Country)	Italy			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,440.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>	
Feed1:	Vac. visbreaker resid	1,440 mt/d				
Feed2:						
Feed3:						
Main Product:	Power <small>(Category)</small>					
Product1:	Electricity	287 MWe				
Product2:	Steam	65 mt/hr				
Product3:						
			Syngas Cap.:	3,845,000 <small>(Nm3/d)</small>	Gasifier licensor data <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	287.0 <small>(Calculated)</small>		
			Fuel Input:	641.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	525.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Across-the-fence <small>(ASU Integration)</small>						
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	Separate handling unit		
Gas Cleanup:	UOP LLC <small>(Supplier)</small>	Selexol <small>(Process)</small>	Sulfur Removal:	Parsons Energy & Chemical <small>(Supplier)</small>	Claus (O2 blown) <small>(Process)</small>				
Gas Turbine:	1 <small>(No.)</small>	ABB Lummus Global <small>(Supplier)</small>	13E2 <small>(Model)</small>	190 <small>(MWout)</small>					
HRSG:	1 <small>(No.)</small>			280 mt/hr <small>(Production)</small>	Syngas Turbine:	1 <small>(No.)</small>	Ansaldo <small>(Supplier)</small>		100 <small>(MWout)</small>
Prin. Contractor:	ABB Lummus Global/SAE Sadelm		Engineer:	ABB Lummus Global/SAE Sade		Constructor:	ABB Lummus Global/SAE Sade		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 184 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Jilin Chemical Industrial Corp. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Jilin Chemical Industrial Corp. **Plant Name:** Jilin Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Jilin Chemical Industrial Corp. **Facility Name:** Jilin Chemical Plant
Location: (City/State/Prov) Jilin **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 739.5 (mt/d) Estimate (Source)
Feed1: Visbreaker residue 740 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia 1,000 mt/d
Product2:
Product3:
Syngas Cap.: 2,096,500 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 156.5 (Calculated)
Fuel Input: 358.3 (MWt) Estimate (Source)
Syngas Output: 286.6 (MWt) Estimate (Source)

Other Information

O2 Supply: Oxygen Linde AG (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Unspecified vendor Rectisol (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde Impianti Italia SpA **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	271	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2001
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	Esso Singapore Pty. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Esso Singapore Pty. Ltd.					Plant Name:	Chawan IGCC Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Esso Singapore Pty. Ltd.	Facility Name:	Chawan Refinery
Location: (City/State/Prov)	Pulau Ayer Chawan, Jurong Island	Facility Type:	Refinery
(Country)	Singapore	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	924.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Residual oil	924			
Feed2:					
Feed3:					
Main Product:	Power				
	<small>(Category)</small>				
Product1:	Electricity	173			
Product2:	H2	MMscf/d			
Product3:	Steam	lb/hr			
			Syngas Cap.:	2,660,000	Estimate
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	198.6	
				<small>(Calculated)</small>	
			Fuel Input:	450.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	363.6	Estimate
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:
			<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:	2	General Electric Co.	6FA
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			173.2
			<small>(MWout)</small>
HRSG:	2	General Electric Co.	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:	M.W. Kellogg		
Engineer:	M.W. Kellogg		
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 122 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** May 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Nanjing Chemical Industry Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nanjing Chemical Industry Co. **Plant Name:** Nanjing Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nanjing Chemical Industry Co. **Facility Name:** Nanjing Chemical Plant
Location: (City/State/Prov) Nanjing, Jiangsu **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 769.0 (mt/d) Estimate (Source)
Feed1: Eureka pitch 385 mt/d **Syngas Cap.:** 2,200,000 (Nm3/d) Gasifier contractor (Source)
Feed2: Vacuum residue oil 385 mt/d **Eq. IGCC Cap., MWe:** 164.2 (Calculated)
Feed3:
Main Product: Chemicals (Category) **Fuel Input:** 346.0 (MWt) Gasifier contractor (Source)
Product1: Ammonia 1,000 mt/d **Syngas Output:** 300.8 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Flash & filtration
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) Outside Battery Limits (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Snamprogetti **Engineer:** Snamprogetti **Constructor:** Nanjing Chemical Industry Co.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 121 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 2003
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nippon Petroleum Refining Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nippon Petroleum Refining Co. **Plant Name:** Negishi IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nippon Petroleum Refining Co. **Facility Name:** Negishi Refinery
Location: (City/State/Prov) Yokohama **Facility Type:** Refinery
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,000.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,992 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 342 MWnet
Product2:
Product3:
Syngas Cap.: 5,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 433.0 (Calculated)
Fuel Input: 967.0 (MWt) Gasifier licensor data (Source)
Syngas Output: 792.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell/JGC (Supplier) ADIP (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) OxyClaus/Scot (Process)
Gas Turbine: 1 (No.) Mitsubishi Heavy Industri 701F (Supplier) (Model) 301 (MWout)
HRSG: 1 (No.) Mitsubishi Heavy Industri (Supplier) Vertical (Model) 430 mt/hr (Production) **Steam Turbine:** 1 (No.) Mitsubishi Heavy Industri Down Flow (Supplier) (Model) 130 (MWout)
Prin. Contractor: JGC Corp. **Engineer:** JGC Corp. **Constructor:** JGC Corp.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: 385 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Feb. 2004
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BP/Formosa **Plt. Owner Type:** _____
Plt. Operator: BP/Formosa **Plant Name:** Mai Liao Refinery
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: _____ **Facility Name:** Mai Liao Refinery
Location: (City/State/Prov) Mai Liao **Facility Type:** Refinery
 (Country) Taiwan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Petroleum (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Naphtha 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: _____ 0
Product3: _____ 0
Syngas Cap.: 1,080,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 80.6 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 147.6 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 329 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Startup **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: AGIP Raffinazione S.p.A. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: AGIP Raffinazione S.p.A. **Plant Name:** Agip IGCC
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: AGIP Raffinazione S.p.A. **Facility Name:** Sannazzaro Refinery
Location: (City/State/Prov) Sannazzaro **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,150.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,200 mt/d **Syngas Cap.:** 3,340,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 249.3 (Calculated)
Feed3: **Fuel Input:** 556.8 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category) **Syngas Output:** 456.6 (MWt) Gasifier licensor data (Source)
Product1: Electricity MW
Product2: H2 Nm3/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

**2007 Gasification Database
Plants sorted by Product**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 04-Mar-99

Key Gasifier Information

Facility ID: 256	No. of Gasifiers: Op'g/Sp/Total 1 / 0 / 1	Gasifier Status: Operating	Start Date: 1952
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Fabrika Azotnih Jendinjnja	Plt. Owner Type: Oil Refining & Chemicals		
Plt. Operator: Fabrika Azotnih Jendinjnja	Plant Name: Gorazde Ammonia Plant		
Gas'n Tech.: Low Pressure Winkler Gasification Process <small>(Technology Name)</small>	Kvaerner Process Technology <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>	
Vendor Contact: <small>(Contact)</small>	 <small>(Email)</small>		

Facility Information

Facility Owner: Fabrika Azotnih Jendinjnja	Facility Name: Gorazde Plant
Location: (City/State/Prov) Gorazde	Facility Type: Chemical Plant
(Country) Former Yugoslavia	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed: Solid Coal <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF): <small>(mt/d) (Source)</small>
Feed1: Lignite	53 mt/d	Syngas Cap.: 120,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2: 		Eq. IGCC Cap., MWe: 9.0 <small>(Calculated)</small>
Feed3: 		Fuel Input: 20.5 Estimate <small>(MWt) (Source)</small>
Main Product: Chemicals <small>(Category)</small>		Syngas Output: 16.4 Estimate <small>(MWt) (Source)</small>
Product1: Ammonia mt/d		
Product2: 		
Product3: 		

Other Information

O2 Supply: Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier) (ASU Integration)</small>	
Syngas Cooler: <small>(Cooler Type) (Cooler Supplier) (MWth Duty)</small>	Soot Handling: 	
Gas Cleanup: <small>(Supplier) (Process)</small>	Sulfur Removal: <small>(Supplier) (Process)</small>	
Gas Turbine: <small>(No.) (Supplier) (Model) (MWout)</small>		
HRSG: <small>(No.) (Supplier) (Model) (Production)</small>	Steam Turbine: <small>(No.) (Supplier) (Model) (MWout)</small>	
Prin. Contractor: 	Engineer: Bamag Verfah.	Constructor: Bamag Verfah.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 191 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1958
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Praxair (EniChem) **Plt. Owner Type:** Industrial Gas Supply
Plt. Operator: Praxair (EniChem) **Plant Name:** Ravenna Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Praxair (EniChem) **Facility Name:** Ravenna Chemical Plant
Location: (City/State/Prov) Ravenna **Facility Type:** Chemical Plant
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 10 MMscf/d **Syngas Cap.:** 700,000 Estimate (Nm3/d) (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 112.6 Estimate (MWt) (Source)
Main Product: Chemicals (Category) **Syngas Output:** 95.7 Estimate (MWt) (Source)
Product1: CO Nm3/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	294	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1959	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Taminco					Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	Taminco					Plant Name:	Billingham Oxochemicals Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Air Products (ICI)	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Billingham, England	Facility Type:	Chemical Plant
(Country)	United Kingdom	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	9 MMscf/d				Syngas Cap.:	600,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	44.8 <small>(Calculated)</small>
Feed3:						Fuel Input:	96.5 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	82.0 Estimate <small>(MWt) (Source)</small>
Product1:	Oxochemicals	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:		
Gas Cleanup:				Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>	
Steam Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
Prin. Contractor:			Engineer:	ICI	Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	70	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	May	1961	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Mitsubishi Petrochemicals					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Mitsubishi Petrochemicals					Plant Name:	Yokkaichi Syngas Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Mitsubishi Petrochemicals	Facility Name:	Yokkaichi Petrochemical Plant
Location: (City/State/Prov)	Yokkaichi	Facility Type:	Petrochemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	137.6 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	138 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	400,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>	
			Fuel Input:	66.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	54.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Shell <small>(Supplier)</small>	Adip <small>(Process)</small>	Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(Production)</small>
			<small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: _____

10-Aug-04

Key Gasifier Information

Facility ID:	188	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	_____	1963
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	PRAOIL				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	PRAOIL				Plant Name:	Gela Ragusa H2 Plant				
Gas'n Tech.:	GE Gasification Technology			GE		Entrained-flow gasification				
	(Technology Name)			(Licensor)		(Technology Type)				
Vendor Contact:	Tim Huskey			timothy.huskey@ge.com						
	(Contact)			(Email)						

Facility Information

Facility Owner:	PRAOIL	Facility Name:	Gela Ragusa Refinery
Location: (City/State/Prov)	Gela Ragusa	Facility Type:	Refinery
(Country)	Italy	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous	Gas	Rate (MAF):	_____	_____									
	(Category)	(Classification)		(mt/d)	(Source)									
Feed1:	Natural gas	17	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Syngas Cap.:</td> <td style="width: 10%; border: 1px solid black;">1,150,000</td> <td style="width: 60%; border: 1px solid black;">Gasifier licensor</td> </tr> <tr> <td></td> <td style="font-size: small;">(Nm3/d)</td> <td style="font-size: small;">(Source)</td> </tr> <tr> <td>Eq. IGCC Cap., MWe:</td> <td style="border: 1px solid black;">85.8</td> <td style="font-size: small;">(Calculated)</td> </tr> </table>			Syngas Cap.:	1,150,000	Gasifier licensor		(Nm3/d)	(Source)	Eq. IGCC Cap., MWe:	85.8	(Calculated)
Syngas Cap.:	1,150,000	Gasifier licensor												
	(Nm3/d)	(Source)												
Eq. IGCC Cap., MWe:	85.8	(Calculated)												
Feed2:	_____	_____												
Feed3:	_____	_____												
Main Product:	Chemicals		Fuel Input:	184.9	Estimate									
	(Category)			(MWt)	(Source)									
Product1:	H2	_____	Syngas Output:	157.2	Estimate									
		(MMscf/d)		(MWt)	(Source)									
Product2:	_____	_____												
Product3:	_____	_____												

Other Information

O2 Supply:	Oxygen	_____	_____
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		Soot Handling:
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	_____	_____	Sulfur Removal:
	(Supplier)	(Process)	_____
			(Supplier)
Gas Turbine:	_____	_____	_____
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	_____	_____	_____
	(No.)	(Supplier)	(Model) (MWout)
			(Production)
Steam Turbine:	_____	_____	_____
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	_____		_____
		(Engineer):	(Constructor):
		Foster Wheeler	_____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

08-Dec-99

Key Gasifier Information

Facility ID:	90	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Jan.	1965	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Kemira Chemicals Oy					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Kemira Chemicals Oy					Plant Name:	Oulu Syngas Plant-I				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Kemira Chemicals Oy					Facility Name:	Oulu Chemical Plant				
Location: (City/State/Prov)	Oulu					Facility Type:	Chemical Plant				
(Country)	Finland					Facility Status:	Operating				
(Region)	Europe										

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	105.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil			bbl/d	
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	300,000	Nm3/d		
Product2:					
Product3:					
				Syngas Cap.:	300,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Eq. IGCC Cap., MWe:	22.4 <small>(Calculated)</small>
				Fuel Input:	50.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>
				Syngas Output:	41.0 <small>(MWt)</small>
					Estimate <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:					
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH				
Engineer:					
Constructor:	Lurgi GmbH				

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	203	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	1969	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Chemische Werke Hüls AG					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Chemische Werke Hüls AG					Plant Name:	Marl Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Chemische Werke Hüls AG	Facility Name:	Marl Chemical Plant
Location: (City/State/Prov)	Marl	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	206.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue & heavy	206 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	600,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	44.8 <small>(Calculated)</small>	
			Fuel Input:	100.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	82.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal: <small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>
	 <small>(MWout)</small>		
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>
	 <small>(Production)</small>	 <small>(No.)</small>	 <small>(Supplier)</small>
	 <small>(Model)</small>	 <small>(MWout)</small>	
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 98 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** Feb. 1969
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: DEA Mineraloel AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: DEA Mineraloel AG **Plant Name:** Wesseling Methanol Plant-VI
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: DEA Mineraloel AG **Facility Name:** Wesseling Chemical Plant
Location: (City/State/Prov) Wesseling **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 447.2 (mt/d) Estimate (Source)
Feed1: Heavy cracked residu 447 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol 582 mt/d
Product2:
Product3:
Syngas Cap.: 1,300,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 97.0 (Calculated)
Fuel Input: 216.7 (MWt) Gasifier licensor data (Source)
Syngas Output: 177.7 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:**
Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: 96 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Oct. 1969
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Naju Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Naju Chemical Plant
Location: (City/State/Prov) Naju, Seoul **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 172.2 (mt/d) Estimate (Source)
Feed1: Vac. Residue 225 mt/d **Syngas Cap.:** 700,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 83.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 68.4 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 318 mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Shell (Supplier) Sulfinol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 104 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1973
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Veba Oil Refining & Petrochemicals GmbH **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Veba Oil Refining & Petrochemicals GmbH **Plant Name:** Gelsenkirchen-Scholven Ammonia/Methanol Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Veba Oil Refining & Petrochemicals GmbH **Facility Name:** Gelsenkirchen-Scholven Chemical Plant
Location: (City/State/Prov) Gelsenkirchen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,479.4 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,479 mt/d **Syngas Cap.:** 4,300,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 321.0 (Calculated)
Feed3: **Fuel Input:** 716.8 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 587.8 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 1,200 mt/d
Product2: Methanol 600 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 207 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1974
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 860.0 (mt/d) Estimate (Source)
Feed1: Vac. residue & heavy 860 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol mt/d
Product2:
Product3:

Syngas Cap.: 2,500,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 186.6 (Calculated)
Fuel Input: 416.8 (MWt) Estimate (Source)
Syngas Output: 341.8 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** BASF

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date:

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:

(Country) Facility Status:

(Region)

Feed/Product Information

Main Feed: Rate (MAF):

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	283	No. of Gasifiers: Op'g/Sp/Total	3 / 0 / 3	Gasifier Status:	Operating	Start Date:	 / / 1977
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hoechst Celanese			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Hoechst Celanese			Plant Name:	Houston Oxochemicals Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>		Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hoechst Celanese	Facility Name:	Houston Chemical Plant
Location: (City/State/Prov)	Houston, TX	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):	 <small>(mt/d)</small>	 <small>(Source)</small>
Feed1:	Natural gas	820,850 Nm3/d			
Feed2:	 	 			
Feed3:	 	 			
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	 	mt/d		
Product2:	 	 			
Product3:	 	 			
				Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>
				Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>
					Gasifier licensor <small>(Source)</small>
				Fuel Input:	337.8 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>
				Syngas Output:	287.1 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>	 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	 <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>
				 <small>(Process)</small>
Gas Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>
			Steam Turbine:	 <small>(No.)</small>
				 <small>(Supplier)</small>
				 <small>(Model)</small>
				 <small>(MWout)</small>
Prin. Contractor:	 		Engineer:	
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	287	No. of Gasifiers: Op'g/Sp/Total	3	0	3	Gasifier Status:	Operating	Start Date:		1978	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	National Fertilizer Ltd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	National Fertilizer Ltd.					Plant Name:	Panipat Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	National Fertilizer Ltd.	Facility Name:	Panipat Fertilizer Plant
Location: (City/State/Prov)	Panipat, Haryana	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	722.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	723 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>			
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>
			Steam Turbine:	
			<small>(No.)</small>	<small>(Supplier)</small>
				<small>(Model)</small>
				<small>(MWout)</small>
Prin. Contractor:			Engineer:	
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	286	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1978	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Exxon Chemical Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Exxon Chemical Co.					Plant Name:	Baton Rouge Oxochemicals Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Exxon Chemical Co.	Facility Name:	Baton Rouge Chemical Plant
Location: (City/State/Prov)	Baton Rouge, LA	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	196.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy fuel oil	196 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	570,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	42.6 <small>(Calculated)</small>	
			Fuel Input:	95.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	77.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>			
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			Soot Handling:
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	108	No. of Gasifiers: Op'g/Sp/Total	3	0	3	Gasifier Status:	Operating	Start Date:	1978	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Fertilizer Corp. of India Ltd.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Fertilizer Corp. of India Ltd.				Plant Name:	Nangal Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Fertilizer Corp. of India Ltd.	Facility Name:	Nangal Fertilizer Plant
Location: (City/State/Prov)	Nangal, New Delhi	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	722.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>			
Feed1:	Bunker C fuel oil	723 mt/d				Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
Feed3:						Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Ammonia	600 mt/d						
Product2:								
Product3:								

Other Information

O2 Supply:						
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:				Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:					Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID:	285	No. of Gasifiers: Op'g/Sp/Total	4/ 0/ 4	Gasifier Status:	Operating	Start Date:	1978
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hydro Agri Brunsbüttel GmbH			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Hydro Agri Brunsbüttel GmbH			Plant Name:	Brunsbüttel Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Hydro Agri Brunsbüttel GmbH	Facility Name:	Brunsbüttel Chemical Plant
Location: (City/State/Prov)	Brunsbüttel	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	1,600.0 (mt/d)	Estimate (Source)
Feed1:	Hvy vis. residue	1,600 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	4,700,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	Ammonia	2,100 mt/d	Eq. IGCC Cap., MWe:	350.9 (Calculated)	
Product2:			Fuel Input:	803.1 (MWt)	Gasifier licensor data (Source)
Product3:			Syngas Output:	642.5 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)		Integrated/N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler:	Fire-tube boiler (Cooler Type)		Soot Handling: Separate handling unit
Gas Cleanup:		Rectisol (Process)	Sulfur Removal:
Gas Turbine:	0 (No.)	N.A. (Supplier)	0 (Model)
			0 (MWout)
HRSG:	0 (No.)	N.A. (Supplier)	0 (Production)
			0 (Model)
			0 (MWout)
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	213	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1979
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Hoechst Celanese			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Hoechst Celanese			Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hoechst Celanese		Facility Name:	Bay City Chemical Plant	
Location:	(City/State/Prov)	Bay City, TX	Facility Type:	Chemical Plant	
	(Country)	United States	Facility Status:	Operating	
	(Region)	North America			

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	175.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Naphtha & fuel oil		175 mt/d	Syngas Cap.:	500,000 <small>(Nm3/d)</small>
Feed2:					Gasifier licensor <small>(Source)</small>
Feed3:				Eq. IGCC Cap., MWe:	37.3 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>			Fuel Input:	83.4 <small>(MWt)</small>
Product1:	Oxochemicals	mt/d		Syngas Output:	68.4 <small>(MWt)</small>
Product2:					Gasifier licensor data <small>(Source)</small>
Product3:					

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>				Soot Handling: Total recycle to gasifier
		<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>	
Gas Cleanup:				Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:				Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
				<small>(Supplier)</small>	<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:	Foster Wheeler		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: 288 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1979

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals

Plt. Owner: National Fertilizer Ltd. Plt. Owner Type: Oil Refining & Chemicals

Plt. Operator: National Fertilizer Ltd. Plant Name: Bathinda Ammonia Plant

Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)

Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: National Fertilizer Ltd. Facility Name: Bathinda Fertilizer Plant

Location: (City/State/Prov) Bathinda Facility Type: Chemical Plant

(Country) India Facility Status: Operating

(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 722.5 Estimate

(Category) (Classification) (mt/d) (Source)

Feed1: Bunker C fuel oil 723 mt/d

Feed2:

Feed3:

Syngas Cap.: 2,100,000 Gasifier licensor

(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 156.8

(Calculated)

Main Product: Chemicals

(Category)

Fuel Input: 350.1 Gasifier licensor data

(MWt) (Source)

Product1: Ammonia mt/d

Syngas Output: 287.1 Gasifier licensor data

(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID: 289 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1979
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Neyveli Lignite Corp. Ltd. **Plt. Owner Type:** _____
Plt. Operator: Neyveli Lignite Corp. Ltd. **Plant Name:** Neyveli Syngas Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Neyveli Lignite Corp. Ltd. **Facility Name:** Neyveli Chemical Plant
Location: (City/State/Prov) Neyveli, Tamil Nadu **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 275.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 275 mt/d
Feed2: _____
Feed3: _____
Main Product: Chemicals (Category)
Product1: Syngas 800,000 Nm3/d
Product2: _____
Product3: _____
Syngas Cap.: 800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 59.7 (Calculated)
Fuel Input: 133.4 (MWt) Gasifier licensor data (Source)
Syngas Output: 109.4 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
HRSG: _____ (No.) _____ (Supplier) _____ (Model) _____ (Production) **Steam Turbine:** _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	214	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	1980
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Akzo Nobel/Berol-Kemi			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Akzo Nobel			Plant Name:	Stenungsund Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)	GE (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Tim Huskey (Contact)	timothy.huskey@ge.com (Email)					

Facility Information

Facility Owner:	Akzo Nobel/Berol-Kemi	Facility Name:	Stenungsund Chemical Plant
Location: (City/State/Prov)	Stenungsund	Facility Type:	Chemical Plant
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	70.0 (mt/d)	Estimate (Source)
Feed1:	Heavy fuel oil	70 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	200,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	14.9 (Calculated)	
			Fuel Input:	33.3 (MWt)	Estimate (Source)
			Syngas Output:	27.3 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Radiant syngas cooler (Cooler Type)	MAN GHH AG (Cooler Supplier)	(MWth Duty)	Soot Handling:	Total recycle to gasifier	
Gas Cleanup:		(Supplier)	(Process)	Sulfur Removal:		
Gas Turbine:		(No.)	(Supplier)	(Model)	(MWout)	
HRSG:		(No.)	(Supplier)	(Model)	(Production)	
		(No.)	(Supplier)	(Model)	(MWout)	
Prin. Contractor:	Davy Powergas		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	215	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1982	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Daicel					Plt. Owner Type:	Unspecified			
Plt. Operator:	Daicel					Plant Name:	Methanol Plant			
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification			
	(Technology Name)					(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com				
	(Contact)					(Email)				

Facility Information

Facility Owner:	Unspecified owner			Facility Name:	Unspecified Chemical Plant		
Location: (City/State/Prov)	Unspecified location			Facility Type:	Chemical Plant		
(Country)	Japan			Facility Status:	Operating		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	190.0	Estimate
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Vac. residue	190 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Methanol	mt/d			
Product2:					
Product3:					
Syngas Cap.:	550,000	Gasifier licensor			
	(Nm3/d)	(Source)			
Eq. IGCC Cap., MWe:	41.1				
	(Calculated)				
Fuel Input:	91.7 Estimate				
	(MWt) (Source)				
Syngas Output:	75.2 Gasifier licensor data				
	(MWt) (Source)				

Other Information

O2 Supply:	Oxygen				
	(Oxidant)	(ASU Supplier)	(ASU Integration)		
Syngas Cooler:	Radiant syngas cooler				Soot Handling: Total recycle to gasifier
	(Cooler Type)		(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:					Sulfur Removal:
	(Supplier)	(Process)	(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					Steam Turbine:
	(No.)	(Supplier)	(Model)	(Production)	(No.) (Supplier) (Model) (MWout)
Prin. Contractor:			Engineer: Ube	Constructor: Ube	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 163 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Operating **Start Date:** July 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plant Name:** Narmada Ammonia/Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Facility Name:** Narmada Fertilizer Complex
Location: (City/State/Prov) Bharuch, Gujarat **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,030.0 (mt/d) Estimate (Source)
Feed1: Ref. residual oil 1,030 mt/d **Syngas Cap.:** 2,964,600 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 221.3 (Calculated)
Feed3: **Fuel Input:** 506.6 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 405.3 (MWt) Estimate (Source)
Product1: Ammonia 1,350 mt/d
Product2: Methanol 60 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Linde AG **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 27	No. of Gasifiers: Op'g/Sp/Total 1/ 1/ 2	Gasifier Status: Operating	Start Date: July 1983
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Eastman Chemical Co.		Plt. Owner Type: Oil Refining & Chemicals	
Plt. Operator: Eastman Chemical Co.		Plant Name: Kingsport Integrated Coal Gasification Facility	
Gas'n Tech.: GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact)	timothy.huskey@ge.com (Email)		

Facility Information

Facility Owner: Eastman Chemical Co.	Facility Name: Kingsport Chemical Complex
Location: (City/State/Prov) Kingsport, TN	Facility Type: Petrochemical Plant
(Country) United States	Facility Status: Operating
(Region) North America	

Feed/Product Information

Main Feed: Solid Coal (Category) (Classification)	Rate (MAF): 750.0 (mt/d)	Estimate (Source)
Feed1: Bit. coal 1,225 t/d		Syngas Cap.: 1,600,000 (Nm3/d) Gasifier licensor (Source)
Feed2:		Eq. IGCC Cap., MWe: 119.4 (Calculated)
Feed3:		Fuel Input: 291.6 (MWt) Estimate (Source)
Main Product: Chemicals (Category)		Syngas Output: 218.7 (MWt) Gasifier licensor data (Source)
Product1: Acetic anhydride 680 mt/d		
Product2: Methanol 550 mt/d		
Product3:		

Other Information

O2 Supply: Oxygen (Oxidant)	Air Products & Chemicals, Inc. (ASU Supplier)	Across-the-fence (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup: Linde AG (Supplier)	Rectisol (Process)	Sulfur Removal: Claus/SCOT (Supplier) (Process)
Gas Turbine:	(No.) (Supplier) (Model) (MWout)	
HRSG: 1 (No.)	(Supplier) (Model) (Production) 200000 lb/hr	Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Bechtel	Engineer: Bechtel	Constructor: John Brown

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 15 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1983
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Zhenhai Refining & Chemical Co. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Zhenhai Refining & Chemical Co. Plant Name: Zhenhai Ammonia Plant
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Zhenhai Refining & Chemical Co. Facility Name: Zhenhai Refinery
Location: (City/State/Prov) Ningbo, Zhejiang Facility Type: Refinery
(Country) China Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 722.5 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Visbreaker residue 900 mt/d
Feed2: Syngas Cap.: 2,100,000 Estimate
Feed3: Eq. IGCC Cap., MWe: 156.8
(Nm3/d) (Source)
(Calculated)
Main Product: Chemicals Fuel Input: 350.0 Estimate
(Category) (MWt) (Source)
Product1: Ammonia 1,000 mt/d Syngas Output: 287.1 Estimate
Product2: (MWt) (Source)
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube Engineer: Ube Constructor: Ube

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	296	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1983	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Sunoco				Plt. Owner Type:	Unspecified				
Plt. Operator:	Sunoco				Plant Name:	Oxochemicals Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	6 MMscf/d				Syngas Cap.:	400,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	64.4 Estimate <small>(MWt) (Source)</small>
Product1:	Oxochemicals	mt/d				Syngas Output:	54.7 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>				Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier) (Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:	Dvay McKee		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID:	297	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	 1983
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Dow (former Union Carbide)			Plt. Owner Type:	Unspecified		
Plt. Operator:	Dow (former Union Carbide)			Plant Name:	Texas City Syngas Plant		
Gas'n Tech.:	GE Gasification Technology		GE	Entrained-flow gasification			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey			timothy.huskey@ge.com			
	<small>(Contact)</small>			<small>(Email)</small>			

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous	Gas	Rate (MAF):		
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Natural gas	12 MMscf/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	830,000	Gasifier licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	62.0	
				<small>(Calculated)</small>	
			Fuel Input:	133.5	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	113.5	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Radiant syngas cooler		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:			Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:	Davy McKee		
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	225	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Quimigal Adubos			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Quimigal Adubos			Plant Name:	Barreiro Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Quimigal Adubos		Facility Name:	Barreiro Chemical Plant	
Location:	(City/State/Prov)	Barreiro, Lavradio	Facility Type:	Chemical Plant	
	(Country)	Portugal	Facility Status:	Operating	
	(Region)	Europe			

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	825.8 (mt/d)	Estimate (Source)
Feed1:	Vac. residue		888 mt/d		
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,400,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	179.2 (Calculated)	
			Fuel Input:	400.1 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	328.1 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:						
	(Oxidant)	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Fire-tube boiler (Cooler Type)					
		(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal: (Supplier) (Process)			
Gas Turbine:						
	(No.)	(Supplier)	(Model) (MWout)			
HRSG:						
	(No.)	(Supplier)	(Model) (Production)			
			Steam Turbine: (No.) (Supplier) (Model) (MWout)			
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	32	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Motiva Enterprises LLC					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Motiva Enterprises LLC					Plant Name:	Convent H2 Plant		
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification			
	(Technology Name)				(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com			
	(Contact)					(Email)			

Facility Information

Facility Owner:	Motiva Enterprises LLC	Facility Name:	Star Enterprise Convent Refinery
Location: (City/State/Prov)	Convent, LA	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	650.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	H-Oil bottoms	650 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	H2	63 MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	1,880,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	140.3	
				(Calculated)	
			Fuel Input:	313.4	Estimate
				(MWt)	(Source)
			Syngas Output:	257.0	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	
		Sulfur Removal:	
			(Supplier)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Fluor Daniel		
	(Contractor)	(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 18 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** July 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Ube Ammonia Industry Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Ube Ammonia Industry Co. Ltd. **Plant Name:** Ube City Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Ube Ammonia Industry Co. Ltd. **Facility Name:** Ube City Chemical Plant
Location: (City/State/Prov) Ube City **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,000.0 (mt/d) Estimate (Source)
Feed1: Coal & petcoke 1,650 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia 1,250 mt/d
Product2:
Product3:
Syngas Cap.: 2,150,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 160.5 (Calculated)
Fuel Input: 391.9 (MWt) Estimate (Source)
Syngas Output: 293.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube **Engineer:**
Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	162	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Aug.	1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Chinese Petroleum Corp.				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Chinese Petroleum Corp.				Plant Name:	Kaohsiung Syngas Plant					
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Chinese Petroleum Corp.	Facility Name:	Kaohsiung Petrochemical Complex
Location: (City/State/Prov)	Kaohsiung	Facility Type:	Petrochemical Plant
(Country)	Taiwan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bitumen	1,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	158,200 Nm3/hr			
Product2:	CO	4,530 Nm3/hr			
Product3:	Methanol SG	26,500 Nm3/hr			
			Syngas Cap.:	2,143,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	160.0 <small>(Calculated)</small>	
			Fuel Input:	390.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	293.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:	Direct water quench/syngas cooler combination <small>(Cooler Type)</small>					Soot Handling:	
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRS G:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
					<small>(MWout)</small>		
Prin. Contractor:	Linde AG			Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 9 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1985
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: China National Petrochemical Corp./Sinopec Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: China National Petrochemical Corp./Sinopec Plant Name: Urumqi Ammonia Plant
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: China National Petrochemical Corp./Sinopec Facility Name: Urumqi Refinery
Location: (City/State/Prov) Urumqi Facility Type: Refinery
(Country) China Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 740.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Visbreaker residue 740 mt/d Syngas Cap.: 2,100,000 Estimate
Feed2: () () (Nm³/d) (Source)
Feed3: () () Eq. IGCC Cap., MWe: 156.8
(Calculated)
Main Product: Chemicals Fuel Input: 358.3 Estimate
(Category) (MWt) (Source)
Product1: Ammonia 1,000 mt/d Syngas Output: 286.6 Estimate
Product2: () () (MWt) (Source)
Product3: () ()

Other Information

O₂ Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling: ()
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube Engineer: () Constructor: ()

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:
Product2:
Product3:

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 48 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: Sept. 1986
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: SAR GmbH Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: SAR GmbH Plant Name: SAR Plant-II
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: SAR GmbH Facility Name: Oberhausen Chemical Plant
Location: (City/State/Prov) Oberhausen-Holten Facility Type: Chemical Plant
(Country) Germany Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 415.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Vac. residue 730 mt/d
Feed2:
Feed3:
Main Product: Chemicals
(Category)
Product1: Oxochemicals mt/d
Product2: H2 Nm3/d
Product3:
Syngas Cap.: 1,200,000 Gasifier licensor
(Nm3/d) (Source)
Eq. IGCC Cap., MWe: 89.6
(Calculated)
Fuel Input: 200.0 Estimate
(MWt) (Source)
Syngas Output: 164.0 Gasifier licensor data
(MWt) (Source)

Other Information

O2 Supply: Oxygen
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench/syngas cooler combination Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Shell Sulfinol Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Uhde Engineer: Uhde Constructor: Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	154	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	July	1987	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	China National Technology Import Co. (CNTIC)					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	China National Technology Import Co. (CNTIC)					Plant Name:	Shaanxi Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom <small>(Technology Name)</small>				Sasol Lurgi GmbH <small>(Licensor)</small>			Fixed-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Pauli Bauman <small>(Contact)</small>				pauli.bauman@sasol.com <small>(Email)</small>						

Facility Information

Facility Owner:	China National Technology Import Co. (CNTIC)	Facility Name:	Shaanxi Chemical Fertilizer Plant
Location: (City/State/Prov)	Shaanxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	1,050.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492	Estimate
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4	
				<small>(Calculated)</small>	
			Fuel Input:	367.1	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	312.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Direct-quench/fire-tube		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	<small>(Supplier)</small>	<small>(Process)</small>	
Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm	Claus	
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	298	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	MSK-Radna					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	MSK-Radna					Plant Name:	Methanol Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	MSK-Radna	Facility Name:	Kikinda Chemical Plant
Location: (City/State/Prov)	Kikinda	Facility Type:	Chemical Plant
(Country)	Former Yugoslavia	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	23 MMscf/d				Syngas Cap.:	1,540,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	115.0 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	247.6 Estimate <small>(MWt)</small>
Product1:	Methanol	mt/d				Syngas Output:	210.5 Gasifier licensor data <small>(MWt)</small>
Product2:							<small>(Source)</small>
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Technip				Engineer:		
					Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	224	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:		1987
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Qilu Petrochemical Ind.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Qilu Petrochemical Ind.				Plant Name:	Zibu Methanol/Oxochemicals Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Qilu Petrochemical Ind.	Facility Name:	Zibu Chemical Plant
Location: (City/State/Prov)	Zibu, Shandong	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	245.9 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	246 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	mt/d			
Product2:	Oxochemicals	mt/d			
Product3:					
	Syngas Cap.:	715,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>		
	Eq. IGCC Cap., MWe:	53.4 <small>(Calculated)</small>			
	Fuel Input:	119.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>		
	Syngas Output:	97.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>		

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:
					Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Eq. IGCC Cap., MWe: (Calculated)

Syngas Cap.:
(Nm3/d) (Source)

Main Product: (Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="43"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1991"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>		Project Reality:	<input type="text" value="Active-Real"/>		Application:	<input type="text" value="Syngas for Gases"/>
Plt. Owner:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>				Plt. Owner Type:	<input type="text" value="Industrial Gas Supply"/>			
Plt. Operator:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>				Plant Name:	<input type="text" value="Stade Syngas Plant"/>			
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/>			<input type="text" value="GE"/>		<input type="text" value="Entrained-flow gasification"/>			
	<small>(Technology Name)</small>			<small>(Licensor)</small>		<small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Tim Huskey"/>			<input type="text" value="timothy.huskey@ge.com"/>					
	<small>(Contact)</small>			<small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Air Liquide (Dow Stade GmbH)"/>	Facility Name:	<input type="text" value="Stade Chemical Plant"/>
Location: (City/State/Prov)	<input type="text" value="Stade"/>	Facility Type:	<input type="text" value="Chemical Plant"/>
(Country)	<input type="text" value="Germany"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Europe"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Gaseous"/>	<input type="text" value="Gas"/>	Rate (MAF):	<input type="text"/>	<input type="text"/>
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	<input type="text" value="Natural gas"/>	<input type="text" value="3,855,000 MMscf/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	<small>(Category)</small>				
Product1:	<input type="text" value="CO"/>	<input type="text" value="mt/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="264,000"/>	<input type="text" value="Estimate"/>
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="19.7"/>	
				<small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="42.5"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	<input type="text" value="36.1"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text"/>	<input type="text"/>
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/>		<input type="text"/>
	<small>(Cooler Type)</small>		<small>(Cooler Supplier) (MWth Duty)</small>
Gas Cleanup:	<input type="text"/>	<input type="text"/>	Sulfur Removal: <input type="text"/>
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier) (Process)</small>
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:	<input type="text"/>	<input type="text"/>	Steam Turbine: <input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:	<input type="text" value="Linde"/>		Engineer: <input type="text"/>
			Constructor: <input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	10	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1995	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Dalian Chemical Industrial Corp.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Dalian Chemical Industrial Corp.				Plant Name:	Dalian Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Dalian Chemical Industrial Corp.	Facility Name:	Dalian Fertilizer Plant
Location: (City/State/Prov)	Dalian, Liaoning	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	740.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	4,700 bbl/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,096,500 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.5 <small>(Calculated)</small>	
			Fuel Input:	358.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	286.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Linde AG <small>(ASU Supplier)</small>					
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling: 	
Gas Cleanup:	Linde AG <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:				
Gas Turbine:							
HRSG:							
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: 38	No. of Gasifiers: Op'g/Sp/Total 1/ 0/ 1	Gasifier Status: Operating	Start Date: Dec. 1995
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Gases
Plt. Owner: Dow (former Union Carbide Corp.)		Plt. Owner Type: Oil Refining & Chemicals	
Plt. Operator: Dow (former Union Carbide Corp.)		Plant Name: Taft Syngas Plant	
Gas'n Tech.: GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact)		timothy.huskey@ge.com (Email)	

Facility Information

Facility Owner: Union Carbide Corp.	Facility Name: Taft Chemical Plant
Location: (City/State/Prov) Taft, LA	Facility Type: Chemical Plant
(Country) United States	Facility Status: Operating
(Region) North America	

Feed/Product Information

Main Feed: Gaseous Gas (Category) (Classification)	Rate (MAF): <input type="text"/> <input type="text"/> (mt/d) (Source)
Feed1: Natural gas 6,305,000 MMscf/d	Syngas Cap.: 432,000 Estimate (Nm3/d) (Source)
Feed2: <input type="text"/> <input type="text"/>	Eq. IGCC Cap., MWe: 32.2 (Calculated)
Feed3: <input type="text"/> <input type="text"/>	Fuel Input: 69.5 Estimate (MWt) (Source)
Main Product: Chemicals (Category)	Syngas Output: 59.1 Estimate (MWt) (Source)
Product1: Oxochemicals mt/d	
Product2: <input type="text"/> <input type="text"/>	
Product3: <input type="text"/> <input type="text"/>	

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)	
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty)	Soot Handling: <input type="text"/>
Gas Cleanup: <input type="text"/> <input type="text"/> (Supplier) (Process)	Sulfur Removal: <input type="text"/> <input type="text"/> (Supplier) (Process)
Gas Turbine: <input type="text"/> <input type="text"/> <input type="text"/> (No.) (Supplier) (Model) (MWout)	
HRSG: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (No.) (Supplier) (Model) (Production)	Steam Turbine: <input type="text"/> <input type="text"/> <input type="text"/> (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Bechtel/Fluor	Engineer: <input type="text"/> Constructor: <input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	36	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	April	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	T & P Syngas (Texaco/Praxair)					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Praxair					Plant Name:	Texas City Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	T & P Syngas (Texaco/Praxair)	Facility Name:	Texas City Industrial Gas Utility Island
Location: (City/State/Prov)	Texas City, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	32	MMscf/d			Syngas Cap.:	1,920,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	143.3 <small>(Calculated)</small>	
Feed3:						Fuel Input:	348.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	278.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Product1:	H2	40	MMscf/d					
Product2:	CO	24	MMscf/d					
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>				
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
Gas Cleanup:	Texaco <small>(Supplier)</small>				Sulfur Removal:		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:	Howe-Baker		Engineer:	Praxair/Texaco		Constructor:	Howe-Baker

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID:	22	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Aug.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Air Products & Chemicals, Inc.					Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	Air Products & Chemicals, Inc.					Plant Name:	LaPorte Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Air Products & Chemicals, Inc.	Facility Name:	LaPorte Industrial Gas Complex
Location: (City/State/Prov)	LaPorte, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	28,677,100 MMscf/d				Syngas Cap.:	1,850,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	138.1 <small>(Calculated)</small>
Feed3:						Fuel Input:	315.9 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	252.7 Estimate <small>(MWt) (Source)</small>
Product1:	H2	50 MMscf/d					
Product2:	CO	16 MMscf/d					
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Products & Chemicals, Inc. <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>			Soot Handling: _____
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:			Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(No.)</small>	<small>(Supplier)</small>
		<small>(Model)</small>		<small>(Model)</small>
		<small>(Production)</small>		<small>(MWout)</small>
Prin. Contractor:	KTI		Engineer:	KTI
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

DateModified:
16-Jan-02

Key Gasifier Information

Facility ID:
No. of Gasifiers: Op'g/Sp/Total / /
Gasifier Status:
Start Date:

Project Count:
Plt. Type:
Project Reality:
Application:

Plt. Owner:
Plt. Owner Type:

Plt. Operator:
Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner:
Facility Name:

Location: (City/State/Prov)
Facility Type:

(Country)
Facility Status:

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: mt/d

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 230 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: 1996
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. Plant Name: Yochon Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. Facility Name: Yochon Chemical Plant
Location: (City/State/Prov) Yochon Facility Type: Chemical Plant
(Country) South Korea Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 132.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Bunker C fuel oil 132 mt/d Syngas Cap.: 384,000 Gasifier licensor
(Nm³/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 28.7
(Calculated)
Feed3: Fuel Input: 64.0 Gasifier licensor data
(MWt) (Source)
Main Product: Chemicals Syngas Output: 52.5 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O₂ Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal: (Supplier) (Process)
(Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH Engineer: Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID: 391 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Chemical & Coking (Shanghai Pacific) **Plant Name:** Gas Plant No. 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Facility Name:** Gas Plant No. 2
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: Town gas 0
Product3: Acetic acid 0
Syngas Cap.: 765,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 57.1 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 104.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** ()

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 57 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** Oct. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shell Nederland Raffinaderij BV **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell Nederland Raffinaderij BV **Plant Name:** Pernis Shell IGCC/Hydrogen Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell Nederland Raffinaderij BV **Facility Name:** Pernis Refinery
Location: (City/State/Prov) Rotterdam **Facility Type:** Refinery
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,650.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,650 mt/d **Syngas Cap.:** 4,662,200 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 348.0 (Calculated)
Feed3: **Fuel Input:** 799.5 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 637.3 (MWt) Gasifier licensor data (Source)
Product1: H2 100 MMscf/d
Product2: Electricity 110 MW
Product3: Steam 200 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) SFL Netherlands (Cooler Supplier) 94.5 (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Shell (Supplier) Claus (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6B (Model) 86 (MWout)
HRSG: 2 (No.) (Supplier) (Model) 290 mt/hr (Production) **Steam Turbine:** 2 (No.) GE/Nuovo Pignone (Supplier) (Model) 41 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** Fluor Daniel B.V. **Constructor:** Fluor Daniel B.V.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 299 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1998
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Texas Eastman **Plt. Owner Type:** Unspecified
Plt. Operator: Texas Eastman **Plant Name:** Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified facility
Location: (City/State/Prov) Unspecified location **Facility Type:** Unknown
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 5 MMscf/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Oxochemicals mt/d
Product2:
Product3:
Syngas Cap.: 350,000 Nm3/d Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 26.1 (Calculated)
Fuel Input: 56.2 Estimate (MWt) (Source)
Syngas Output: 47.8 Gasifier licensor data (MWt) (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Kvaerner John Brown **Constructor:** Kellogg Brown & Root

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 22-Jul-04

Key Gasifier Information

Facility ID:	228	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Lanzhou Chemical Industrial Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Lanzhou Chemical Industrial Co.			Plant Name:	Lanzhou Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>			Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Lanzhou Chemical Industrial Co.	Facility Name:	Lanzhou Chemical Plant
Location: (City/State/Prov)	Lanzhou, Gansu	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	<input type="text"/>	<input type="text"/>		
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural Gas	700 mt/d				Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>
Feed2:	<input type="text"/>	<input type="text"/>					Gasifier licensor <small>(Source)</small>
Feed3:	<input type="text"/>	<input type="text"/>				Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	350.1 <small>(MWt)</small>
							Gasifier licensor data <small>(Source)</small>
Product1:	Ammonia	mt/d				Syngas Output:	287.1 <small>(MWt)</small>
Product2:	<input type="text"/>	<input type="text"/>					Gasifier licensor data <small>(Source)</small>
Product3:	<input type="text"/>	<input type="text"/>					

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		<input type="text"/>	<input type="text"/>	Soot Handling:	<input type="text"/>	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	<input type="text"/>	<input type="text"/>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		<small>(No.)</small>	<small>(MWout)</small>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>			
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Steam Turbine:	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer:	<input type="text"/>		Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	185	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	Aug. 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Huainan General Chemical Works			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Huainan General Chemical Works			Plant Name:	Hefei City Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Huainan General Chemical Works		Facility Name:	Hefei City Chemical Plant		
Location: (City/State/Prov)	Hefei City, Anhui		Facility Type:	Chemical Plant		
(Country)	China		Facility Status:	Operating		
(Region)	Asia/Australia					

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	655.0 (mt/d)	Estimate (Source)
Feed1:	Coal	898 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	1,400,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	Ammonia	667 mt/d	Eq. IGCC Cap., MWe:	104.5 (Calculated)	
Product2:			Fuel Input:	255.2 (MWt)	Estimate (Source)
Product3:			Syngas Output:	191.4 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)		(ASU Supplier)		(ASU Integration)												
Syngas Cooler:	Direct water quench cooler (Cooler Type)			(Cooler Supplier)		(MWth Duty)	Soot Handling:										
Gas Cleanup:		(Supplier)		(Process)	Sulfur Removal:		(Supplier)		(Process)								
Gas Turbine:		(No.)		(Supplier)		(Model)		(MWout)									
HRSG:		(No.)		(Supplier)		(Model)		(Production)	Steam Turbine:		(No.)		(Supplier)		(Model)		(MWout)
Prin. Contractor:		Engineer:	Ube	Constructor:													

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	20	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	June 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Linde AG			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	Linde AG			Plant Name:	Singapore Syngas Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Singapore Syngas Pte. Ltd. (Texaco/Messer)		Facility Name:	Pulau Merlimau Gas Plant	
Location:	(City/State/Prov)	Jurong Island	Facility Type:	Gas Plant	
	(Country)	Singapore	Facility Status:	Operating	
	(Region)	Asia/Australia			

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	554.0 (mt/d)	Estimate (Source)
Feed1:	Ref. residue		572 mt/d		
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	H2	25 MMscf/d			
Product2:	CO	25 MMscf/d			
Product3:					
Syngas Cap.:	1,610,000 (Nm3/d)		Gasifier licensor (Source)		
Eq. IGCC Cap., MWe:	120.2 (Calculated)				
Fuel Input:	268.4 (MWt)		Estimate (Source)		
Syngas Output:	220.1 (MWt)		Gasifier licensor data (Source)		

Other Information

O2 Supply:	Oxygen (Oxidant)	Messer Griesheim (ASU Supplier)			(ASU Integration)
Syngas Cooler:	Direct water quench cooler (Cooler Type)				Soot Handling:
			(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:			Sulfur Removal:		
	(Supplier)	(Process)	(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					
	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine:
					(No.) (Supplier) (Model) (MWout)
Prin. Contractor:			Engineer:	Linde AG	Constructor:
					M.W. Kellogg/Chiyoda

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	126	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Oct.	2000
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	BOC Gases				Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	BOC Gases				Plant Name:	Brisbane H2 Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	BOC Gases			Facility Name:	Brisbane Industrial Gas Complex					
Location:	<small>(City/State/Prov)</small>	Brisbane, Queensland			Facility Type:	Gas Plant				
	<small>(Country)</small>	Australia			Facility Status:	Operating				
	<small>(Region)</small>	Asia/Australia								

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	15	MMscf/d					
Feed2:	Ref. off-gases							
Feed3:								
Main Product:	Chemicals <small>(Category)</small>							
Product1:	H2	30	MMscf/d					
Product2:								
Product3:								
				Syngas Cap.: 805,000 Gasifier licensor <small>(Nm3/d) (Source)</small>				
				Eq. IGCC Cap., MWe: 60.1 <small>(Calculated)</small>				
				Fuel Input: 129.4 Estimate <small>(MWt) (Source)</small>				
				Syngas Output: 110.0 Gasifier licensor data <small>(MWt) (Source)</small>				

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	BOC Gases <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	 <small>(Supplier) (Process)</small>		Sulfur Removal: <small>(Supplier) (Process)</small>		
Gas Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>	
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>	Steam Turbine: <small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:			Engineer:	Kvaerner	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	42	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	2000
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Henan			Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Henan			Plant Name:	Puyang Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process (Technology Name)			Lurgi GmbH (Licensor)	Moving-bed gasification (Technology Type)				
Vendor Contact:	Claus Greil (Contact)			claus_greil@lurgi.de (Email)					

Facility Information

Facility Owner:	Henan	Facility Name:	Puyang Chemical Fertilizer Plant
Location: (City/State/Prov)	Puyang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	1,000.0 (mt/d)	Estimate (Source)
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	2,282,492 (Nm3/d)	Estimate (Source)
Product1:	Ammonia	mt/d	Eq. IGCC Cap., MWe:	170.4 (Calculated)	
Product2:			Fuel Input:	367.1 (MWt)	Estimate (Source)
Product3:			Syngas Output:	312.0 (MWt)	Estimate (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	ASU Supplier	ASU Integration
Syngas Cooler:	Cooler Type	Cooler Supplier	MWth Duty
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal: Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (Process)
Gas Turbine:	No.	Supplier	Model
HRSG:	No.	Supplier	Model
			Production
			MWout
Prin. Contractor:		Engineer:	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	35	No. of Gasifiers: Op'g/Sp/Total	1/ 1/ 2	Gasifier Status:	Operating	Start Date:	July 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Coffeyville Resources Refining and Marketing, LLC			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Coffeyville Resources Refining and Marketing, LLC			Plant Name:	Coffeyville Syngas Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>	GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>	timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Coffeyville Resources Refining and Marketing, LLC	Facility Name:	Coffeyville Nitrogen Plant
Location: (City/State/Prov)	Coffeyville, KS	Facility Type:	Petrochemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petcoke <small>(Classification)</small>	Rate (MAF):	1,100.0 <small>(mt/d)</small>	Gasifier operator data <small>(Source)</small>
Feed1:	Petcoke	1,100 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:	UAN	1,545 mt/d			
Product3:					
			Syngas Cap.:	2,141,200 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	159.8 <small>(Calculated)</small>	
			Fuel Input:	390.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	292.7 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	BOC Gases <small>(ASU Supplier)</small>	Across-the-fence <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		Soot Handling:
Gas Cleanup:	UOP LLC <small>(Supplier)</small>	Selexol <small>(Process)</small>	Sulfur Removal:
Gas Turbine:	0 <small>(No.)</small>	N.A. <small>(Supplier)</small>	0 <small>(Model)</small>
HRSG:	0 <small>(No.)</small>	N.A. <small>(Supplier)</small>	0 <small>(Production)</small>
			Steam Turbine:
	0 <small>(No.)</small>	N.A. <small>(Supplier)</small>	0 <small>(Model)</small>
Prin. Contractor:	Black & Veatch Pritchard	Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	394	No. of Gasifiers: Op'g/Sp/Total	3/1/4	Gasifier Status:	Operating	Start Date:	2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Zhong Yuan Dahua Group Ltd.			Plt. Owner Type:			
Plt. Operator:	Zhong Yuan Dahua Group Ltd.			Plant Name:	Zhong Yuan Dahua Group Ltd.		
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process (Technology Name)		Lurgi GmbH (Licensor)	Moving-bed gasification (Technology Type)			
Vendor Contact:	Claus Greil (Contact)		claus_greil@lurgi.de (Email)				

Facility Information

Facility Owner:	Zhong Yuan Dahua Group Ltd.		Facility Name:		
Location: (City/State/Prov)	Puyang, Henan		Facility Type:		
(Country)	China		Facility Status:		
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)		(Source)
Feed1:	Coal		0	Syngas Cap.: 2,282,492 (Nm3/d) (Source)		
Feed2:			0	Eq. IGCC Cap., MWe: 170.4 (Calculated)		
Feed3:			0	Fuel Input: 367.0 (MWt) (Source)		
Main Product:	Chemicals (Category)		Syngas Output: 312.0 (MWt) (Source)			
Product1:			0			
Product2:			0			
Product3:			0			

Other Information

O2 Supply:							
(Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:			0	Soot Handling:			
(Cooler Type)	(Cooler Supplier)	(MWth Duty)					
Gas Cleanup:				Sulfur Removal:			
(Supplier)	(Process)	(Supplier)	(Process)				
Gas Turbine:	0		0				
(No.)	(Supplier)	(Model)	(MWout)				
HRSG:	0		0	Steam Turbine:	0		
(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 184 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Jilin Chemical Industrial Corp. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Jilin Chemical Industrial Corp. **Plant Name:** Jilin Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Jilin Chemical Industrial Corp. **Facility Name:** Jilin Chemical Plant
Location: (City/State/Prov) Jilin **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 739.5 (mt/d) Estimate (Source)
Feed1: Visbreaker residue 740 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia 1,000 mt/d
Product2:
Product3:
Syngas Cap.: 2,096,500 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 156.5 (Calculated)
Fuel Input: 358.3 (MWt) Estimate (Source)
Syngas Output: 286.6 (MWt) Estimate (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Unspecified vendor (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde Impianti Italia SpA **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	344	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2Q	2002	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Air Liquide America Corp.					Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	Air Liquide America Corp.					Plant Name:	Longview Gasification Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Air Liquide America Corp.	Facility Name:	Longview Industrial Gas Plant
Location: (City/State/Prov)	Longview, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):			
				<small>(mt/d)</small>	<small>(Source)</small>	
Feed1:	Natural gas	23 MMscf/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Syngas	48 MMscf/d				
Product2:	Steam	lb/hr				
Product3:						
			Syngas Cap.:	1,558,000	Gasifier licensor <small>(Source)</small>	
				<small>(Nm3/d)</small>	<small>(Source)</small>	
			Eq. IGCC Cap., MWe:	116.3	<small>(Calculated)</small>	
			Fuel Input:	250.6	Gasifier licensor data <small>(Source)</small>	
				<small>(MWt)</small>	<small>(Source)</small>	
			Syngas Output:	213.0	Gasifier licensor data <small>(Source)</small>	
				<small>(MWt)</small>	<small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>			<small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				<small>(Cooler Supplier)</small>
					<small>(MWth Duty)</small>
Gas Cleanup:					<small>(Supplier)</small>
					<small>(Process)</small>
Sulfur Removal:					<small>(Supplier)</small>
					<small>(Process)</small>
Gas Turbine:					<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
HRSG:					<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:	Howe-Baker Engineers, Inc.		Engineer:	Howe-Baker Engineers, Inc.	
			Constructor:	Howe-Baker Engineers, Inc.	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 122 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** May 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Nanjing Chemical Industry Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nanjing Chemical Industry Co. **Plant Name:** Nanjing Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nanjing Chemical Industry Co. **Facility Name:** Nanjing Chemical Plant
Location: (City/State/Prov) Nanjing, Jiangsu **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 769.0 (mt/d) Estimate (Source)
Feed1: Eureka pitch 385 mt/d **Syngas Cap.:** 2,200,000 (Nm3/d) Gasifier contractor (Source)
Feed2: Vacuum residue oil 385 mt/d **Eq. IGCC Cap., MWe:** 164.2 (Calculated)
Feed3:
Main Product: Chemicals (Category) **Fuel Input:** 346.0 (MWt) Gasifier contractor (Source)
Product1: Ammonia 1,000 mt/d **Syngas Output:** 300.8 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Flash & filtration
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) Outside Battery Limits (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Snamprogetti **Engineer:** Snamprogetti **Constructor:** Nanjing Chemical Industry Co.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID:	390	No. of Gasifiers: Op'g/Sp/Total	1	/	0	/	1	Gasifier Status:	Operating	Start Date:	2004
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:			
Plt. Owner:	Haolianghe Ammonia Plant					Plt. Owner Type:					
Plt. Operator:	Haolianghe Ammonia Plant					Plant Name:	Haolianghe Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:		Facility Name:	Haolianghe Ammonia Plant
Location: (City/State/Prov)	Haolianghe	Facility Type:	
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	0				Syngas Cap.:	1,474,620 <small>(Nm3/d)</small>
Feed2:		0				Eq. IGCC Cap., MWe:	110.1 <small>(Calculated)</small>
Feed3:		0				Fuel Input:	0.0 <small>(MWt)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	201.6 <small>(MWt)</small>
Product1:	Ammonia	0					
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0	Soot Handling:			
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			Sulfur Removal:				
	<small>(Supplier)</small>		<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	Steam Turbine:	0	0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
				<small>(Model)</small>	<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID:	366	No. of Gasifiers: Op'g/Sp/Total	0/	0/	0	Gasifier Status:	Development	Start Date:	2005
Project Count:	0	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Sinopec-Shell				Plt. Owner Type:				
Plt. Operator:	Sinopec-Shell				Plant Name:				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sinopec-Shell	Facility Name:	
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		2,000 t/d			Syngas Cap.:	
Feed2:			0			<small>(Nm3/d)</small>	<small>(Source)</small>
Feed3:			0			Eq. IGCC Cap., MWe:	
						<small>(Calculated)</small>	
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	0.0
						<small>(MWt)</small>	<small>(Source)</small>
Product1:			0			Syngas Output:	273.4
Product2:			0			<small>(MWt)</small>	<small>Gasifier licensor data</small> <small>(Source)</small>
Product3:			0				

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:				0		Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:	0			0			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0			0		Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	384	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases/Chemicals
Plt. Owner:	China 2					Plt. Owner Type:			
Plt. Operator:						Plant Name:	China 2		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	China 2			Facility Name:	China 2			
Location: (City/State/Prov)	Jinling, Nanjing			Facility Type:	Chemical Plant			
(Country)	China			Facility Status:	Planning			
(Region)	Asia/Australia							

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0				
Feed2:			0				
Feed3:			0				
Main Product:	Chemicals <small>(Category)</small>			Syngas Cap.:	1,275,000 <small>(Nm3/d)</small>		<small>(Source)</small>
Product1:	Methanol		0	Eq. IGCC Cap., MWe:	95.2 <small>(Calculated)</small>		
Product2:			0	Fuel Input:	0.0 <small>(MWt)</small>		<small>(Source)</small>
Product3:			0	Syngas Output:	174.3 <small>(MWt)</small>		<small>(Source)</small>

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:				0	Soot Handling:			
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>			<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:				Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: 375 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Liuzhou Chemicals **Plt. Owner Type:** _____
Plt. Operator: Liuzhou Chemicals **Plant Name:** _____
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Liuzhou Chemicals **Facility Name:** _____
Location: (City/State/Prov) Liuzhou, Guanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 1,200 mt/d **Syngas Cap.:** 1,700,000 (Nm3/d) (Source) _____
Feed2: 0 **Eq. IGCC Cap., MWe:** 126.9 (Calculated)
Feed3: 0 **Fuel Input:** 0.0 (MWt) (Source) _____
Main Product: Chemicals (Category) **Syngas Output:** 232.0 (MWt) (Source) _____
Product1: Ammonia 0
Product2: 0
Product3: 0

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 367 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Sinopec **Plt. Owner Type:** _____
Plt. Operator: Sinopec **Plant Name:** Sinopec, Zhijiang
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Sinopec **Facility Name:** _____
Location: (City/State/Prov) Zhijiang, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 2,000 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 273.4 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 396 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shaanxi Shenmu Chemical Company **Plt. Owner Type:** _____
Plt. Operator: Shaanxi Shenmu Chemical Company **Plant Name:** Shaanxi Shenmu Chemical Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shaanxi Shenmu Chemical Company **Facility Name:** _____
Location: (City/State/Prov) Shenmu, Shaanxi **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 1,925,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 143.7 (Calculated)
Fuel Input: 351.0 (MWt) _____ (Source)
Syngas Output: 263.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	336	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Hubei Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Hubei Fertilizer Plant
Location: (City/State/Prov)	Yincheng, Hubei	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,550.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,500,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	261.3 <small>(Calculated)</small>	
			Fuel Input:	598.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>			<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	335	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Dong Ting Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Dong Ting Fertilizer Plant
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			Syngas Cap.:
Feed2:					3,410,000 <small>(Nm3/d)</small>
Feed3:					Gasifier licensor <small>(Source)</small>
					Eq. IGCC Cap., MWe:
					254.6 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>				Fuel Input:
Product1:	Ammonia	mt/d			582.7 <small>(MWt)</small>
Product2:					Gasifier licensor data <small>(Source)</small>
Product3:					Syngas Output:
					466.2 <small>(MWt)</small>
					Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling:
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:						Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:						Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 398 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Startup **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Weihe Chemical Company **Plt. Owner Type:** _____
Plt. Operator: Weihe Chemical Company **Plant Name:** Weihe Chemical
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Weihe Chemical Company **Facility Name:** _____
Location: (City/State/Prov) Weinan, Shaanxi **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 2,900,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 216.5 (Calculated)
Fuel Input: 527.0 (MWt) _____ (Source)
Syngas Output: 395.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

DateModified:

15-Sep-04

Key Gasifier Information

Facility ID: 386 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Development Start Date: 2006
Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application:
Plt. Owner: China 5 Plt. Owner Type:
Plt. Operator: Plant Name: China 5
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
Vendor Contact: Tim Huskey timothy.huskey@ge.com

Facility Information

Facility Owner: China 5 Facility Name: China 5
Location: (City/State/Prov) (Country) China (Region) Asia/Australia
Facility Type:
Facility Status: Planning

Feed/Product Information

Main Feed: Coal Rate (MAF): 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals
Product1: Methanol 0
Product2: 0
Product3: 0
Syngas Cap.: 2,080,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 155.3 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 284.3 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) 0 Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout) 0
HRSG: (No.) (Supplier) (Model) (Production) 0 Steam Turbine: (No.) (Supplier) (Model) (MWout) 0
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 364 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Shuanghuan Chemical **Plt. Owner Type:** _____
Plt. Operator: Shuanghuan Chemical **Plant Name:** Shell Shuanghuan Chemical
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shuanghuan Chemical **Facility Name:** _____
Location: (City/State/Prov) Yingcheng, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 900 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 177.7 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 379 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yuntianhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yuntianhua Chemicals **Plant Name:** Anning Yuntianhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yuntianhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Anning, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

DateModified:

12-Aug-04

Key Gasifier Information

Facility ID: 382 No. of Gasifiers: Op'g/Sp/Total 1/ 0/ 1 Gasifier Status: Engineering Start Date: 2007 Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application: Plt. Owner: Yongcheng Chemicals Plt. Operator: Yongcheng Chemicals Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com

Facility Information

Facility Owner: Yongcheng Chemicals Facility Name: Location: (City/State/Prov) Yongcheng, Henan Facility Type: Chemical Plant (Country) China Facility Status: Planning (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal Rate (MAF): 0.0 mt/d Syngas Cap.: 3,100,000 Nm3/d Eq. IGCC Cap., MWe: 231.4 (Calculated) Fuel Input: 0.0 MWt Syngas Output: 424.0 MWt Main Product: Chemicals Product1: Methanol 0 Product2: 0 Product3: 0

Other Information

O2 Supply: Syngas Cooler: Gas Cleanup: Gas Turbine: HRSG: Steam Turbine: Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 380 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yunzhanhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yunzhanhua Chemicals **Plant Name:** Huashan Yunzhanhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yunzhanhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Huashan, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 401 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Construction **Start Date:** 2008
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Henan Yima Kaixiang Group **Plt. Owner Type:**
Plt. Operator: Kaixiang **Plant Name:** Kaixiang Chemical Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Kaixiang **Facility Name:**
Location: (City/State/Prov) Yima, Henan **Facility Type:**
 (Country) China **Facility Status:**
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 1,720,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 128.4 (Calculated)
Fuel Input: 321.0 (MWt) (Source)
Syngas Output: 257.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	328	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Development	Start Date:	2010	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Chemicals	
Plt. Owner:	Indian Oil Corp. Ltd.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Indian Oil Corp. Ltd.				Plant Name:	Paradip Gasification H2/Power Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Indian Oil Corp. Ltd.	Facility Name:	Paradip Refinery
Location: (City/State/Prov)	Nagapattinam, Orissa	Facility Type:	Refinery
(Country)	India	Facility Status:	Construction
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petrocoke <small>(Classification)</small>	Rate (MAF):	2,850.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Petrocoke	3,500 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	160 MMscf/d			
Product2:	Electricity	180 MW			
Product3:					
			Syngas Cap.:	6,500,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	485.2 <small>(Calculated)</small>	
			Fuel Input:	1,110.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	888.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:		
	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>	
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>		180 <small>(Model)</small>			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	
						<small>(Supplier)</small>	
						<small>(Model)</small>	
						<small>(MWout)</small>	
Prin. Contractor:	Engineers India Ltd.		Engineer:	Krupp Uhde		Constructor:	Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

DateModified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: **Facility Type:**
(City/State/Prov) (Country) (Region)

Facility Status:
(Country) (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	406	No. of Gasifiers: Op'g/Sp/Total	3 / 0 / 3	Gasifier Status:	Development	Start Date:	2011
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Unspecified Owner			Plt. Owner Type:			
Plt. Operator:	Unspecified Owner			Plant Name:	Inner Mongolia Chemical Plant		
Gas'n Tech.:	Shell Gasification Process		Shell	Entrained-flow gasification			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld			Piet.Zuideveld@shell.com			
	<small>(Contact)</small>			<small>(Email)</small>			

Facility Information

Facility Owner:	Unspecified Owner	Facility Name:	Inner Mongolia Chemical Plant
Location: (City/State/Prov)	Inner Mongolia	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0	
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Coal	0			
Feed2:		0			
Feed3:		0			
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:		0			
Product2:		0			
Product3:		0			
			Syngas Cap.:	24,750,000	
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	1,847.6	
				<small>(Calculated)</small>	
			Fuel Input:	4,216.0	
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	3,373.0	
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:			0
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>
			<small>(Process)</small>
Gas Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>
			<small>(No.)</small>
			<small>(Supplier)</small>
			<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jun-03

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID:	145	No. of Gasifiers: Op'g/Sp/Total	40/	0/	40	Gasifier Status:	Operating	Start Date:		1977
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Fuels/Chemicals		
Plt. Owner:	Sasol (Pty) Ltd.				Plt. Owner Type:	Synthetic Fuels & Chemicals				
Plt. Operator:	Sasol Synfuels (Pty) Ltd.				Plant Name:	Sasol Synfuels				
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom <small>(Technology Name)</small>			Sasol Lurgi GmbH <small>(Licensor)</small>		Fixed-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Pauli Bauman <small>(Contact)</small>				pauli.bauman@sasol.com <small>(Email)</small>					

Facility Information

Facility Owner:	Sasol (Pty) Ltd.			Facility Name:	Sasol Synfuels			
Location:	<small>(City/State/Prov)</small>	Secunda, Mpumalanga		Facility Type:	Petrochemical Plant			
	<small>(Country)</small>	South Africa		Facility Status:	Operating			
	<small>(Region)</small>	Africa/Middle East						

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	24,780.0	Operator/licensor	
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>	
Feed1:	Subbit. coal	1,475 mt/hr			Syngas Cap.:	39,600,000
Feed2:						Operator/licensor
Feed3:						(Nm3/d) <small>(Source)</small>
					Eq. IGCC Cap., MWe:	2,956.2
						(Calculated)
Main Product:	FT liquids				Fuel Input:	8,810.0
	<small>(Category)</small>					Operator/licensor
Product1:	Gas				Syngas Output:	7,048.0
Product2:	Chemicals					Operator/licensor
Product3:						(MWt) <small>(Source)</small>

Other Information

O2 Supply:	Oxygen	Air Liquide	Not integrated
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	No SG cooler; series of air & water coolers		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	Sulfur Removal: Sasol/Linde
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfolin (Stretford variant)
			<small>(Supplier) <small>(Process)</small></small>
Gas Turbine:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) <small>(MWout)</small></small>
HRSG:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) <small>(MWout)</small></small>
			Steam Turbine: 0
			N.A.
			0
Prin. Contractor:	Lurgi		Engineer: Fluor Daniel, Inc.
			Constructor: Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-04

Key Gasifier Information

Facility ID: 146 No. of Gasifiers: Op'g/Sp/Total 40/ 0/ 40 Gasifier Status: Operating Start Date: 1982

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Fuels/Chemicals

Plt. Owner: Sasol (Pty) Ltd. Plt. Owner Type: Synthetic Fuels & Chemicals

Plt. Operator: Sasol Synfuels (Pty) Ltd. Plant Name: Gasification East Plant

Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)

Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. Facility Name: Sasol Synfuels

Location: (City/State/Prov) Secunda, Mpumalanga Facility Type: Petrochemical Plant

(Country) South Africa Facility Status: Operating

(Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): 24,780.0 Operator/licensor
(Category) (Classification) (mt/d) (Source)

Feed1: Subbit. coal 1,475 mt/hr

Feed2:

Feed3:

Syngas Cap.: 39,600,000 Operator/licensor
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 2,956.2
(Calculated)

Main Product: FT liquids
(Category)

Fuel Input: 8,810.0 Operator/licensor
(MWt) (Source)

Product1: Gas

Syngas Output: 7,048.0 Operator/licensor
(MWt) (Source)

Product2: Chemicals

Product3:

Other Information

O2 Supply: Oxygen Air Liquide Not integrated
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: No SG cooler; series of air & water coolers Soot Handling: N.A.
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: Sasol/Linde Sulfolin (Stretford variant)
(Supplier) (Process) (Supplier) (Process)

Gas Turbine: 0 N.A. 0
(No.) (Supplier) (Model) (MWout)

HRSG: 0 N.A. 0 Steam Turbine: 0 N.A. 0
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Lurgi Engineer: Fluor Daniel, Inc. Constructor: Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID: 19 **No. of Gasifiers: Op'g/Sp/Total** 6/ 0/ 6 **Gasifier Status:** Operating **Start Date:** May 1993
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels
Plt. Owner: Shell MDS (Malaysia) Sdn. Bhd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell MDS (Malaysia) Sdn. Bhd. **Plant Name:** Bintulu GTL Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell MDS (Malaysia) Sdn. Bhd. **Facility Name:** Bintulu Middle Distillate Synthesis Plant
Location: (City/State/Prov) Bintulu, Sarawak **Facility Type:** Gas Plant
 (Country) Malaysia **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 100 MMscf/d **Syngas Cap.:** 7,552,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 563.8 (Calculated)
Feed3: **Fuel Input:** 1,214.6 (MWt) Gasifier licensor data (Source)
Main Product: FT liquids (Category) **Syngas Output:** 1,032.4 (MWt) Gasifier licensor data (Source)
Product1: Mid-distillates 12,500 bbl/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler with integrated superheater (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	374	No. of Gasifiers: Op'g/Sp/Total	18/	0/	18	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning	Application:		
Plt. Owner:	Qatar Petroleum				Plt. Owner Type:				
Plt. Operator:	Qatar Petroleum				Plant Name:	Pearl GTL			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Qatar Petroleum	Facility Name:	
Location: (City/State/Prov)		Facility Type:	Chemical Plant
(Country)	Qatar	Facility Status:	Planning
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Natural Gas		0			Syngas Cap.:	80,000,000 <small>(Nm3/d)</small>	
Feed2:			0			Eq. IGCC Cap., MWe:	5,972.2 <small>(Calculated)</small>	
Feed3:			0			Fuel Input:	0.0 <small>(MWt)</small>	
Main Product:	FT liquids <small>(Category)</small>				Syngas Output:		10,936.0 <small>(MWt)</small>	
Product1:	Distillate		140,000 bpd					
Product2:	Naphtha		0					
Product3:	Paraffins		0					

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:			0
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>
Gas Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>
			<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	416	No. of Gasifiers: Op'g/Sp/Total	4/	1/	5	Gasifier Status:	Development	Start Date:		2012
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:		
Plt. Owner:	Rentech Development				Plt. Owner Type:					
Plt. Operator:	Rentech Development				Plant Name:	Rentech Strategic Fuels and Chemicals Center				
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process <small>(Technology Name)</small>				ConocoPhillips <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Phil R. Amick <small>(Contact)</small>				Phil.Amick@ConocoPhillips.com <small>(Email)</small>					

Facility Information

Facility Owner:	Rentech Development	Facility Name:		
Location: (City/State/Prov)	Adams County, MS	Facility Type:		
(Country)	United States	Facility Status:		
(Region)	North America			

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>		
Feed1:	Coal		0			
Feed2:			0			
Feed3:			0			
Main Product:	FT liquids <small>(Category)</small>					
Product1:	FT Liquids		0			
Product2:	CO2 for EOR		0			
Product3:			0			
	Syngas Cap.:	10,480,000				
		<small>(Nm3/d)</small>	<small>(Source)</small>			
	Eq. IGCC Cap., MWe:	782.4				
		<small>(Calculated)</small>				
	Fuel Input:	1,780.0				
		<small>(MWt)</small>	<small>(Source)</small>			
	Syngas Output:	1,420.0				
		<small>(MWt)</small>	<small>(Source)</small>			

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0				
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:							
	<small>(Supplier)</small>		<small>(Process)</small>				
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	0	<small>(MWout)</small>		
	<small>(Production)</small>	<small>(No.)</small>		<small>(Supplier)</small>			
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 09-Dec-99

Key Gasifier Information

Facility ID:	103	No. of Gasifiers: Op'g/Sp/Total	12/	0/	12	Gasifier Status:	Operating	Start Date:	1971
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Gases	
Plt. Owner:	Falconbridge Dominicana				Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Falconbridge Dominicana				Plant Name:	Santo Domingo Syngas Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Falconbridge Dominicana	Facility Name:	Santo Domingo Chemical Plant
Location: (City/State/Prov)	Santo Domingo	Facility Type:	Chemical Plant
(Country)	Dominican Republic	Facility Status:	Operating
(Region)	Central & South America/Caribbean		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	495.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>			
Feed1:	Bunker C fuel oil	496 mt/d				Syngas Cap.:	1,440,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	107.5 <small>(Calculated)</small>	
Feed3:						Fuel Input:	240.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Main Product:	Gaseous fuels <small>(Category)</small>					Syngas Output:	196.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Reducing gas	MMscf/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Air <small>(Oxidant)</small>							
Syngas Cooler:	None <small>(Cooler Type)</small>					Soot Handling:		
Gas Cleanup:						Sulfur Removal:		
Gas Turbine:								
HRSG:						Steam Turbine:		
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

DateModified: 10-Aug-04

Key Gasifier Information

Facility ID:	316	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	Oct.	1983	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Fuels		
Plt. Owner:	Oy W. Schauman Ab Mills					Plt. Owner Type:	Pulp & Paper Processing				
Plt. Operator:	Oy W. Schauman Ab Mills					Plant Name:	Pietarsaari ACFBG Unit				
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>			Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	John Hemmings <small>(Contact)</small>				john_hemmings@fwc.com <small>(Email)</small>						

Facility Information

Facility Owner:	Oy W. Schauman Ab Mills					Facility Name:	Pietarsaari Kiln				
Location: (City/State/Prov)	Pietarsaari					Facility Type:	Pulp & Paper Mill				
(Country)	Finland					Facility Status:	Operating				
(Region)	Europe										

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Biofuels		mt/d				
Feed2:							
Feed3:							
Main Product:	Gaseous fuels <small>(Category)</small>						
Product1:	Syngas	35	MWth				
Product2:							
Product3:							
				Syngas Cap.:	204,819	Estimate <small>(Nm3/d) (Source)</small>	
				Eq. IGCC Cap., MWe:	15.3	<small>(Calculated)</small>	
				Fuel Input:	35.0	Gasifier licensor data <small>(MWt) (Source)</small>	
				Syngas Output:	28.0	Estimate <small>(MWt) (Source)</small>	

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:					Soot Handling:		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier) (Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 24 **No. of Gasifiers: Op'g/Sp/Total** 12/ 2/ 14 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Dakota Gasification Co. **Plt. Owner Type:** Utility
Plt. Operator: Dakota Gasification Co. **Plant Name:** Great Plains Synfuels Plant
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Dakota Gasification Co. **Facility Name:** Great Plains Synfuels Plant
Location: (City/State/Prov) Bismarck, ND **Facility Type:** Electric Utility
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 8,000.0 Gasifier licensor data
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 14,000 t/d **Syngas Cap.:** 13,900,000 Estimate
Feed2: Ref. residue 50 t/d (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 1,037.7
 (Calculated)
Main Product: Gaseous fuels **Fuel Input:** 2,533.7 Estimate
 (Category) (MWt) (Source)
Product1: SNG 160 MMscf/d **Syngas Output:** 1,900.3 Estimate
Product2: CO2 5,000 mt/d (MWt) (Source)
Product3:

Other Information

O2 Supply: Oxygen Linde AG Across-the-fence/No integration
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube Soot Handling:
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: NH3-based SO2 scrubber
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: C-E Lummus/Kaiser **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 317 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels
Plt. Owner: Norrsundet Bruks Ab **Plt. Owner Type:** Pulp & Paper Processing
Plt. Operator: Norrsundet Bruks Ab **Plant Name:** Norrsundet ACFBG Unit
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier (Technology Name) Foster Wheeler International (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: John Hemmings (Contact) john_hemmings@fwc.com (Email)

Facility Information

Facility Owner: Norrsundet Bruks Ab **Facility Name:** Norrsundet Mill
Location: (City/State/Prov) Norrsundet **Facility Type:** Pulp & Paper Mill
 (Country) Finland **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** (mt/d) (Source)
 (Category) (Classification)
Feed1: Bark (mt/d)
Feed2:
Feed3:
Main Product: Gaseous fuels (Category)
Product1: Syngas 25 MWth
Product2:
Product3:
Syngas Cap.: 146,299 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 10.9 (Calculated)
Fuel Input: 25.0 Gasifier licensor data (MWt) (Source)
Syngas Output: 20.0 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 319 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1985
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels
Plt. Owner: Portucel **Plt. Owner Type:** Pulp & Paper Processing
Plt. Operator: Portucel **Plant Name:** Rodao ACFBG Unit
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier (Technology Name) Foster Wheeler International (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: John Hemmings (Contact) john_hemmings@fwc.com (Email)

Facility Information

Facility Owner: Portucel **Facility Name:** Rodao Mill
Location: (City/State/Prov) Rodao **Facility Type:** Pulp & Paper Mill
 (Country) Portugal **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** (mt/d) (Source)
 (Category) (Classification)
Feed1: Bark mt/d
Feed2:
Feed3:
Main Product: Gaseous fuels (Category)
Product1: Syngas 15 MWth
Product2:
Product3:
Syngas Cap.: 87,800 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 6.6 (Calculated)
Fuel Input: 15.0 Gasifier licensor data (MWt) (Source)
Syngas Output: 15.0 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

Key Gasifier Information

Facility ID: 160 **No. of Gasifiers: Op'g/Sp/Total** 6/ 2/ 8 **Gasifier Status:** Operating **Start Date:** 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Pacific Chemical (Group) Co., Ltd. **Plant Name:** Wujing Gas Plant No. 2
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) _____ (Email)

Facility Information

Facility Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Facility Name:** Wujing Coking and Chemical Plant
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** _____ (mt/d) _____ (Source)
Feed1: Bit. coal 800 mt/d
Feed2: _____
Feed3: _____
Main Product: Gaseous fuels (Category)
Product1: Fuel gas 3,000,000 Nm3/d
Product2: Town gas 500,000 Nm3/d
Product3: _____
Syngas Cap.: 3,000,000 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 224.0 (Calculated)
Fuel Input: 512.6 Estimate (MWt) (Source)
Syngas Output: 410.1 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** Design Institute of Shanghai **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	240	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	Rüdersdorfer Zement GmbH					Plt. Owner Type:					
Plt. Operator:	Rüdersdorfer Zement GmbH					Plant Name:	Fuel Gas Plant				
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process					Lurgi Envirotherm GmbH	Fluidized-bed gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Claus Greil					claus_greil@lurgi.de					
	(Contact)					(Email)					

Facility Information

Facility Owner:	Rüdersdorfer Zement GmbH	Facility Name:	Rüdersdorf Cement Kiln
Location: (City/State/Prov)	Rüdersdorf	Facility Type:	Other
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid	Biomass/Waste	Rate (MAF):	320.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Biomass	320 mt/d			
Feed2:	Wastes				
Feed3:	Carbon ash				
Main Product:	Gaseous fuels				
	(Category)				
Product1:	Fuel gas	100	MWth		
Product2:					
Product3:					
			Syngas Cap.:	732,000	Estimate
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	54.6	
				(Calculated)	
			Fuel Input:	110.0	Gasifier licensor data
				(MWt)	(Source)
			Syngas Output:	100.0	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Air							
	(Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:						Soot Handling:		
	(Cooler Type)			(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:				Sulfur Removal:				
	(Supplier)			(Process)	(Supplier)	(Process)		
Gas Turbine:								
	(No.)	(Supplier)	(Model)	(MWout)				
HRSG:					Steam Turbine:			
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	
Prin. Contractor:				Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 270 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** April 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: ExxonMobil **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: ExxonMobil **Plant Name:** Baytown Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: ExxonMobil **Facility Name:** Baytown Chemical Plant
Location: (City/State/Prov) Baytown, TX **Facility Type:** Chemical Plant
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 875.0 (mt/d) Estimate (Source)
Feed1: Deasphalter pitch 1,100 mt/d
Feed2:
Feed3:
Syngas Cap.: 2,540,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 189.6 (Calculated)
Main Product: Gaseous fuels (Category) **Fuel Input:** 423.4 (MWt) Estimate (Source)
Product1: Syngas 2,540,000 Nm3/d **Syngas Output:** 347.2 (MWt) Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Parsons **Engineer:**
Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 21-Feb-01

Key Gasifier Information

Facility ID:	280	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2001
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Corenso United Oy Ltd.					Plt. Owner Type:	Pulp & Paper Processing		
Plt. Operator:	Corenso United Oy Ltd.					Plant Name:	Varkaus ACFBG Plant		
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>		Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	John Hemmings <small>(Contact)</small>					john_hemmings@fwc.com <small>(Email)</small>			

Facility Information

Facility Owner:	Corenso United Oy Ltd.	Facility Name:	Varkaus Gas Plant
Location: (City/State/Prov)	Varkaus	Facility Type:	Pulp & Paper Mill
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Packaging wastes		mt/d			Syngas Cap.:	234,133 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	17.5 <small>(Calculated)</small>
Feed3:						Fuel Input:	40.0 Gasifier licensor data <small>(MWt) (Source)</small>
Main Product:	Gaseous fuels <small>(Category)</small>					Syngas Output:	32.0 Estimate <small>(MWt) (Source)</small>
Product1:	Syngas		Nm3/d				
Product2:							
Product3:							

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	1			12.5 kg/s	Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:						Constructor:	
				<small>(Engineer)</small>			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID: 333	No. of Gasifiers: Op'g/Sp/Total 1 / 0 / 1	Gasifier Status: Startup	Start Date: 2007
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Gases
Plt. Owner: Sokolovska Uhelna, A.S.	Plt. Owner Type: Mining Company		
Plt. Operator: Sokolovska Uhelna, A.S.	Plant Name: Thermoselece Vresova		
Gas'n Tech.:	Siemens SFG Gasification Process <small>(Technology Name)</small>	Siemens Power Generation <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>
Vendor Contact:	Harry Morehead <small>(Contact)</small>	harry.morehead@siemens.com <small>(Email)</small>	

Facility Information

Facility Owner: Chemoprojekt, a.s.	Facility Name: Thermoselece Vresova
Location: (City/State/Prov) Vresova	Facility Type: Lignite Processing
(Country) Czech Republic	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed: Solid Coal	Rate (MAF): 	
<small>(Category)</small> <small>(Classification)</small>	<small>(mt/d)</small> <small>(Source)</small>	
Feed1: Lignite 1,968 mt/d	Syngas Cap.: 750,147 Gasifier licensor	
Feed2: 	<small>(Nm3/d)</small> <small>(Source)</small>	
Feed3: 	Eq. IGCC Cap., MWe: 56.0	
	<small>(Calculated)</small>	
Main Product: Gaseous fuels	Fuel Input: 175.0 Estimate	
<small>(Category)</small>	<small>(MWt)</small> <small>(Source)</small>	
Product1: 	Syngas Output: 140.0 Estimate	
Product2: 	<small>(MWt)</small> <small>(Source)</small>	
Product3: 		

Other Information

O2 Supply: Oxygen		
<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler: 		
<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup: 	Rectisol	Sulfur Removal:
<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine: 2	General Electric Co.	9E
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG: 		
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Steam Turbine: 		
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor: 	Engineer: Krupp Unde/Lurgi Envirotherm	Constructor:

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-07

Key Gasifier Information

Facility ID:	372	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Opti Canada				Plt. Owner Type:				
Plt. Operator:	Opti Canada				Plant Name:	Long Lake Integrated Upgrading Project			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Opti Canada	Facility Name:	Opti Canada Refinery
Location: (City/State/Prov)	Port McMurray	Facility Type:	Refinery
(Country)	Canada	Facility Status:	Planning
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Asphalt	3,100 mt/d				Syngas Cap.:	7,500,000 <small>(Nm3/d)</small>
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	559.9 <small>(Calculated)</small>
Main Product:	Gaseous fuels <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt)</small>
Product1:	H2	0				Syngas Output:	1,025.0 <small>(MWt)</small>
Product2:	Steam	0					
Product3:	Power	0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0	Soot Handling:			
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			Sulfur Removal:				
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>		
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	0		
				<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	236	No. of Gasifiers: Op'g/Sp/Total	7/	0/	7	Gasifier Status:	Operating	Start Date:	1964
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processing		
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant		
Gas'n Tech.:	Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Pauli Bauman <small>(Contact)</small>				pauli.bauman@sasol.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH				Facility Name:	Secondary Raw Material Utilization Centre			
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe				Facility Type:	Waste Processing Plant			
(Country)	Germany				Facility Status:	Operating			
(Region)	Europe								

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>					
Feed1:	Municipal waste	1,850 mt/d				Syngas Cap.:	3,000,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>		
Feed2:						Eq. IGCC Cap., MWe:	224.0 <small>(Calculated)</small>			
Feed3:						Fuel Input:	494.1 <small>(MWt)</small>	Estimate <small>(Source)</small>		
Main Product:	Power <small>(Category)</small>					Syngas Output:	410.1 <small>(MWt)</small>	Estimate <small>(Source)</small>		
Product1:	Electricity	75 MW								
Product2:	Methanol	375 mt/d								
Product3:										

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>								
Syngas Cooler:						Soot Handling: 					
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>			Sulfur Removal:					
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	MS6001B <small>(Model)</small>	44.5 <small>(MWout)</small>							
HRSG:	1 <small>(No.)</small>			240 t/hr <small>(Production)</small>	Steam Turbine:		1 <small>(No.)</small>			30 <small>(MWout)</small>	
Prin. Contractor:			Engineer:					Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID:	281	No. of Gasifiers: Op'g/Sp/Total	5/	0/	5	Gasifier Status:	Operating	Start Date:	1968	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power	
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processor			
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant			
Gas'n Tech.:	Lurgi Multi Purpose Gasification Process <small>(Technology Name)</small>			Lurgi Oel • Gas • Chemie GmbH <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>			claus_greil@lurgi.de <small>(Email)</small>						

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH			Facility Name:	Secondary Raw Material Utilization Centre					
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe			Facility Type:	Waste Processing					
(Country)	Germany			Facility Status:	Operating					
(Region)	Europe									

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	625.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>						
Feed1:	Oil	480 mt/d				Syngas Cap.:	1,440,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>			
Feed2:	Slurry	144 mt/d				Eq. IGCC Cap., MWe:	107.5 <small>(Calculated)</small>				
Feed3:						Fuel Input:	246.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>			
Main Product:	Power <small>(Category)</small>					Syngas Output:	196.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>			
Product1:	Electricity	75 MW									
Product2:	Methanol	375 mt/d									
Product3:											

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>								
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:					
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>		Sulfur Removal:						
Gas Turbine:											
HRSG:						Steam Turbine:					
Prin. Contractor:			Engineer:					Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 114 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1992
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: GSP Gasification Process (Technology Name) Future Energy GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dirk Volkmann (Contact) d.volkmann@future-energy.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 150.0 (mt/d) Estimate (Source)
Feed1: Waste oil/slurry tar 150 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 75 MW
Product2: Methanol 375 mt/d
Product3:
Syngas Cap.: 1,200,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 89.6 (Calculated)
Fuel Input: 234.2 (MWt) Estimate (Source)
Syngas Output: 164.0 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

23-Feb-01

Key Gasifier Information

Facility ID:	275	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	June	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Sydkraft AB					Plt. Owner Type:	Utility				
Plt. Operator:	Sydkraft AB					Plant Name:	Värnamo IGCC Demonstration Plant				
Gas'n Tech.:	Foster Wheeler Pressurized Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>			Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Lawford C. Howells <small>(Contact)</small>					Lawford_Howells@fwc.com <small>(Email)</small>					

Facility Information

Facility Owner:	Sydkraft AB			Facility Name:	Malmö/Värnamo Plant						
Location: (City/State/Prov)	Malmö/Värnamo			Facility Type:	Electric Utility						
(Country)	Sweden			Facility Status:	Operating						
(Region)	Europe										

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	55.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>	
Feed1:	Biofuels	55 mt/d				
Feed2:						
Feed3:						
Main Product:	Power <small>(Category)</small>					
Product1:	Electricity	6 MWe				
Product2:	District heat	9 MWth				
Product3:						
			Syngas Cap.:	105,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	7.8 <small>(Calculated)</small>		
			Fuel Input:	18.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	14.4 <small>(MWt)</small>	Estimate <small>(Source)</small>	

Other Information

O2 Supply:	Air <small>(Oxidant)</small>			
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:				Soot Handling:
		<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			Sulfur Removal:	
		<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier) (Process)</small>
Gas Turbine:	1 <small>(No.)</small>	Alstom UK <small>(Supplier)</small>	Typhoon <small>(Model)</small>	4.2 <small>(MWout)</small>
HRSG:				
		<small>(Supplier)</small>	<small>(Model) (Production)</small>	<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:			Engineer:	
				Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

27-Aug-03

Key Gasifier Information

Facility ID: 56 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** April 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nuon Power Buggenum **Plt. Owner Type:** Utility
Plt. Operator: Nuon Power Buggenum **Plant Name:** Buggenum IGCC Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Nuon Power **Facility Name:** Willem-Alexander Centrale (WAC)
Location: (City/State/Prov) Haelen, Limburg **Facility Type:** Electric Utility
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Bit. coal 2,000 mt/d (max)
Feed2:
Feed3:
Syngas Cap.: 3,408,000 (Nm³/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 254.4 (Calculated)
Main Product: Power (Category) **Fuel Input:** 702.6 (MWt) Gasifier licensor data (Source)
Product1: Electricity 253 MWe **Syngas Output:** 465.9 (MWt) Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Water-tube boiler with superheater (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus (O2 Blown)/SCOT (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.2 (Model) 156 (MWout)
HRSG: 1 (No.) Stork (Supplier) (Model) 300 (Production) MWth **Steam Turbine:** 3 (No.) Siemens/KWU (Supplier) 1 HP/1IP/1 LP (Model) 128 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

14-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**
Project Count: **Plt. Type:** **Project Reality:** **Application:**
Plt. Owner: **Plt. Owner Type:**
Plt. Operator: **Plant Name:**
Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)
Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**
Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)
Feed1:
Feed2:
Feed3:
Main Product:
(Category)
Product1: MWe (net)
Product2:
Product3:
Syngas Cap.:
(Nm3/d) (Source)
Eq. IGCC Cap., MWe:
(Calculated)
Fuel Input:
(MWt) (Source)
Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)
Gas Turbine:
(No.) (Supplier) (Model) (MWout)
HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID: 37 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Oct. 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Tampa Electric Co. **Plt. Owner Type:** Utility
Plt. Operator: Tampa Electric Co. **Plant Name:** Polk County IGCC Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Tampa Electric Co. **Facility Name:** Polk Power Station, Unit No. 1
Location: (City/State/Prov) Mulberry, FL **Facility Type:** Electric Utility
(Country) United States **Facility Status:** Operating
(Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,541.0 (mt/d) Estimate (Source)
Feed1: Coal/Petcoke 2,200 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 250 MWe (net)
Product2:
Product3:
Syngas Cap.: 3,300,000 Nm3/d Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 246.4 (Calculated)
Fuel Input: 601.5 MWh Estimate (Source)
Syngas Output: 451.1 MWh Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Radiant & convective syngas coolers (Cooler Type) MAN GHH AG (Cooler Supplier) Soot Handling: Separate handling unit (MWth Duty)
Gas Cleanup: MDEA (Supplier) (Process) **Sulfur Removal:** Monsanto (Supplier) Sulfuric Acid Plant (Process)
Gas Turbine: 1 (No.) General Electric Co. (Supplier) 7FA (Model) 192 (MWout)
HRSG: 1 (No.) General Electric Co. (Supplier) Vogt/GE (Model) (Production) **Steam Turbine:** 1 (No.) General Electric Co. (Supplier) (Model) 125 (MWout)
Prin. Contractor: Bechtel **Engineer:** Bechtel **Constructor:** Bechtel

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 29 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Sept. 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Frontier Oil & Refining Co. (Texaco Inc.) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Frontier Oil & Refining Co. **Plant Name:** El Dorado Gasification Power Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Frontier Oil & Refining Co. **Facility Name:** Frontier El Dorado Refinery
Location: (City/State/Prov) El Dorado, KS **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 100.0 (mt/d) Estimate (Source)
Feed1: Petcoke 151 mt/d
Feed2: Ref. waste 14 mt/d
Feed3: Natural gas 7,000 MMBtu/d
Main Product: Power (Category)
Product1: Electricity 35 MW
Product2: HP steam 180,000 lb/hr
Product3:

Syngas Cap.: 80,559 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 6.0 (Calculated)
Fuel Input: 14.7 (MWt) Estimate (Source)
Syngas Output: 11.0 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)

Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: 1 (No.) General Electric Co. (Supplier) 6B (Model) 35 (MWout)

HRSG: 1 (No.) (Supplier) (Model) 90 st/hr (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Fluor Daniel **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-03

Key Gasifier Information

Facility ID:	58	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1997	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Elcogas SA					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Elcogas SA					Plant Name:	Puertollano GCC Plant				
Gas'n Tech.:	Krupp Koppers PRENFLO Gasification Technology <small>(Technology Name)</small>				Krupp Uhde <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	H. Max Hooper <small>(Contact)</small>					hooperm@usa.kud.thyssenkrupp.com <small>(Email)</small>					

Facility Information

Facility Owner:	Elcogas SA	Facility Name:	Puertollano Power Plant
Location: (City/State/Prov)	Puertollano	Facility Type:	Electric Utility
(Country)	Spain	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Coal & petcoke	2,600	Rate (MAF):			Syngas Cap.:	4,300,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	321.0 <small>(Calculated)</small>
Main Product:	Power <small>(Category)</small>					Fuel Input:	734.8 <small>(MWt)</small>
Product1:	Electricity	335	MWe				Gasifier licensor data <small>(Source)</small>
Product2:						Syngas Output:	587.8 <small>(MWt)</small>
Product3:							Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Convective syngas cooler <small>(Cooler Type)</small>		Steinmüller <small>(Cooler Supplier)</small>	
				Soot Handling:
Gas Cleanup:	Krupp Uhde <small>(Supplier)</small>	MDEA <small>(Process)</small>	Sulfur Removal:	
				Claus <small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	Siemens/KWU <small>(Supplier)</small>	V94.3 <small>(Model)</small>	182.3 <small>(MWout)</small>
HRSG:	1 <small>(No.)</small>	Babcock & Wilcox <small>(Supplier)</small>		
			Steam Turbine:	1 <small>(No.)</small>
				Siemens/KWU <small>(Supplier)</small>
				135.4 <small>(MWout)</small>
Prin. Contractor:	Krupp Uhde		Engineer:	Krupp Uhde
			Constructor:	B&W/Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	314	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	Jan. 1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	Lahden Lämpövoima Oy			Plt. Owner Type:	Utility		
Plt. Operator:	Lahden Lämpövoima Oy			Plant Name:	Kymijärvi ACFBG Plant		
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>		Foster Wheeler International <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	John Hemmings <small>(Contact)</small>		john_hemmings@fwc.com <small>(Email)</small>				

Facility Information

Facility Owner:	Lahden Lämpövoima Oy	Facility Name:	Kymijärvi Power Station
Location: (City/State/Prov)	Lahti	Facility Type:	Electric Utility
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):				
				(mt/d)	(Source)		
Feed1:	Biofuels			mt/d			
Feed2:							
Feed3:							
Main Product:	Power <small>(Category)</small>						
Product1:	Electricity	42	MWe				
Product2:	District heat						
Product3:							

Other Information

O2 Supply:	Air						
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	1		49				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:				Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
							<small>(MWout)</small>
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Dec-00

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Main Product:

(Category)

Fuel Input:

(MWt) (Source)

Product1:

Syngas Output:

(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 55 **No. of Gasifiers: Op'g/Sp/Total** 3/0/3 **Gasifier Status:** Operating **Start Date:** April 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: SARLUX srl **Plt. Owner Type:** Special Joint Venture
Plt. Operator: SARLUX srl **Plant Name:** SARLUX IGCC Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Saras S.p.A. **Facility Name:** Saras S.p.A. Raffinerie Sarde
Location: (City/State/Prov) Sarroch, Cagliari, Sardinia **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) Rate (MAF): 3,545.0 (mt/d) Gasifier contractor (Source)
Feed1: Visbreaker residue 3,552 mt/d
Feed2:
Feed3:
Syngas Cap.: 10,400,000 (Nm3/d) Gasifier contractor (Source)
Eq. IGCC Cap., MWe: 776.4 (Calculated)
Main Product: Power (Category) **Fuel Input:** 1,586.3 (MWt) Gasifier contractor (Source)
Product1: Electricity 551 MWe **Syngas Output:** 1,271.2 (MWt) Gasifier contractor (Source)
Product2: H2 960,000 Nm3/d
Product3: Steam 185 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Naphtha recovery & recy
Gas Cleanup: UOP LLC (Supplier) Selexol (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (O2 blown) (Process)
Gas Turbine: 3 (No.) General Electric Co. (Supplier) 9E (Model) 414 (MWout)
HRSG: 3 (No.) General Electric Co. (Supplier) (Model) 700 t/hr (Production) **Steam Turbine:** 3 (No.) General Electric Co. (Supplier) (Model) 152.4 (MWout)
Prin. Contractor: Snamprogetti **Engineer:** RTI **Constructor:** RTI

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	242	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:		2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	EPZ					Plt. Owner Type:					
Plt. Operator:	EPZ					Plant Name:	Amercentrale Fuel Gas Plant				
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>					Lurgi Envirotherm GmbH <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>					claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	EPZ			Facility Name:	Amercentrale Plant		
Location: (City/State/Prov)	Geertruidenberg			Facility Type:			
(Country)	Netherlands			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Demolition wood	500 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	85 MWth			
Product2:					
Product3:					
			Syngas Cap.:	614,300 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	45.9 <small>(Calculated)</small>	
			Fuel Input:	105.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	84.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>			
Syngas Cooler:	Water-tube <small>(Cooler Type)</small>	Baumgarte <small>(Cooler Supplier)</small>		Soot Handling:
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Scrubber <small>(Process)</small>	Sulfur Removal:	
Gas Turbine:				
HRSG:				
Steam Turbine:				
Prin. Contractor:			Engineer:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	271	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2001	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power	
Plt. Owner:	Esso Singapore Pty. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Esso Singapore Pty. Ltd.					Plant Name:	Chawan IGCC Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Esso Singapore Pty. Ltd.	Facility Name:	Chawan Refinery
Location: (City/State/Prov)	Pulau Ayer Chawan, Jurong Island	Facility Type:	Refinery
(Country)	Singapore	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	924.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Residual oil	924 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	173 MW			
Product2:	H2	MMscf/d			
Product3:	Steam	lb/hr			
			Syngas Cap.:	2,660,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	198.6 <small>(Calculated)</small>	
			Fuel Input:	450.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	363.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6FA <small>(Model)</small>	173.2 <small>(MWout)</small>			
HRSG:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>				Steam Turbine:	
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	M.W. Kellogg		Engineer:	M.W. Kellogg		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 31 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Valero **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Valero **Plant Name:** Delaware Clean Energy Cogeneration Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Premcor, Inc. **Facility Name:** Premcor Delaware City Refinery
Location: (City/State/Prov) Delaware City, DE **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 1,775.0 (mt/d) Estimate (Source)
Feed1: Fluid petcoke 2,100 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 160 MW (net)
Product2: Steam 791,000 lb/hr
Product3:

Syngas Cap.: 3,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 283.7 (Calculated)
Fuel Input: 692.7 (MWt) Estimate (Source)
Syngas Output: 519.5 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6FA (Model) 180 (MWout)
HRSG: 2 (No.) Nooter-Erikson (Supplier) (Model) 359 mt/hr (Production) **Steam Turbine:** 2 (No.) (Supplier) (Model) 80 (MWout)
Prin. Contractor: Parsons Process Group Inc. **Engineer:** Parsons Process Group Inc. **Constructor:** Parsons Process Group Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 16-Jan-02

Key Gasifier Information

Facility ID:	159	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Operating	Start Date:	2002
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	IBIL Energy Systems Ltd. (IES)		Plt. Owner Type:	 			
Plt. Operator:	IBIL Energy Systems Ltd. (IES)		Plant Name:	Sanghi IGCC Plant			
Gas'n Tech.:	GTI (IGT) U-GAS Gasification Process <small>(Technology Name)</small>		Carbona/Enviropower <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	J.G. Patel <small>(Contact)</small>		 <small>(Email)</small>				

Facility Information

Facility Owner:	IBIL Energy Systems Ltd. (IES)	Facility Name:	IES Power Plant
Location: (City/State/Prov)	Kutch, Gujarat	Facility Type:	IPP
(Country)	India	Facility Status:	Construction
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	350.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Lignite	350 mt/d			
Feed2:	 	 			
Feed3:	 	 			
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	53 MW			
Product2:	Steam	40 t/hr			
Product3:	 	 			
			Syngas Cap.:		
			804,000 <small>(Nm3/d)</small> Estimate <small>(Source)</small>		
			Eq. IGCC Cap., MWe:		
			60.0 <small>(Calculated)</small>		
			Fuel Input:		
			136.4 <small>(MWt)</small> Estimate <small>(Source)</small>		
			Syngas Output:		
			109.1 <small>(MWt)</small> Estimate <small>(Source)</small>		

Other Information

O2 Supply:	Air <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>				
Syngas Cooler:	 <small>(Cooler Type)</small>		 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling: 		
Gas Cleanup:	 <small>(Supplier)</small>		 <small>(Process)</small>	Sulfur Removal:		 <small>(Supplier)</small> <small>(Process)</small>	
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6B <small>(Model)</small>	35.9 <small>(MWout)</small>			
HRSG:	1 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	90 t/hr <small>(Production)</small>	Steam Turbine:	1 <small>(No.)</small> General Electric Co. <small>(Supplier)</small> <small>(Model)</small> 21.2 <small>(MWout)</small>	
Prin. Contractor:	Enviropower		Engineer:	Carbona Inc.		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 121 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 2003
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nippon Petroleum Refining Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nippon Petroleum Refining Co. **Plant Name:** Negishi IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nippon Petroleum Refining Co. **Facility Name:** Negishi Refinery
Location: (City/State/Prov) Yokohama **Facility Type:** Refinery
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,000.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,992 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 342 MWnet
Product2:
Product3:
Syngas Cap.: 5,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 433.0 (Calculated)
Fuel Input: 967.0 (MWt) Gasifier licensor data (Source)
Syngas Output: 792.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell/JGC (Supplier) ADIP (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) OxyClaus/Scot (Process)
Gas Turbine: 1 (No.) Mitsubishi Heavy Industri 701F (Supplier) (Model) 301 (MWout)
HRSG: 1 (No.) Mitsubishi Heavy Industri (Supplier) Vertical (Model) 430 mt/hr (Production) **Steam Turbine:** 1 (No.) Mitsubishi Heavy Industri Down Flow (Supplier) (Model) 130 (MWout)
Prin. Contractor: JGC Corp. **Engineer:** JGC Corp. **Constructor:** JGC Corp.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	409	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Power
Plt. Owner:	ERORA/Christian Co. Development LLC					Plt. Owner Type:			
Plt. Operator:	ERORA/Christian Co. Development LLC					Plant Name:	Taylorville Energy Center		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	ERORA/Christian Co. Development LLC	Facility Name:	
Location: (City/State/Prov)	Taylorville, IL	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Coal		0			Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>	
Feed2:			0			Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>	
Feed3:			0			Fuel Input:	1,530.0 <small>(MWt)</small>	
Main Product:	Power <small>(Category)</small>					Syngas Output:	1,150.0 <small>(MWt)</small>	
Product1:	Electricity		630	MW				
Product2:			0					
Product3:			0					

Other Information

O2 Supply:									
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>						
Syngas Cooler:			0		Soot Handling:				
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>					
Gas Cleanup:					Sulfur Removal:				
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>					
HRSG:	0		0		Steam Turbine:	0	0		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:					Engineer:				

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: MW

Product2: BCF/yr

Product3: BCF/yr

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.: (Technology Name) (Licensor) (Technology Type)

Vendor Contact: (Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: (Category) (Classification) **Rate (MAF):** (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product: (Category)

Product1: MW

Product2:

Product3:

Syngas Cap.: (Nm3/d) (Source)

Eq. IGCC Cap., MWe: (Calculated)

Fuel Input: (MWt) (Source)

Syngas Output: (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: 408 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Development **Start Date:** 2011
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: Duke Energy Indiana **Plt. Owner Type:** Utility
Plt. Operator: Duke Energy Indiana **Plant Name:** Edwardsport IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Duke Energy Indiana **Facility Name:** _____
Location: (City/State/Prov) Edwardsport, IN **Facility Type:** _____
 (Country) United States **Facility Status:** _____
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal _____ 0 _____
Feed2: _____ 0 _____
Feed3: _____ 0 _____
Main Product: Power (Category)
Product1: Electricity 630 MW
Product2: _____ 0 _____
Product3: _____ 0 _____
Syngas Cap.: 8,450,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 630.8 (Calculated)
Fuel Input: 1,530.0 (MWt) _____ (Source)
Syngas Output: 1,150.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-07

Key Gasifier Information

Facility ID: 358 No. of Gasifiers: Op'g/Sp/Total 2/ 1/ 3 Gasifier Status: Development Start Date: 2013
Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application: Syngas for Power
Plt. Owner: Excelsior Energy Plt. Owner Type: Technology Developer
Plt. Operator: Excelsior Energy Plant Name: Mesaba Energy Project
Gas'n Tech.: E-GAS (Destec/Dow) Gasification Process ConocoPhillips Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Phil R. Amick Phil.Amick@ConocoPhillips.com
(Contact) (Email)

Facility Information

Facility Owner: Excelsior Energy Facility Name: Mesaba Energy Project
Location: (City/State/Prov) Minnesota Facility Type:
(Country) United States Facility Status:
(Region) North America

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): 0.0
(Category) (Classification) (mt/d) (Source)
Feed1: Coal 5,000 t/d
Feed2: 0
Feed3: 0
Main Product: Power
(Category)
Product1: Electricity 600 MW
Product2: 0
Product3: 0
Syngas Cap.: 9,849,600
(Nm3/d) (Source)
Eq. IGCC Cap., MWe: 735.3
(Calculated)
Fuel Input: 1,683.1
(MWt) (Source)
Syngas Output: 1,346.6
(MWt) (Source)

Other Information

O2 Supply: Oxygen
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube cooler 0 Soot Handling: Dry Barrier
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 2 0
(No.) (Supplier) (Model) (MWout)
HRSG: 2 0 Steam Turbine: 1 0
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

**2007 Gasification Database
Plants sorted by Region**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 16-Jun-03

16-Jun-03

Key Gasifier Information

Facility ID:	3	No. of Gasifiers: Op'g/Sp/Total	15/	2/	17	Gasifier Status:	Operating	Start Date:	1955	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Fuels	
Plt. Owner:	Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd.				Plant Name:	Sasol-I F-T Syngas Plant				
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Sasol Chemical Industries (Pty.) Ltd./Sasol Ltd.	Facility Name:	Sasol-I Petrochemical Plant
Location: (City/State/Prov)	Sasolburg	Facility Type:	Petrochemical Plant
(Country)	South Africa	Facility Status:	Operating
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	7,000.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Bit. coal	10,000 mt/d			
Feed2:					
Feed3:					
Main Product:	FT liquids <small>(Category)</small>				
Product1:	FT liquids	4,000 bbl/d			
Product2:					
Product3:					
			Syngas Cap.:	7,100,000 <small>(Nm3/d)</small>	Gasifier operator <small>(Source)</small>
			Eq. IGCC Cap., MWe:	530.0 <small>(Calculated)</small>	
			Fuel Input:	1,169.4 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	970.6 <small>(MWt)</small>	Gasifier operator data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct-quench/fire-tube <small>(Cooler Type)</small>		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	
Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm <small>(Supplier)</small>		Claus <small>(Process)</small>
Gas Turbine:	0 <small>(No.)</small>		
HRSG:	0 <small>(No.)</small>		
Steam Turbine:	0 <small>(No.)</small>		
Prin. Contractor:	Lurgi/M.W. Kellogg		
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: 131 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1966
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Nitrogen Works of Societé el Nasr d' Engrois **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nitrogen Works of Societé el Nasr d' Engrois **Plant Name:** Suez Ammonia Plant
Gas'n Tech.: Koppers-Totzek Gasification Process (Technology Name) Krupp Uhde (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: H. Max Hooper (Contact) hooperm@usa.kud.thyssenkrupp.com (Email)

Facility Information

Facility Owner: Nitrogen Works of Societé el Nasr d' Engrois **Facility Name:** Suez Chemical Plant
Location: (City/State/Prov) Talkha **Facility Type:** Chemical Plant
 (Country) Egypt **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Ref. off-gases (MMscf/d) **Syngas Cap.:** 778,000 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 58.1 (Calculated)
Feed3: **Fuel Input:** 125.2 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 106.4 (MWt) Estimate (Source)
Product1: Ammonia (mt/d)
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID: 145 **No. of Gasifiers: Op'g/Sp/Total** 40/ 0/ 40 **Gasifier Status:** Operating **Start Date:** 1977
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels/Chemicals
Plt. Owner: Sasol (Pty) Ltd. **Plt. Owner Type:** Synthetic Fuels & Chemicals
Plt. Operator: Sasol Synfuels (Pty) Ltd. **Plant Name:** Sasol Synfuels
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. **Facility Name:** Sasol Synfuels
Location: (City/State/Prov) Secunda, Mpumalanga **Facility Type:** Petrochemical Plant
 (Country) South Africa **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 24,780.0 Operator/licensor
 (Category) (Classification) (mt/d) (Source)
Feed1: Subbit. coal 1,475 mt/hr **Syngas Cap.:** 39,600,000 Operator/licensor
Feed2: **Syngas Cap.:** (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 2,956.2 (Calculated)
Main Product: FT liquids (Category) **Fuel Input:** 8,810.0 Operator/licensor (MWt) (Source)
Product1: Gas **Syngas Output:** 7,048.0 Operator/licensor (MWt) (Source)
Product2: Chemicals
Product3:

Other Information

O2 Supply: Oxygen Air Liquide Not integrated
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: No SG cooler; series of air & water coolers Soot Handling: N.A.
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: Sasol/Linde Sulfolin (Stretford variant)
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 Steam Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi **Engineer:** Fluor Daniel, Inc. **Constructor:** Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID: 146 **No. of Gasifiers: Op'g/Sp/Total** 40/ 0/ 40 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels/Chemicals
Plt. Owner: Sasol (Pty) Ltd. **Plt. Owner Type:** Synthetic Fuels & Chemicals
Plt. Operator: Sasol Synfuels (Pty) Ltd. **Plant Name:** Gasification East Plant
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. **Facility Name:** Sasol Synfuels
Location: (City/State/Prov) Secunda, Mpumalanga **Facility Type:** Petrochemical Plant
 (Country) South Africa **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 24,780.0 Operator/licensor
 (Category) (Classification) (mt/d) (Source)
Feed1: Subbit. coal 1,475 mt/hr **Syngas Cap.:** 39,600,000 Operator/licensor
Feed2: **Syngas Cap.:** (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 2,956.2 (Calculated)
Main Product: FT liquids (Category) **Fuel Input:** 8,810.0 Operator/licensor (MWt) (Source)
Product1: Gas **Syngas Output:** 7,048.0 Operator/licensor (MWt) (Source)
Product2: Chemicals
Product3:

Other Information

O2 Supply: Oxygen Air Liquide Not integrated
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: No SG cooler; series of air & water coolers (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** N.A.
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: Sasol/Linde Sulfolin (Stretford variant)
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi **Engineer:** Fluor Daniel, Inc. **Constructor:** Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: bpd

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	70	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	May	1961	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Mitsubishi Petrochemicals					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Mitsubishi Petrochemicals					Plant Name:	Yokkaichi Syngas Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Mitsubishi Petrochemicals	Facility Name:	Yokkaichi Petrochemical Plant
Location: (City/State/Prov)	Yokkaichi	Facility Type:	Petrochemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	137.6 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	138 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	400,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>	
			Fuel Input:	66.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	54.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
	<small>(Cooler Supplier)</small>			<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Shell <small>(Supplier)</small>	Adip <small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
			Steam Turbine:		
				<small>(No.)</small>	<small>(Supplier)</small>
				<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: 96 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** Oct. 1969
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Naju Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Naju Chemical Plant
Location: (City/State/Prov) Naju, Seoul **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 172.2 (mt/d) Estimate (Source)
Feed1: Vac. Residue 225 mt/d **Syngas Cap.:** 700,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 52.3 (Calculated)
Feed3: **Fuel Input:** 83.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 68.4 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 318 mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Shell (Supplier) Sulfinol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	287	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1978
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	National Fertilizer Ltd.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	National Fertilizer Ltd.					Plant Name:	Panipat Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	National Fertilizer Ltd.	Facility Name:	Panipat Fertilizer Plant
Location: (City/State/Prov)	Panipat, Haryana	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	722.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Bunker C fuel oil	723 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Ammonia	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>		
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>							
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>						<small>(MWth Duty)</small>	
		<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:								
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>	
Gas Turbine:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(MWout)</small>	
HRSG:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.: (Technology Name) (Licensor) (Technology Type)

Vendor Contact: (Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: (Category) (Classification) **Rate (MAF):** (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product: (Category)

Product1:

Product2:

Product3:

Syngas Cap.: (Nm3/d) (Source)

Eq. IGCC Cap., MWe: (Calculated)

Fuel Input: (MWt) (Source)

Syngas Output: (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**

Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID: 289 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1979
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Neyveli Lignite Corp. Ltd. **Plt. Owner Type:** _____
Plt. Operator: Neyveli Lignite Corp. Ltd. **Plant Name:** Neyveli Syngas Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Neyveli Lignite Corp. Ltd. **Facility Name:** Neyveli Chemical Plant
Location: (City/State/Prov) Neyveli, Tamil Nadu **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 275.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 275 mt/d **Syngas Cap.:** 800,000 (Nm3/d) Gasifier licensor (Source)
Feed2: _____ **Eq. IGCC Cap., MWe:** 59.7 (Calculated)
Feed3: _____ **Fuel Input:** 133.4 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 109.4 (MWt) Gasifier licensor data (Source)
Product1: Syngas 800,000 Nm3/d
Product2: _____
Product3: _____

Other Information

O2 Supply: Oxygen (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
HRSG: _____ (No.) _____ (Supplier) _____ (Model) _____ (Production) **Steam Turbine:** _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 215 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Daicel **Plt. Owner Type:** Unspecified
Plt. Operator: Daicel **Plant Name:** Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified Chemical Plant
Location: (City/State/Prov) Unspecified location **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 190.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 190 mt/d **Syngas Cap.:** 550,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 41.1 (Calculated)
Feed3: **Fuel Input:** 91.7 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 75.2 (MWt) Gasifier licensor data (Source)
Product1: Methanol mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Total recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Ube **Constructor:** Ube

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Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	179	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Operating	Start Date:	 / / 1982
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Ube Ammonia Industry Co. Ltd.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Ube Ammonia Industry Co. Ltd.			Plant Name:	Ube City CO Plant		
Gas'n Tech.:	GE Gasification Technology		GE	Entrained-flow gasification			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey		timothy.huskey@ge.com				
	<small>(Contact)</small>		<small>(Email)</small>				

Facility Information

Facility Owner:	Ube Ammonia Industry Co. Ltd.	Facility Name:	Ube City Chemical Plant
Location: (City/State/Prov)	Ube City	Facility Type:	Chemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Petcoke	Rate (MAF):	95.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Petcoke	95 mt/d			
Feed2:	 	 			
Feed3:	 	 			
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	CO	6,500,000 scf/d			
Product2:	 	 			
Product3:	 	 			
			Syngas Cap.:	200,000	Gasifier licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	14.9	
				<small>(Calculated)</small>	
			Fuel Input:	36.4	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	27.3	Gasifier licensor data
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen	 	
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	 	 	Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:	 	 	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:	 	 	Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(No.)</small> <small>(Supplier)</small> <small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:	Ube		Engineer:
			Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 163 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Operating **Start Date:** July 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plant Name:** Narmada Ammonia/Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Facility Name:** Narmada Fertilizer Complex
Location: (City/State/Prov) Bharuch, Gujarat **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,030.0 (mt/d) Estimate (Source)
Feed1: Ref. residual oil 1,030 mt/d **Syngas Cap.:** 2,964,600 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 221.3 (Calculated)
Feed3: **Fuel Input:** 506.6 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 405.3 (MWt) Estimate (Source)
Product1: Ammonia 1,350 mt/d
Product2: Methanol 60 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Linde AG **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	15	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1983	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Zhenhai Refining & Chemical Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Zhenhai Refining & Chemical Co.					Plant Name:	Zhenhai Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification					
	(Technology Name)				(Licensor)	(Technology Type)					
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	Zhenhai Refining & Chemical Co.	Facility Name:	Zhenhai Refinery
Location: (City/State/Prov)	Ningbo, Zhejiang	Facility Type:	Refinery
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	722.5	Estimate
	(Category)	(Classification)	(mt/d)		(Source)
Feed1:	Visbreaker residue	900			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Ammonia	1,000	mt/d		
Product2:					
Product3:					
			Eq. IGCC Cap., MWe:	156.8	(Calculated)
			Syngas Cap.:	2,100,000	Estimate
				(Nm3/d)	(Source)
			Fuel Input:	350.0	Estimate
				(MWt)	(Source)
			Syngas Output:	287.1	Estimate
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen			
	(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:	Direct water quench cooler			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:
Gas Cleanup:				
	(Supplier)	(Process)	Sulfur Removal:	
			(Supplier)	(Process)
Gas Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
HRSG:				
	(No.)	(Supplier)	(Model)	(Production)
			Steam Turbine:	
			(No.)	(Supplier)
			(Model)	(MWout)
Prin. Contractor:	Ube			Ube
Engineer:	Ube			Ube
Constructor:	Ube			Ube

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 162 No. of Gasifiers: Op'g/Sp/Total 2/0/2 Gasifier Status: Operating Start Date: Aug. 1984
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Chinese Petroleum Corp. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Chinese Petroleum Corp. Plant Name: Kaohsiung Syngas Plant
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Chinese Petroleum Corp. Facility Name: Kaohsiung Petrochemical Complex
Location: (City/State/Prov) Kaohsiung Facility Type: Petrochemical Plant
(Country) Taiwan Facility Status: Operating
(Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 1,000.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Bitumen 1,000 mt/d
Feed2:
Feed3:
Main Product: Chemicals
(Category)
Product1: H2 158,200 Nm3/hr
Product2: CO 4,530 Nm3/hr
Product3: Methanol SG 26,500 Nm3/hr
Syngas Cap.: 2,143,000 Gasifier licensor
(Nm3/d) (Source)
Eq. IGCC Cap., MWe: 160.0
(Calculated)
Fuel Input: 390.7 Estimate
(MWt) (Source)
Syngas Output: 293.0 Gasifier licensor data
(MWt) (Source)

Other Information

O2 Supply: Oxygen
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench/syngas cooler combination Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Linde AG Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 18 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** July 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Ube Ammonia Industry Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Ube Ammonia Industry Co. Ltd. **Plant Name:** Ube City Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Ube Ammonia Industry Co. Ltd. **Facility Name:** Ube City Chemical Plant
Location: (City/State/Prov) Ube City **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,000.0 (mt/d) Estimate (Source)
Feed1: Coal & petcoke 1,650 mt/d **Syngas Cap.:** 2,150,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 160.5 (Calculated)
Feed3: **Fuel Input:** 391.9 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 293.9 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 1,250 mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	9	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1985	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	China National Petrochemical Corp./Sinopec				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	China National Petrochemical Corp./Sinopec				Plant Name:	Urumqi Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	China National Petrochemical Corp./Sinopec	Facility Name:	Urumqi Refinery
Location: (City/State/Prov)	Urumqi	Facility Type:	Refinery
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	740.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	740 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	358.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	286.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Ube		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	224	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Qilu Petrochemical Ind.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Qilu Petrochemical Ind.					Plant Name:	Zibu Methanol/Oxochemicals Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>		
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Qilu Petrochemical Ind.	Facility Name:	Zibu Chemical Plant
Location: (City/State/Prov)	Zibu, Shandong	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	245.9 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	246 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	mt/d			
Product2:	Oxochemicals	mt/d			
Product3:					
			Syngas Cap.:	715,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	53.4 <small>(Calculated)</small>	
			Fuel Input:	119.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	97.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:	Lurgi GmbH		
Engineer:			
Constructor:	Lurgi GmbH		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID: 154 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** July 1987
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: China National Technology Import Co. (CNTIC) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: China National Technology Import Co. (CNTIC) **Plant Name:** Shaanxi Ammonia Plant
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: China National Technology Import Co. (CNTIC) **Facility Name:** Shaanxi Chemical Fertilizer Plant
Location: (City/State/Prov) Shaanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,050.0 (mt/d) Estimate (Source)
Feed1: Anthracite 1,200 mt/d **Syngas Cap.:** 2,282,492 (Nm3/d) Estimate (Source)
Feed2:
Feed3:
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 367.1 (MWt) Estimate (Source)
Product1: Ammonia mt/d **Syngas Output:** 312.0 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	8	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1988	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Gases	
Plt. Owner:	CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd.				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd.				Plant Name:	Ningxia Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	CNPC Ningxia Dayuan Refining & Chemical Ind. Co. Ltd.	Facility Name:	Ningxia Chemical Works
Location: (City/State/Prov)	Xishi District, Yinchuan, Ningxia	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	865.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Visbreaker residue	1,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels <small>(Category)</small>				
Product1:	Gases	MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	2,500,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	186.6 <small>(Calculated)</small>	
			Fuel Input:	416.8 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	341.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>						
Gas Cleanup:							
Gas Turbine:	0 <small>(No.)</small>	N.A. <small>(Supplier)</small>	0 <small>(Model)</small>	0 <small>(MWout)</small>			
HRSG:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>	0 <small>(Model)</small>	0 <small>(Production)</small>		
Steam Turbine:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>	0 <small>(Model)</small>	0 <small>(MWout)</small>		
Prin. Contractor:	Ube		Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 13-Mar-01

Key Gasifier Information

Facility ID:	19	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:	May	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Fuels		
Plt. Owner:	Shell MDS (Malaysia) Sdn. Bhd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Shell MDS (Malaysia) Sdn. Bhd.					Plant Name:	Bintulu GTL Plant				
Gas'n Tech.:	Shell Gasification Process (Technology Name)					Shell (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)					Piet.Zuideveld@shell.com (Email)					

Facility Information

Facility Owner:	Shell MDS (Malaysia) Sdn. Bhd.	Facility Name:	Bintulu Middle Distillate Synthesis Plant
Location: (City/State/Prov)	Bintulu, Sarawak	Facility Type:	Gas Plant
(Country)	Malaysia	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):					
				(mt/d)	(Source)			
Feed1:	Natural gas	100 MMscf/d				Syngas Cap.:	7,552,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:						Eq. IGCC Cap., MWe:	563.8 (Calculated)	
Feed3:						Fuel Input:	1,214.6 (MWt)	Gasifier licensor data (Source)
Main Product:	FT liquids (Category)					Syngas Output:	1,032.4 (MWt)	Gasifier licensor data (Source)
Product1:	Mid-distillates	12,500 bbl/d						
Product2:								
Product3:								

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)						
			(ASU Integration)					
Syngas Cooler:	Fire-tube boiler with integrated superheater (Cooler Type)					Soot Handling:		
			(Cooler Supplier)	(MWth Duty)				
Gas Cleanup:					Sulfur Removal:			
	(Supplier)	(Process)	(Supplier)	(Process)				
Gas Turbine:								
	(No.)	(Supplier)	(Model)	(MWout)				
HRSG:					Steam Turbine:			
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	
Prin. Contractor:	Lurgi GmbH				Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 160 **No. of Gasifiers: Op'g/Sp/Total** 6/ 2/ 8 **Gasifier Status:** Operating **Start Date:** 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Pacific Chemical (Group) Co., Ltd. **Plant Name:** Wujing Gas Plant No. 2
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) _____ (Email)

Facility Information

Facility Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Facility Name:** Wujing Coking and Chemical Plant
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** _____ (mt/d) _____ (Source)
Feed1: Bit. coal 800 mt/d
Feed2: _____
Feed3: _____
Main Product: Gaseous fuels (Category)
Product1: Fuel gas 3,000,000 Nm3/d
Product2: Town gas 500,000 Nm3/d
Product3: _____
Syngas Cap.: 3,000,000 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 224.0 (Calculated)
Fuel Input: 512.6 Estimate (MWt) (Source)
Syngas Output: 410.1 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** Design Institute of Shanghai **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 16-Jan-02

Key Gasifier Information

Facility ID:	229	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Juijiang Petrochemical Co.		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Juijiang Petrochemical Co.		Plant Name:	Juijiang Ammonia Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>		Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Juijiang Petrochemical Co.	Facility Name:	Juijiang Fertilizer Plant
Location: (City/State/Prov)	Juijiang, Jiangxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	725.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	672 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	 <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>	 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>
Gas Turbine:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>
			Steam Turbine:	 <small>(No.)</small>
				 <small>(Supplier)</small>
				 <small>(Model)</small>
				 <small>(MWout)</small>
Prin. Contractor:			Engineer:	
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	227	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Inner Mongolia Fertilizer Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Inner Mongolia Fertilizer Co.			Plant Name:	Hohhot Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Inner Mongolia Fertilizer Co.		Facility Name:	Hohhot Fertilizer Plant	
Location: (City/State/Prov)	Hohhot, Inner Mongolia		Facility Type:	Chemical Plant	
(Country)	China		Facility Status:	Operating	
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	725.0 (mt/d)	Estimate (Source)
Feed1:	Vac. residue	672 mt/d	Syngas Cap.:	2,100,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:			Eq. IGCC Cap., MWe:	156.8 (Calculated)	
Feed3:			Fuel Input:	350.1 (MWt)	Gasifier licensor data (Source)
Main Product:	Chemicals (Category)		Syngas Output:	287.1 (MWt)	Gasifier licensor data (Source)
Product1:	Ammonia	mt/d			
Product2:					
Product3:					

Other Information

O2 Supply:			
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Fire-tube boiler (Cooler Type)		
		(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal: (Supplier) (Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:		Engineer:	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	230	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:		1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Lucky Goldstar Chemical Ltd.			Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Lucky Goldstar Chemical Ltd.			Plant Name:	Yochon Oxochemicals Plant			
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)					

Facility Information

Facility Owner:	Lucky Goldstar Chemical Ltd.			Facility Name:	Yochon Chemical Plant		
Location:	(City/State/Prov)	Yochon		Facility Type:	Chemical Plant		
	(Country)	South Korea		Facility Status:	Operating		
	(Region)	Asia/Australia					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	132.0 (mt/d)	Estimate (Source)
Feed1:	Bunker C fuel oil	132 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
Syngas Cap.:	384,000 (Nm3/d)	Gasifier licensor (Source)			
Eq. IGCC Cap., MWe:	28.7 (Calculated)				
Fuel Input:	64.0 (MWt)	Gasifier licensor data (Source)			
Syngas Output:	52.5 (MWt)	Gasifier licensor data (Source)			

Other Information

O2 Supply:						
	(Oxidant)	(ASU Supplier)	(ASU Integration)			
Syngas Cooler:	Fire-tube boiler (Cooler Type)		(Cooler Supplier)	(MWth Duty)	Soot Handling:	
Gas Cleanup:			(Supplier)	(Process)	Sulfur Removal:	
			(Supplier)	(Process)		
Gas Turbine:			(No.)	(Supplier)	(Model)	(MWout)
HRSG:			(No.)	(Supplier)	(Model)	(Production)
			(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: 391 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Chemical & Coking (Shanghai Pacific) **Plant Name:** Gas Plant No. 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Facility Name:** Gas Plant No. 2
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: Town gas 0
Product3: Acetic acid 0
Syngas Cap.: 765,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 57.1 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 104.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

22-Jul-04

Key Gasifier Information

Facility ID:	228	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:		1998	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Lanzhou Chemical Industrial Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Lanzhou Chemical Industrial Co.					Plant Name:	Lanzhou Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process					Shell	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld					Piet.Zuideveld@shell.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	Lanzhou Chemical Industrial Co.	Facility Name:	Lanzhou Chemical Plant
Location: (City/State/Prov)	Lanzhou, Gansu	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):		
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Natural Gas	700 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Ammonia		mt/d		
Product2:					
Product3:					
				Syngas Cap.:	2,100,000
				(Nm ³ /d)	Gasifier licensor (Source)
				Eq. IGCC Cap., MWe:	156.8
				(Calculated)	
				Fuel Input:	350.1
				(MWt)	Gasifier licensor data (Source)
				Syngas Output:	287.1
				(MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:				
	(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:	Fire-tube boiler			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol		
	(Supplier)	(Process)	(Supplier)	(Process)
Gas Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
HRSG:				
	(No.)	(Supplier)	(Model)	(Production)
			Steam Turbine:	
			(No.)	(Supplier)
			(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 394 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:** _____
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Zhong Yuan Dahua Group Ltd.
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:** _____
Location: (City/State/Prov) Puyang, Henan **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 2,282,492 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Fuel Input: 367.0 (MWt) _____ (Source)
Syngas Output: 312.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	185	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	Aug.	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Huainan General Chemical Works					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Huainan General Chemical Works					Plant Name:	Hefei City Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Huainan General Chemical Works	Facility Name:	Hefei City Chemical Plant
Location: (City/State/Prov)	Hefei City, Anhui	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	655.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	898 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	667 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	104.5 <small>(Calculated)</small>	
			Fuel Input:	255.2 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	191.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		<small>(Process)</small>
						<small>(Supplier)</small>	
Gas Turbine:			<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
	<small>(No.)</small>						
HRSG:			<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	Steam Turbine:	
	<small>(No.)</small>					<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:	Ube		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	20	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	June	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Linde AG					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Linde AG					Plant Name:	Singapore Syngas Plant				
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	Singapore Syngas Pte. Ltd. (Texaco/Messer)	Facility Name:	Pulau Merlimau Gas Plant
Location: (City/State/Prov)	Jurong Island	Facility Type:	Gas Plant
(Country)	Singapore	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	554.0	Estimate	
	(Category)	(Classification)		(mt/d)	(Source)	
Feed1:	Ref. residue	572 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals					
	(Category)					
Product1:	H2	25 MMscf/d				
Product2:	CO	25 MMscf/d				
Product3:						

Other Information

O2 Supply:	Oxygen	Messer Griesheim			
	(Oxidant)	(ASU Supplier)	(ASU Integration)		
Syngas Cooler:	Direct water quench cooler				
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)		
Gas Cleanup:					
	(Supplier)	(Process)		(Supplier)	(Process)
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					
	(No.)	(Supplier)	(Model)	(Production)	(MWout)
Prin. Contractor:			Linde AG	M.W. Kellogg/Chiyoda	
			(Engineer)		(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	42	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	2000	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Henan				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Henan				Plant Name:	Puyang Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Henan	Facility Name:	Puyang Chemical Fertilizer Plant
Location: (City/State/Prov)	Puyang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	1,000.0	Estimate
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492	Estimate
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4	
				<small>(Calculated)</small>	
			Fuel Input:	367.1	Estimate
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	312.0	Estimate
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:			
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	<small>(Supplier)</small>	<small>(Process)</small>	
Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm	Claus	
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	271	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2001	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power	
Plt. Owner:	Esso Singapore Pty. Ltd.					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Esso Singapore Pty. Ltd.					Plant Name:	Chawan IGCC Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Esso Singapore Pty. Ltd.	Facility Name:	Chawan Refinery
Location: (City/State/Prov)	Pulau Ayer Chawan, Jurong Island	Facility Type:	Refinery
(Country)	Singapore	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	924.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Residual oil	924 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	173 MW			
Product2:	H2	MMscf/d			
Product3:	Steam	lb/hr			
			Syngas Cap.:	2,660,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	198.6 <small>(Calculated)</small>	
			Fuel Input:	450.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	363.6 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		<small>(Process)</small>
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6FA <small>(Model)</small>	173.2 <small>(MWout)</small>			
HRSG:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>			Steam Turbine:		<small>(MWout)</small>
			<small>(Model)</small>	<small>(Production)</small>		<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	M.W. Kellogg		Engineer:	M.W. Kellogg		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 184 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Jilin Chemical Industrial Corp. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Jilin Chemical Industrial Corp. **Plant Name:** Jilin Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Jilin Chemical Industrial Corp. **Facility Name:** Jilin Chemical Plant
Location: (City/State/Prov) Jilin **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 739.5 (mt/d) Estimate (Source)
Feed1: Visbreaker residue 740 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia 1,000 mt/d
Product2:
Product3:
Syngas Cap.: 2,096,500 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 156.5 (Calculated)
Fuel Input: 358.3 (MWt) Estimate (Source)
Syngas Output: 286.6 (MWt) Estimate (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Unspecified vendor (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde Impianti Italia SpA **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 122 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** May 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Nanjing Chemical Industry Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nanjing Chemical Industry Co. **Plant Name:** Nanjing Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nanjing Chemical Industry Co. **Facility Name:** Nanjing Chemical Plant
Location: (City/State/Prov) Nanjing, Jiangsu **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 769.0 (mt/d) Estimate (Source)
Feed1: Eureka pitch 385 mt/d **Syngas Cap.:** 2,200,000 (Nm3/d) Gasifier contractor (Source)
Feed2: Vacuum residue oil 385 mt/d **Eq. IGCC Cap., MWe:** 164.2 (Calculated)
Feed3:
Main Product: Chemicals (Category) **Fuel Input:** 346.0 (MWt) Gasifier contractor (Source)
Product1: Ammonia 1,000 mt/d **Syngas Output:** 300.8 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Flash & filtration
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) Outside Battery Limits (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Snamprogetti **Engineer:** Snamprogetti **Constructor:** Nanjing Chemical Industry Co.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: 159 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: IBIL Energy Systems Ltd. (IES) **Plt. Owner Type:**
Plt. Operator: IBIL Energy Systems Ltd. (IES) **Plant Name:** Sanghi IGCC Plant
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) (Email)

Facility Information

Facility Owner: IBIL Energy Systems Ltd. (IES) **Facility Name:** IES Power Plant
Location: (City/State/Prov) Kutch, Gujarat **Facility Type:** IPP
 (Country) India **Facility Status:** Construction
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 350.0 Estimate
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 350 mt/d **Syngas Cap.:** 804,000 Estimate
Feed2: **Eq. IGCC Cap., MWe:** 60.0
Feed3: (Calculated)
Main Product: Power **Fuel Input:** 136.4 Estimate
 (Category) (MWt) (Source)
Product1: Electricity 53 MW **Syngas Output:** 109.1 Estimate
Product2: Steam 40 t/hr (MWt) (Source)
Product3:

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 1 General Electric Co. 6B 35.9
 (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) (Production) **Steam Turbine:** 1 General Electric Co. 21.2
 (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Enviropower **Engineer:** Carbona Inc. **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 121 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 2003
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nippon Petroleum Refining Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nippon Petroleum Refining Co. **Plant Name:** Negishi IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nippon Petroleum Refining Co. **Facility Name:** Negishi Refinery
Location: (City/State/Prov) Yokohama **Facility Type:** Refinery
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,000.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,992 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 342 MWnet
Product2:
Product3:
Syngas Cap.: 5,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 433.0 (Calculated)
Fuel Input: 967.0 (MWt) Gasifier licensor data (Source)
Syngas Output: 792.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell/JGC (Supplier) ADIP (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) OxyClaus/Scot (Process)
Gas Turbine: 1 (No.) Mitsubishi Heavy Industri 701F (Supplier) (Model) 301 (MWout)
HRSG: 1 (No.) Mitsubishi Heavy Industri (Supplier) Vertical (Model) 430 mt/hr (Production) **Steam Turbine:** 1 (No.) Mitsubishi Heavy Industri Down Flow (Supplier) (Model) 130 (MWout)
Prin. Contractor: JGC Corp. **Engineer:** JGC Corp. **Constructor:** JGC Corp.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	383	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	2004
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application: Syngas for Chemicals	
Plt. Owner:	China 1 (Expansion)			Plt. Owner Type:			
Plt. Operator:				Plant Name:	China 1		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	China 1 (Expansion)	Facility Name:	China 1
Location: (City/State/Prov)	Haolianghe, Heilongjiang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Coal	0			
Feed2:		0			
Feed3:		0			
Main Product:	Chemicals <small>(Category)</small>		Syngas Cap.:	2,045,000 <small>(Nm3/d)</small>	<small>(Source)</small>
Product1:	Methanol	0	Eq. IGCC Cap., MWe:	152.7 <small>(Calculated)</small>	
Product2:		0	Fuel Input:	0.0 <small>(MWt)</small>	<small>(Source)</small>
Product3:		0	Syngas Output:	279.6 <small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:			
<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:		0	Soot Handling:
<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:
<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:	0		0
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>
Steam Turbine:	0		0
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID:	385	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	Feb.	2004	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	BP/Formosa					Plt. Owner Type:					
Plt. Operator:	BP/Formosa					Plant Name:	Mai Liao Refinery				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:		Facility Name:	Mai Liao Refinery
Location: (City/State/Prov)	Mai Liao	Facility Type:	Refinery
(Country)	Taiwan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Naphtha	0				Syngas Cap.:	1,080,000 <small>(Nm3/d)</small>	
Feed2:		0				Eq. IGCC Cap., MWe:	80.6 <small>(Calculated)</small>	
Feed3:		0				Fuel Input:	0.0 <small>(MWt)</small>	
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	147.6 <small>(MWt)</small>	
Product1:	Methanol	0						
Product2:		0						
Product3:		0						

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:				0	Soot Handling:			
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: <input type="text" value="Coal"/> <input type="text" value="1,200 mt/d"/>	Syngas Cap.: <input type="text" value="1,700,000"/> <input type="text"/> <small>(Nm3/d) (Source)</small>
Feed2: <input type="text"/> <input type="text" value="0"/>	Eq. IGCC Cap., MWe: <input type="text" value="126.9"/> <input type="text"/> <small>(Calculated)</small>
Feed3: <input type="text"/> <input type="text" value="0"/>	Fuel Input: <input type="text" value="0.0"/> <input type="text"/> <small>(MWt) (Source)</small>
Main Product: <input type="text" value="Chemicals"/> <small>(Category)</small>	Syngas Output: <input type="text" value="232.0"/> <input type="text"/> <small>(MWt) (Source)</small>
Product1: <input type="text" value="Ammonia"/> <input type="text" value="0"/>	
Product2: <input type="text"/> <input type="text" value="0"/>	
Product3: <input type="text"/> <input type="text" value="0"/>	

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	384	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2005	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases/Chemicals	
Plt. Owner:	China 2					Plt. Owner Type:				
Plt. Operator:						Plant Name:	China 2			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	China 2	Facility Name:	China 2
Location: (City/State/Prov)	Jinling, Nanjing	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Coal	0				Syngas Cap.:	1,275,000 <small>(Nm3/d)</small>	
Feed2:		0				Eq. IGCC Cap., MWe:	95.2 <small>(Calculated)</small>	
Feed3:		0				Fuel Input:	0.0 <small>(MWt)</small>	
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	174.3 <small>(MWt)</small>	
Product1:	Methanol	0						
Product2:		0						
Product3:		0						

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:			0	Soot Handling:				
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>					
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 396 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shaanxi Shenmu Chemical Company **Plt. Owner Type:**
Plt. Operator: Shaanxi Shenmu Chemical Company **Plant Name:** Shaanxi Shenmu Chemical Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shaanxi Shenmu Chemical Company **Facility Name:**
Location: (City/State/Prov) Shenmu, Shaanxi **Facility Type:**
 (Country) China **Facility Status:**
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 1,925,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 143.7 (Calculated)
Fuel Input: 351.0 (MWt) (Source)
Syngas Output: 263.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 20-Jul-04

Key Gasifier Information

Facility ID:	366	No. of Gasifiers: Op'g/Sp/Total	0/	0/	0	Gasifier Status:	Development	Start Date:	2005
Project Count:	0	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Sinopec-Shell				Plt. Owner Type:				
Plt. Operator:	Sinopec-Shell				Plant Name:				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sinopec-Shell	Facility Name:	
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	2,000 t/d				Syngas Cap.:	
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt) (Source)</small>
Product1:		0				Syngas Output:	273.4 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0			Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0			Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>			<small>(No.)</small>
	<small>(Supplier)</small>		<small>(Model)</small>		<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1: **Product2:**
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: 386 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Development **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: China 5 **Plt. Owner Type:** _____
Plt. Operator: _____ **Plant Name:** China 5
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: China 5 **Facility Name:** China 5
Location: (City/State/Prov) _____ **Facility Type:** _____
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: 0
Product3: 0
Syngas Cap.: 2,080,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 155.3 (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 284.3 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	<input type="text" value="398"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Startup"/>	Start Date:	<input type="text" value="2006"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>			Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Weihe Chemical Company"/>				Plt. Owner Type:	<input type="text"/>			
Plt. Operator:	<input type="text" value="Weihe Chemical Company"/>				Plant Name:	<input type="text" value="Weihe Chemical"/>			
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>			<input type="text" value="GE"/> <small>(Licensor)</small>		<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>			<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Weihe Chemical Company"/>	Facility Name:	<input type="text"/>
Location:	<input type="text" value="(City/State/Prov) Weinan, Shaanxi"/>	Facility Type:	<input type="text"/>
	<input type="text" value="(Country) China"/>	Facility Status:	<input type="text"/>
	<input type="text" value="(Region) Asia/Australia"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/>	<input type="text" value="Coal"/>	Rate (MAF):	<input type="text" value="0.0"/>	<input type="text"/>
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	<input type="text" value="Coal"/>	<input type="text" value="0"/>			
Feed2:	<input type="text"/>	<input type="text" value="0"/>			
Feed3:	<input type="text"/>	<input type="text" value="0"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				
Product1:	<input type="text"/>	<input type="text" value="0"/>			
Product2:	<input type="text"/>	<input type="text" value="0"/>			
Product3:	<input type="text"/>	<input type="text" value="0"/>			
			Syngas Cap.:	<input type="text" value="2,900,000"/>	<input type="text"/>
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="216.5"/>	
				<small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="527.0"/>	<input type="text"/>
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	<input type="text" value="395.0"/>	<input type="text"/>
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(Supplier)</small>	<small>(Process)</small>	<input type="text"/>
		Sulfur Removal:	<input type="text"/>
			<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:	<input type="text" value="0"/>	<input type="text"/>	<input type="text" value="0"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:	<input type="text" value="0"/>	<input type="text"/>	<input type="text" value="0"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(Production)</small>
		Steam Turbine:	<input type="text" value="0"/>
			<small>(No.)</small> <small>(Supplier)</small> <small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer: <input type="text"/>
			Constructor: <input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	335	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Dong Ting Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Dong Ting Fertilizer Plant
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,410,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	254.6 <small>(Calculated)</small>	
			Fuel Input:	582.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:	
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		
			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
			Steam Turbine:		
			<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
				<small>(MWout)</small>	
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	336	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:		2006	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals		
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Sinopec/Shell					Plant Name:	Hubei Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Sinopec	Facility Name:	Hubei Fertilizer Plant		
Location: (City/State/Prov)	Yincheng, Hubei	Facility Type:	Chemical Plant		
(Country)	China	Facility Status:	Operating		
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,550.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,500,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	261.3 <small>(Calculated)</small>	
			Fuel Input:	598.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
	<small>(Cooler Supplier)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:			Engineer:		
			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 380 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yunzhanhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yunzhanhua Chemicals **Plant Name:** Huashan Yunzhanhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yunzhanhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Huashan, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 379 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yuntianhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yuntianhua Chemicals **Plant Name:** Anning Yuntianhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yuntianhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Anning, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	404	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Tianjin Bohai Chemical Group			Plt. Owner Type:			
Plt. Operator:	Tianjin Bohai Chemical Group			Plant Name:	Tianjin Chemical Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Tianjin Bohai Chemical Group	Facility Name:	
Location: (City/State/Prov)	Tianjin	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)	(Source)		
Feed1:	Coal			0			
Feed2:				0			
Feed3:				0			
Main Product:	Chemicals (Category)						
Product1:				0			
Product2:				0			
Product3:				0			
						Syngas Cap.:	8,250,000 (Nm3/d) (Source)
						Eq. IGCC Cap., MWe:	615.9 (Calculated)
						Fuel Input:	1,405.0 (MWt) (Source)
						Syngas Output:	1,124.0 (MWt) (Source)

Other Information

O2 Supply:							
	(Oxidant)	(ASU Supplier)		(ASU Integration)			
Syngas Cooler:				0		Soot Handling:	
	(Cooler Type)		(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:						Sulfur Removal:	
	(Supplier)	(Process)				(Supplier)	(Process)
Gas Turbine:	0			0			
	(No.)	(Supplier)	(Model)	(MWout)			
HRSG:	0			0		Steam Turbine:	0
	(No.)	(Supplier)	(Model)	(Production)		(No.)	(Supplier)
						(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	<input type="text" value="405"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Development"/>	Start Date:	<input type="text" value="2010"/>	
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>		Project Reality:	<input type="text" value="Planning"/>		Application:	<input type="text" value="Syngas for Chemicals"/>	
Plt. Owner:	<input type="text" value="Unspecified Owner"/>				Plt. Owner Type:	<input type="text"/>				
Plt. Operator:	<input type="text" value="Unspecified Owner"/>				Plant Name:	<input type="text" value="Guizhou Chemical Plant"/>				
Gas'n Tech.:	<input type="text" value="Shell Gasification Process"/> <small>(Technology Name)</small>				<input type="text" value="Shell"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>				
Vendor Contact:	<input type="text" value="Dr. Ir. Piet L. Zuideveld"/> <small>(Contact)</small>				<input type="text" value="Piet.Zuideveld@shell.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Unspecified Owner"/>			Facility Name:	<input type="text"/>		
Location: (City/State/Prov)	<input type="text" value="Guizhou"/>			Facility Type:	<input type="text"/>		
(Country)	<input type="text" value="China"/>			Facility Status:	<input type="text"/>		
(Region)	<input type="text" value="Asia/Australia"/>						

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/> <small>(Category)</small>	<input type="text" value="Coal"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value="0.0"/> <small>(mt/d)</small>	<input type="text"/> <small>(Source)</small>		
Feed1:	<input type="text" value="Coal"/>	<input type="text" value="0"/>			Syngas Cap.:	<input type="text" value="4,125,000"/> <small>(Nm3/d)</small>	<input type="text"/> <small>(Source)</small>
Feed2:	<input type="text"/>	<input type="text" value="0"/>			Eq. IGCC Cap., MWe:	<input type="text" value="307.9"/> <small>(Calculated)</small>	
Feed3:	<input type="text"/>	<input type="text" value="0"/>			Fuel Input:	<input type="text" value="703.0"/> <small>(MWt)</small>	<input type="text"/> <small>(Source)</small>
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				Syngas Output:	<input type="text" value="562.0"/> <small>(MWt)</small>	<input type="text"/> <small>(Source)</small>
Product1:	<input type="text"/>	<input type="text" value="0"/>					
Product2:	<input type="text"/>	<input type="text" value="0"/>					
Product3:	<input type="text"/>	<input type="text" value="0"/>					

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>						
Syngas Cooler:	<input type="text"/>			<input type="text" value="0"/> <small>(Cooler Supplier)</small>	<input type="text"/> <small>(MWth Duty)</small>	Soot Handling:	<input type="text"/>		
Gas Cleanup:	<input type="text"/>		<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	Sulfur Removal:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>		
Gas Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text" value="0"/> <small>(MWout)</small>					
HRSG:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text" value="0"/> <small>(Production)</small>	Steam Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small>	<input type="text" value="0"/> <small>(MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer:	<input type="text"/>		Constructor:	<input type="text"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	328	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Development	Start Date:	2010
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Indian Oil Corp. Ltd.				Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Indian Oil Corp. Ltd.				Plant Name:	Paradip Gasification H2/Power Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>			Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Indian Oil Corp. Ltd.	Facility Name:	Paradip Refinery
Location: (City/State/Prov)	Nagapattinam, Orissa	Facility Type:	Refinery
(Country)	India	Facility Status:	Construction
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petrocoke <small>(Classification)</small>	Rate (MAF):	2,850.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Petrocoke	3,500 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	160	MMscf/d		
Product2:	Electricity	180	MW		
Product3:					
			Syngas Cap.:	6,500,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	485.2 <small>(Calculated)</small>	
			Fuel Input:	1,110.8 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	888.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>		180 <small>(Model)</small>	
				<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
			Steam Turbine:		
				<small>(No.)</small>	<small>(Supplier)</small>
				<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Engineers India Ltd.		Engineer:	Krupp Uhde	
			Constructor:	Krupp Uhde	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	406	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Chemicals	
Plt. Owner:	Unspecified Owner				Plt. Owner Type:					
Plt. Operator:	Unspecified Owner				Plant Name:	Inner Mongolia Chemical Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified Owner	Facility Name:	Inner Mongolia Chemical Plant
Location: (City/State/Prov)	Inner Mongolia	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal			0			
Feed2:				0			
Feed3:				0			
Main Product:	Chemicals <small>(Category)</small>						
Product1:				0			
Product2:				0			
Product3:				0			
						Syngas Cap.:	24,750,000 <small>(Nm3/d)</small>
						Eq. IGCC Cap., MWe:	1,847.6 <small>(Calculated)</small>
						Fuel Input:	4,216.0 <small>(MWt)</small>
						Syngas Output:	3,373.0 <small>(MWt)</small>

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0			Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0			Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>			<small>(No.)</small>
	<small>(Supplier)</small>		<small>(Model)</small>		<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID: 103 No. of Gasifiers: Op'g/Sp/Total 12/ 0/ 12 Gasifier Status: Operating Start Date: 1971
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Gases
Plt. Owner: Falconbridge Dominicana Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Falconbridge Dominicana Plant Name: Santo Domingo Syngas Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Falconbridge Dominicana Facility Name: Santo Domingo Chemical Plant
Location: (City/State/Prov) Santo Domingo Facility Type: Chemical Plant
(Country) Dominican Republic Facility Status: Operating
(Region) Central & South America/Caribbean

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 495.5 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Bunker C fuel oil 496 mt/d
Feed2:
Feed3:
Main Product: Gaseous fuels
(Category)
Product1: Reducing gas MMscf/d
Product2:
Product3:
Syngas Cap.: 1,440,000 Gasifier licensor
(Nm³/d) (Source)
Eq. IGCC Cap., MWe: 107.5
(Calculated)
Fuel Input: 240.1 Gasifier licensor data
(MWt) (Source)
Syngas Output: 196.9 Gasifier licensor data
(MWt) (Source)

Other Information

O₂ Supply: Air
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: None Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine:
(No.) (Supplier) (Model) (MWout)
HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 16-Jan-02

Key Gasifier Information

Facility ID:	<input type="text" value="223"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="3"/> / <input type="text" value="0"/> / <input type="text" value="3"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1979"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Ultrafertil S.A."/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Ultrafertil S.A."/>			Plant Name:	<input type="text" value="Araucária Ammonia Plant"/>		
Gas'n Tech.:	<input type="text" value="Shell Gasification Process"/>		<input type="text" value="Shell"/>		<input type="text" value="Entrained-flow gasification"/>		
	(Technology Name)		(Licensor)		(Technology Type)		
Vendor Contact:	<input type="text" value="Dr. Ir. Piet L. Zuideveld"/>			<input type="text" value="Piet.Zuideveld@shell.com"/>			
	(Contact)			(Email)			

Facility Information

Facility Owner:	<input type="text" value="Ultrafertil S.A."/>	Facility Name:	<input type="text" value="Araucária Fertilizer Plant"/>
Location: (City/State/Prov)	<input type="text" value="Araucária"/>	Facility Type:	<input type="text" value="Chemical Plant"/>
(Country)	<input type="text" value="Brazil"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Central & South America/Caribbean"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Liquid"/>	<input type="text" value="Petroleum"/>	Rate (MAF):	<input type="text" value="1,135.2"/>	<input type="text" value="Estimate"/>
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	<input type="text" value="Asphalt residue"/>	<input type="text" value="1,135 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	(Category)				
Product1:	<input type="text" value="Ammonia"/>	<input type="text" value="1,575 mt/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="3,300,000"/>	<input type="text" value="Gasifier licensor"/>
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	<input type="text" value="246.4"/>	
				(Calculated)	
			Fuel Input:	<input type="text" value="550.1"/>	<input type="text" value="Gasifier licensor data"/>
				(MWt)	(Source)
			Syngas Output:	<input type="text" value="451.1"/>	<input type="text" value="Gasifier licensor data"/>
				(MWt)	(Source)

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text" value="Fire-tube boiler"/>		<input type="text"/>
	(Cooler Type)		(Cooler Supplier)
			(MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	(Supplier)
			(Process)
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model)
			(MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model)
			(Production)
			(MWout)
Prin. Contractor:	<input type="text" value="Lurgi GmbH"/>		<input type="text"/>
			(Engineer)
			(Constructor)
	<input type="text" value="Lurgi GmbH"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: <input type="text" value="191"/>	No. of Gasifiers: Op'g/Sp/Total <input type="text" value="2"/> / <input type="text" value="0"/> / <input type="text" value="2"/>	Gasifier Status: <input type="text" value="Operating"/>	Start Date: <input type="text" value="1958"/>
Project Count: <input type="text" value="1"/>	Plt. Type: <input type="text" value="Commercial"/>	Project Reality: <input type="text" value="Active-Real"/>	Application: <input type="text" value="Syngas for Gases"/>
Plt. Owner: <input type="text" value="Praxair (EniChem)"/>	Plt. Owner Type: <input type="text" value="Industrial Gas Supply"/>		
Plt. Operator: <input type="text" value="Praxair (EniChem)"/>	Plant Name: <input type="text" value="Ravenna Syngas Plant"/>		
Gas'n Tech.: <input type="text" value="GE Gasification Technology"/>	<input type="text" value="GE"/>	<input type="text" value="Entrained-flow gasification"/>	
<small>(Technology Name)</small>		<small>(Licensor)</small> <small>(Technology Type)</small>	
Vendor Contact: <input type="text" value="Tim Huskey"/>	<input type="text" value="timothy.huskey@ge.com"/>		
<small>(Contact)</small>		<small>(Email)</small>	

Facility Information

Facility Owner: <input type="text" value="Praxair (EniChem)"/>	Facility Name: <input type="text" value="Ravenna Chemical Plant"/>
Location: (City/State/Prov) <input type="text" value="Ravenna"/>	Facility Type: <input type="text" value="Chemical Plant"/>
(Country) <input type="text" value="Italy"/>	Facility Status: <input type="text" value="Operating"/>
(Region) <input type="text" value="Europe"/>	

Feed/Product Information

Main Feed: <input type="text" value="Gaseous"/>	<input type="text" value="Gas"/>	Rate (MAF): <input type="text"/>	<input type="text"/>
<small>(Category)</small> <small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1: <input type="text" value="Natural gas"/>	<input type="text" value="10 MMscf/d"/>	Syngas Cap.: <input type="text" value="700,000"/>	<input type="text" value="Estimate"/>
Feed2: <input type="text"/>	<input type="text"/>	<small>(Nm3/d)</small> <small>(Source)</small>	
Feed3: <input type="text"/>	<input type="text"/>	Eq. IGCC Cap., MWe: <input type="text" value="52.3"/>	
		<small>(Calculated)</small>	
Main Product: <input type="text" value="Chemicals"/>		Fuel Input: <input type="text" value="112.6"/>	<input type="text" value="Estimate"/>
<small>(Category)</small>		<small>(MWt)</small> <small>(Source)</small>	
Product1: <input type="text" value="CO"/>	<input type="text" value="Nm3/d"/>	Syngas Output: <input type="text" value="95.7"/>	<input type="text" value="Estimate"/>
Product2: <input type="text"/>	<input type="text"/>	<small>(MWt)</small> <small>(Source)</small>	
Product3: <input type="text"/>	<input type="text"/>		

Other Information

O2 Supply: <input type="text" value="Oxygen"/>	<input type="text"/>	<input type="text"/>
<small>(Oxidant)</small> <small>(ASU Supplier)</small>		<small>(ASU Integration)</small>
Syngas Cooler: <input type="text" value="Direct water quench cooler"/>	<input type="text"/>	<input type="text"/>
<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small> <small>(MWth Duty)</small>
Gas Cleanup: <input type="text"/>	<input type="text"/>	Sulfur Removal: <input type="text"/>
<small>(Supplier)</small> <small>(Process)</small>		<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine: <input type="text"/>	<input type="text"/>	<input type="text"/>
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG: <input type="text"/>	<input type="text"/>	<input type="text"/>
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(Production)</small>
Steam Turbine: <input type="text"/>	<input type="text"/>	<input type="text"/>
<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor: <input type="text"/>	Engineer: <input type="text"/>	Constructor: <input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID:	294	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1959	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Taminco					Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	Taminco					Plant Name:	Billingham Oxochemicals Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Air Products (ICI)	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Billingham, England	Facility Type:	Chemical Plant
(Country)	United Kingdom	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	9 MMscf/d				Syngas Cap.:	600,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	44.8 <small>(Calculated)</small>
Feed3:						Fuel Input:	96.5 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	82.0 Estimate <small>(MWt) (Source)</small>
Product1:	Oxochemicals	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			ICI		Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="188"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="2"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1963"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>		Project Reality:	<input type="text" value="Active-Real"/>		Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="PRAOIL"/>				Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>			
Plt. Operator:	<input type="text" value="PRAOIL"/>				Plant Name:	<input type="text" value="Gela Ragusa H2 Plant"/>			
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/>			<input type="text" value="GE"/>		<input type="text" value="Entrained-flow gasification"/>			
	<small>(Technology Name)</small>			<small>(Licensor)</small>		<small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Tim Huskey"/>			<input type="text" value="timothy.huskey@ge.com"/>					
	<small>(Contact)</small>			<small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="PRAOIL"/>			Facility Name:	<input type="text" value="Gela Ragusa Refinery"/>				
Location: (City/State/Prov)	<input type="text" value="Gela Ragusa"/>				Facility Type:	<input type="text" value="Refinery"/>			
(Country)	<input type="text" value="Italy"/>				Facility Status:	<input type="text" value="Operating"/>			
(Region)	<input type="text" value="Europe"/>								

Feed/Product Information

Main Feed:	<input type="text" value="Gaseous"/>	<input type="text" value="Gas"/>	Rate (MAF):	<input type="text"/>	<input type="text"/>
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	<input type="text" value="Natural gas"/>	<input type="text" value="17 MMscf/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	<small>(Category)</small>				
Product1:	<input type="text" value="H2"/>	<input type="text" value="MMscf/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="1,150,000"/>	<input type="text" value="Gasifier licensor"/>
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="85.8"/>	
				<small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="184.9"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	<input type="text" value="157.2"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text"/>	<input type="text"/>
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/>		<input type="text"/>
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	<input type="text"/>	<input type="text"/>	Sulfur Removal: <input type="text"/>
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier) (Process)</small>
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (MWout)</small>
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model) (Production) (MWout)</small>
			Steam Turbine: <input type="text"/>
			<small>(No.) (Supplier) (Model) (MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer: <input type="text" value="Foster Wheeler"/>
			Constructor: <input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="236"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="7"/> / <input type="text" value="0"/> / <input type="text" value="7"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1964"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals/Power"/>
Plt. Owner:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>			Plt. Owner Type:	<input type="text" value="Waste Processing"/>		
Plt. Operator:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>			Plant Name:	<input type="text" value="Schwarze Pumpe Power/Methanol Plant"/>		
Gas'n Tech.:	<input type="text" value="Lurgi Dry Ash Gasification Process"/>		<input type="text" value="Lurgi GmbH"/>	<input type="text" value="Moving-bed gasification"/>			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	<input type="text" value="Pauli Bauman"/>		<input type="text" value="pauli.bauman@sasol.com"/>				
	<small>(Contact)</small>		<small>(Email)</small>				

Facility Information

Facility Owner:	<input type="text" value="Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb"/>		Facility Name:	<input type="text" value="Secondary Raw Material Utilization Centre"/>	
Location:	<input type="text" value="Lausitz, Schwarze Pumpe"/>		Facility Type:	<input type="text" value="Waste Processing Plant"/>	
	<small>(City/State/Prov)</small>				
	<input type="text" value="Germany"/>		Facility Status:	<input type="text" value="Operating"/>	
	<small>(Country)</small>				
	<input type="text" value="Europe"/>				
	<small>(Region)</small>				

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/>	<input type="text" value="Biomass/Waste"/>	Rate (MAF):	<input type="text" value="1,500.0"/>	<input type="text" value="Estimate"/>
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	<input type="text" value="Municipal waste"/>	<input type="text" value="1,850 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Power"/>		Syngas Cap.:	<input type="text" value="3,000,000"/>	<input type="text" value="Estimate"/>
	<small>(Category)</small>			<small>(Nm3/d)</small>	<small>(Source)</small>
Product1:	<input type="text" value="Electricity"/>	<input type="text" value="75 MW"/>	Eq. IGCC Cap., MWe:	<input type="text" value="224.0"/>	
				<small>(Calculated)</small>	
Product2:	<input type="text" value="Methanol"/>	<input type="text" value="375 mt/d"/>	Fuel Input:	<input type="text" value="494.1"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>
Product3:	<input type="text"/>	<input type="text"/>	Syngas Output:	<input type="text" value="410.1"/>	<input type="text" value="Estimate"/>
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text" value="AGA"/>	<input type="text" value="Not integrated"/>	
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	<input type="text"/>	<input type="text"/>	<input type="text"/>	Soot Handling:
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	<input type="text" value="Lurgi Oel•Gas•Chemie GmbH"/>	<input type="text" value="Rectisol"/>	Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<input type="text"/>	<input type="text"/>
			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	<input type="text" value="1"/>	<input type="text" value="General Electric Co."/>	<input type="text" value="MS6001B"/>	<input type="text" value="44.5"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:	<input type="text" value="1"/>	<input type="text"/>	<input type="text" value="240 t/hr"/>	Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>	<input type="text" value="1"/>
				<small>(No.)</small>
				<small>(Supplier)</small>
				<small>(Model)</small>
				<small>(MWout)</small>
Prin. Contractor:	<input type="text"/>		Engineer:	<input type="text"/>
			Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

08-Dec-99

Key Gasifier Information

Facility ID:	90	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Jan.	1965	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Kemira Chemicals Oy					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Kemira Chemicals Oy					Plant Name:	Oulu Syngas Plant-I				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Kemira Chemicals Oy	Facility Name:	Oulu Chemical Plant
Location: (City/State/Prov)	Oulu	Facility Type:	Chemical Plant
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	105.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	bb/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	300,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	22.4 <small>(Calculated)</small>	
			Fuel Input:	50.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	41.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:					
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>				
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:					
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>
Steam Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Lurgi GmbH			Engineer:	
				Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	201	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	1966	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	BASF AG					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	BASF AG					Plant Name:	Ludwigshafen Oxochemicals Plant			
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification				
	(Technology Name)				(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com				
	(Contact)					(Email)				

Facility Information

Facility Owner:	BASF AG	Facility Name:	Ludwigshafen Chemical Plant
Location: (City/State/Prov)	Ludwigshafen	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	344.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Heavy fuel oil	344 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,000,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	74.7	
				(Calculated)	
			Fuel Input:	166.7	Estimate
				(MWt)	(Source)
			Syngas Output:	136.7	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		MAN GHH AG
	(Cooler Type)		(Cooler Supplier)
			
			(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Supplier)
			
			(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
			
			(Supplier) (Model) (MWout)
Prin. Contractor:			
Engineer:	Foster Wheeler, BASF		
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 281 **No. of Gasifiers: Op'g/Sp/Total** 5/ 0/ 5 **Gasifier Status:** Operating **Start Date:** 1968
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: Lurgi Multi Purpose Gasification Process (Technology Name) Lurgi Oel • Gas • Chemie GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 625.0 (mt/d) Estimate (Source)
Feed1: Oil 480 mt/d **Syngas Cap.:** 1,440,000 (Nm3/d) Gasifier licensor (Source)
Feed2: Slurry 144 mt/d **Eq. IGCC Cap., MWe:** 107.5 (Calculated)
Feed3:
Main Product: Power (Category) **Fuel Input:** 246.1 (MWt) Gasifier licensor data (Source)
Product1: Electricity 75 MW **Syngas Output:** 196.9 (MWt) Gasifier licensor data (Source)
Product2: Methanol 375 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="203"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="0"/> / <input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1969"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Chemische Werke Hüls AG"/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Chemische Werke Hüls AG"/>			Plant Name:	<input type="text" value="Marl Oxochemicals Plant"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> (Technology Name)		<input type="text" value="GE"/> (Licensor)	<input type="text" value="Entrained-flow gasification"/> (Technology Type)			
Vendor Contact:	<input type="text" value="Tim Huskey"/> (Contact)		<input type="text" value="timothy.huskey@ge.com"/> (Email)				

Facility Information

Facility Owner:	<input type="text" value="Chemische Werke Hüls AG"/>		Facility Name:	<input type="text" value="Marl Chemical Plant"/>	
Location: (City/State/Prov)	<input type="text" value="Marl"/>		Facility Type:	<input type="text" value="Chemical Plant"/>	
(Country)	<input type="text" value="Germany"/>		Facility Status:	<input type="text" value="Operating"/>	
(Region)	<input type="text" value="Europe"/>				

Feed/Product Information

Main Feed:	<input type="text" value="Liquid"/> (Category)	<input type="text" value="Petroleum"/> (Classification)	Rate (MAF):	<input type="text" value="206.0"/> (mt/d)	<input type="text" value="Estimate"/> (Source)
Feed1:	<input type="text" value="Vac. residue & heavy"/>		<input type="text" value="206 mt/d"/>		
Feed2:	<input type="text"/>				
Feed3:	<input type="text"/>				
Main Product:	<input type="text" value="Chemicals"/> (Category)		Syngas Cap.:	<input type="text" value="600,000"/> (Nm3/d)	<input type="text" value="Estimate"/> (Source)
Product1:	<input type="text" value="Oxochemicals"/>	<input type="text" value="mt/d"/>	Eq. IGCC Cap., MWe:	<input type="text" value="44.8"/> (Calculated)	
Product2:	<input type="text"/>		Fuel Input:	<input type="text" value="100.0"/> (MWt)	<input type="text" value="Estimate"/> (Source)
Product3:	<input type="text"/>		Syngas Output:	<input type="text" value="82.0"/> (MWt)	<input type="text" value="Estimate"/> (Source)

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> (Oxidant)	<input type="text"/> (ASU Supplier)	<input type="text"/> (ASU Integration)		
Syngas Cooler:	<input type="text" value="Radiant syngas cooler"/> (Cooler Type)		<input type="text" value="MAN GHH AG"/> (Cooler Supplier)	<input type="text"/> (MWth Duty)	Soot Handling: <input type="text" value="Total recycle to gasifier"/>
Gas Cleanup:	<input type="text"/> (Supplier)		<input type="text"/> (Process)	Sulfur Removal:	<input type="text"/> (Supplier) <input type="text"/> (Process)
Gas Turbine:	<input type="text"/> (No.)	<input type="text"/> (Supplier)	<input type="text"/> (Model)	<input type="text"/> (MWout)	
HRSG:	<input type="text"/> (No.)	<input type="text"/> (Supplier)	<input type="text"/> (Model)	<input type="text"/> (Production)	Steam Turbine: <input type="text"/> (No.) <input type="text"/> (Supplier) <input type="text"/> (Model) <input type="text"/> (MWout)
Prin. Contractor:	<input type="text"/>		Engineer:	<input type="text"/>	
			Constructor:	<input type="text"/>	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

02-Mar-99

Key Gasifier Information

Facility ID:	98	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Feb.	1969	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	DEA Mineraloel AG				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	DEA Mineraloel AG				Plant Name:	Wesseling Methanol Plant-VI					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	DEA Mineraloel AG	Facility Name:	Wesseling Chemical Plant
Location: (City/State/Prov)	Wesseling	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	447.2 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy cracked residu	447 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	582 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,300,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	97.0 <small>(Calculated)</small>	
			Fuel Input:	216.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	177.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:			Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(Production)</small>
			<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:
Constructor:	Lurgi GmbH		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 104 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1973
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Veba Oil Refining & Petrochemicals GmbH **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Veba Oil Refining & Petrochemicals GmbH **Plant Name:** Gelsenkirchen-Scholven Ammonia/Methanol Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Veba Oil Refining & Petrochemicals GmbH **Facility Name:** Gelsenkirchen-Scholven Chemical Plant
Location: (City/State/Prov) Gelsenkirchen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,479.4 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,479 mt/d **Syngas Cap.:** 4,300,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 321.0 (Calculated)
Feed3: **Fuel Input:** 716.8 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 587.8 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 1,200 mt/d
Product2: Methanol 600 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 207 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1974
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 860.0 (mt/d) Estimate (Source)
Feed1: Vac. residue & heavy 860 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol mt/d
Product2:
Product3:
Syngas Cap.: 2,500,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 186.6 (Calculated)
Fuel Input: 416.8 (MWt) Estimate (Source)
Syngas Output: 341.8 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** BASF

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="210"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="0"/> / <input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="1977"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Chemicals"/>
Plt. Owner:	<input type="text" value="Celanese Chemical (Ruh Chemie)"/>		Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>			
Plt. Operator:	<input type="text" value="Celanese Chemical (Ruh Chemie)"/>		Plant Name:	<input type="text" value="Oxochemicals Plant"/>			
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/>	<input type="text" value="GE"/>	<input type="text" value="Entrained-flow gasification"/>				
	(Technology Name)		(Licensor)	(Technology Type)			
Vendor Contact:	<input type="text" value="Tim Huskey"/>	<input type="text" value="timothy.huskey@ge.com"/>					
	(Contact)	(Email)					

Facility Information

Facility Owner:	<input type="text" value="Celanese Chemical (Ruh Chemie)"/>	Facility Name:	<input type="text" value="Oberhausen Chemical Plant"/>
Location: (City/State/Prov)	<input type="text" value="Oberhausen-Holtent"/>	Facility Type:	<input type="text" value="Chemical Plant"/>
(Country)	<input type="text" value="Germany"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Europe"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Liquid"/>	<input type="text" value="Petroleum"/>	Rate (MAF):	<input type="text" value="330.0"/>	<input type="text" value="Estimate"/>
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	<input type="text" value="Heavy fuel oil & vac."/>	<input type="text" value="330 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/>				
	(Category)				
Product1:	<input type="text" value="Oxochemicals"/>	<input type="text" value="mt/d"/>			
Product2:	<input type="text"/>	<input type="text"/>			
Product3:	<input type="text"/>	<input type="text"/>			
Syngas Cap.:	<input type="text" value="960,000"/>	<input type="text" value="Gasifier licensor"/>			
	(Nm3/d)	(Source)			
Eq. IGCC Cap., MWe:	<input type="text" value="71.7"/>				
	(Calculated)				
Fuel Input:	<input type="text" value="160.0"/>	<input type="text" value="Estimate"/>			
	(MWt)	(Source)			
Syngas Output:	<input type="text" value="131.2"/>	<input type="text" value="Gasifier licensor data"/>			
	(MWt)	(Source)			

Other Information

O2 Supply:	<input type="text" value="Oxygen"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text" value="Radiant syngas cooler"/>	<input type="text"/>	<input type="text"/>
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	(Supplier)
Sulfur Removal:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Supplier)	(Process)	
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (Production)
Steam Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	<input type="text"/>	Engineer:	<input type="text"/>
		Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production)

Steam Turbine:
(No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

27-Aug-03

Key Gasifier Information

Facility ID: 285	No. of Gasifiers: Op'g/Sp/Total 4/ 0/ 4	Gasifier Status: Operating	Start Date: 1978
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Hydro Agri Brunsbüttel GmbH	Plt. Owner Type: Oil Refining & Chemicals		
Plt. Operator: Hydro Agri Brunsbüttel GmbH	Plant Name: Brunsbüttel Ammonia Plant		
Gas'n Tech.: Shell Gasification Process (Technology Name)	Shell (Licensor)	Entrained-flow gasification (Technology Type)	
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact)	Piet.Zuideveld@shell.com (Email)		

Facility Information

Facility Owner: Hydro Agri Brunsbüttel GmbH	Facility Name: Brunsbüttel Chemical Plant
Location: (City/State/Prov) Brunsbüttel	Facility Type: Chemical Plant
(Country) Germany	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification)	Rate (MAF): 1,600.0 (mt/d)	Estimate (Source)
Feed1: Hvy vis. residue 1,600 mt/d	Syngas Cap.: 4,700,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:	Eq. IGCC Cap., MWe: 350.9 (Calculated)	
Feed3:		
Main Product: Chemicals (Category)	Fuel Input: 803.1 (MWt)	Gasifier licensor data (Source)
Product1: Ammonia 2,100 mt/d	Syngas Output: 642.5 (MWt)	Gasifier licensor data (Source)
Product2:		
Product3:		

Other Information

O2 Supply: Oxygen (Oxidant)	(ASU Supplier)	Integrated/N2 feeds NH3 prod'n (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Rectisol (Supplier) (Process)	Sulfur Removal: Claus (Supplier) (Process)
Gas Turbine: 0 (No.)	N.A. (Supplier) (Model)	0 (MWout)
HRSG: 0 (No.)	N.A. (Supplier) (Model)	0 (Production)
	Steam Turbine: 0 (No.)	N.A. (Supplier) (Model)
Prin. Contractor:	Engineer:	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	214	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1980
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Akzo Nobel/Berol-Kemi					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Akzo Nobel					Plant Name:	Stenungsund Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Akzo Nobel/Berol-Kemi	Facility Name:	Stenungsund Chemical Plant
Location: (City/State/Prov)	Stenungsund	Facility Type:	Chemical Plant
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	70.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy fuel oil	70 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	14.9 <small>(Calculated)</small>	
			Fuel Input:	33.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	27.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>				Soot Handling: Total recycle to gasifier
Gas Cleanup:						Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:						Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:	Davy Powergas		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 316 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: Oct. 1983

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Fuels

Plt. Owner: Oy W. Schauman Ab Mills Plt. Owner Type: Pulp & Paper Processing

Plt. Operator: Oy W. Schauman Ab Mills Plant Name: Pietarsaari ACFBG Unit

Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier (Technology Name) Foster Wheeler International (Licensor) Fluidized-bed gasification (Technology Type)

Vendor Contact: John Hemmings (Contact) john_hemmings@fwc.com (Email)

Facility Information

Facility Owner: Oy W. Schauman Ab Mills Facility Name: Pietarsaari Kiln

Location: (City/State/Prov) Pietarsaari Facility Type: Pulp & Paper Mill
(Country) Finland Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste Rate (MAF): (mt/d) (Source)

Feed1: Biofuels mt/d Syngas Cap.: 204,819 Estimate (Nm3/d) (Source)

Feed2: () Eq. IGCC Cap., MWe: 15.3 (Calculated)

Feed3: () Fuel Input: 35.0 Gasifier licensor data (MWt) (Source)

Main Product: Gaseous fuels (Category) Syngas Output: 28.0 Estimate (MWt) (Source)

Product1: Syngas 35 MWth

Product2: ()

Product3: ()

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling: ()

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)

Prin. Contractor: () Engineer: () Constructor: ()

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	317	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Fuels	
Plt. Owner:	Norrundet Bruks Ab				Plt. Owner Type:	Pulp & Paper Processing				
Plt. Operator:	Norrundet Bruks Ab				Plant Name:	Norrundet ACFBG Unit				
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier			Foster Wheeler International		Fluidized-bed gasification				
	(Technology Name)			(Licensor)		(Technology Type)				
Vendor Contact:	John Hemmings			john_hemmings@fwc.com						
	(Contact)			(Email)						

Facility Information

Facility Owner:	Norrundet Bruks Ab	Facility Name:	Norrundet Mill
Location: (City/State/Prov)	Norrundet	Facility Type:	Pulp & Paper Mill
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid	Biomass/Waste	Rate (MAF):		
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Bark	mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels				
	(Category)				
Product1:	Syngas	25 MWth			
Product2:					
Product3:					
			Syngas Cap.:	146,299	Estimate
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	10.9	
				(Calculated)	
			Fuel Input:	25.0	Gasifier licensor data
				(MWt)	(Source)
			Syngas Output:	20.0	Estimate
				(MWt)	(Source)

Other Information

O2 Supply:	Air		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:			
	(Contractor)		(Engineer)
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

02-Mar-99

Key Gasifier Information

Facility ID:	225	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Quimigal Adubos		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Quimigal Adubos		Plant Name:	Barreiro Ammonia Plant			
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Quimigal Adubos		Facility Name:	Barreiro Chemical Plant		
Location: (City/State/Prov)	Barreiro, Lavradio		Facility Type:	Chemical Plant		
(Country)	Portugal		Facility Status:	Operating		
(Region)	Europe					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	825.8 (mt/d)	Estimate (Source)
Feed1:	Vac. residue	888 mt/d	Syngas Cap.:	2,400,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:			Eq. IGCC Cap., MWe:	179.2 (Calculated)	
Feed3:			Fuel Input:	400.1 (MWt)	Gasifier licensor data (Source)
Main Product:	Chemicals (Category)		Syngas Output:	328.1 (MWt)	Gasifier licensor data (Source)
Product1:	Ammonia	mt/d			
Product2:					
Product3:					

Other Information

O2 Supply:			
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Fire-tube boiler (Cooler Type)		
		(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH (Supplier)	Rectisol (Process)	Sulfur Removal: (Supplier) (Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Lurgi GmbH	Engineer:	Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	46	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:	1985	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Rheinbraun				Plt. Owner Type:					
Plt. Operator:	Rheinbraun				Plant Name:	Ville Methanol Plant				
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification				
	(Technology Name)				(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey				timothy.huskey@ge.com					
	(Contact)				(Email)					

Facility Information

Facility Owner:	Rheinbraun	Facility Name:	Ville/Berrenrath Coal Briquetting Plant
Location: (City/State/Prov)	Ville	Facility Type:	Other
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	977.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Coal	977			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Methanol	1,000	mt/d		
Product2:					
Product3:					
Syngas Cap.:	2,231,500		Estimate		
	(Nm3/d)		(Source)		
Eq. IGCC Cap., MWe:	166.6				
	(Calculated)				
Fuel Input:	381.3		Estimate		
	(MWt)		(Source)		
Syngas Output:	305.1		Estimate		
	(MWt)		(Source)		

Other Information

O2 Supply:				
	(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:				
	(Cooler Type)		(Cooler Supplier)	(MWth Duty)
Gas Cleanup:				
	(Supplier)	(Process)	(Supplier)	(Process)
Gas Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
HRSG:				
	(No.)	(Supplier)	(Model)	(Production)
Steam Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Uhde			
	(Contractor)		(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	319	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	1985
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Fuels
Plt. Owner:	Portucel			Plt. Owner Type:	Pulp & Paper Processing		
Plt. Operator:	Portucel			Plant Name:	Rodao ACFBG Unit		
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>		Foster Wheeler International <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	John Hemmings <small>(Contact)</small>		john_hemmings@fwc.com <small>(Email)</small>				

Facility Information

Facility Owner:	Portucel	Facility Name:	Rodao Mill
Location: (City/State/Prov)	Rodao	Facility Type:	Pulp & Paper Mill
(Country)	Portugal	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	<input type="text"/> <small>(mt/d)</small>	<input type="text"/> <small>(Source)</small>
Feed1:	Bark				
Feed2:					
Feed3:					
Main Product:	Gaseous fuels <small>(Category)</small>				
Product1:	Syngas	15 MWth			
Product2:					
Product3:					
			Syngas Cap.:	87,800 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	6.6 <small>(Calculated)</small>	
			Fuel Input:	15.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	15.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>	<input type="text"/> <small>(ASU Supplier)</small>	<input type="text"/> <small>(ASU Integration)</small>
Syngas Cooler:	<input type="text"/> <small>(Cooler Type)</small>	<input type="text"/> <small>(Cooler Supplier)</small>	<input type="text"/> <small>(MWth Duty)</small>
Gas Cleanup:	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Process)</small>	Sulfur Removal: <input type="text"/> <small>(Supplier)</small> <input type="text"/> <small>(Process)</small>
Gas Turbine:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small> <input type="text"/> <small>(MWout)</small>
HRSG:	<input type="text"/> <small>(No.)</small>	<input type="text"/> <small>(Supplier)</small>	<input type="text"/> <small>(Model)</small> <input type="text"/> <small>(Production)</small>
			Steam Turbine: <input type="text"/> <small>(No.)</small> <input type="text"/> <small>(Supplier)</small> <input type="text"/> <small>(Model)</small> <input type="text"/> <small>(MWout)</small>
Prin. Contractor:	<input type="text"/>	Engineer:	<input type="text"/>
		Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 13-Mar-01

13-Mar-01

Key Gasifier Information

Facility ID:	45	No. of Gasifiers: Op'g/Sp/Total	6/	0/	6	Gasifier Status:	Operating	Start Date:		1985
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Mitteldeutsche Erdöl-Raffinerie GmbH				Plant Name:	Leuna Methanol Anlage				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Mitteldeutsche Erdöl-Raffinerie GmbH	Facility Name:	Mider Refinery
Location: (City/State/Prov)	Leuna	Facility Type:	Refinery
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	2,400.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Visbreaker residue	2,400 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	H2	42 MMscf/d			
Product2:	Methanol	600,000 mt/yr			
Product3:	Electricity	MW			
			Syngas Cap.:	7,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	537.5 <small>(Calculated)</small>	
			Fuel Input:	1,162.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	984.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling: NSRU
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal: <small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	48	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1986	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	SAR GmbH					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	SAR GmbH					Plant Name:	SAR Plant-II				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	SAR GmbH	Facility Name:	Oberhausen Chemical Plant
Location: (City/State/Prov)	Oberhausen-Holten	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	415.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	730 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:	H2	Nm3/d			
Product3:					
			Syngas Cap.:	1,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	89.6 <small>(Calculated)</small>	
			Fuel Input:	200.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	164.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench/syngas cooler combination <small>(Cooler Type)</small>				
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:	
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:		
				<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	
			Steam Turbine:		
				<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>
					<small>(MWout)</small>
Prin. Contractor:	Uhde		Engineer:	Uhde	
			Constructor:	Uhde	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	298	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	MSK-Radna					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	MSK-Radna					Plant Name:	Methanol Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	MSK-Radna	Facility Name:	Kikinda Chemical Plant
Location: (City/State/Prov)	Kikinda	Facility Type:	Chemical Plant
(Country)	Former Yugoslavia	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	23 MMscf/d				Syngas Cap.:	1,540,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	115.0 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	247.6 Estimate <small>(MWt) (Source)</small>
Product1:	Methanol	mt/d				Syngas Output:	210.5 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Technip					Constructor:	
				<small>(Engineer)</small>	<small>(Constructor)</small>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	43	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1991
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Air Liquide (Dow Stade GmbH)				Plt. Owner Type:	Industrial Gas Supply			
Plt. Operator:	Air Liquide (Dow Stade GmbH)				Plant Name:	Stade Syngas Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Air Liquide (Dow Stade GmbH)	Facility Name:	Stade Chemical Plant
Location: (City/State/Prov)	Stade	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	3,855,000 MMscf/d				Syngas Cap.:	264,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	19.7 <small>(Calculated)</small>
Feed3:						Fuel Input:	42.5 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	36.1 Estimate <small>(MWt) (Source)</small>
Product1:	CO	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:	Linde		Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	114	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1992
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processor		
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant		
Gas'n Tech.:	GSP Gasification Process <small>(Technology Name)</small>			Future Energy GmbH <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dirk Volkmann <small>(Contact)</small>			d.volkmann@future-energy.de <small>(Email)</small>					

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH			Facility Name:	Secondary Raw Material Utilization Centre			
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe			Facility Type:	Waste Processing			
(Country)	Germany			Facility Status:	Operating			
(Region)	Europe							

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	150.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>					
Feed1:	Waste oil/slurry tar	150 mt/d			Syngas Cap.:	1,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>			
Feed2:					Eq. IGCC Cap., MWe:	89.6 <small>(Calculated)</small>				
Feed3:					Fuel Input:	234.2 <small>(MWt)</small>	Estimate <small>(Source)</small>			
Main Product:	Power <small>(Category)</small>				Syngas Output:	164.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>			
Product1:	Electricity	75 MW								
Product2:	Methanol	375 mt/d								
Product3:										

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>							
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:				
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>		Sulfur Removal:					
Gas Turbine:										
HRSG:						Steam Turbine:				
Prin. Contractor:			Engineer:				Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

23-Feb-01

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 56 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** April 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nuon Power Buggenum **Plt. Owner Type:** Utility
Plt. Operator: Nuon Power Buggenum **Plant Name:** Buggenum IGCC Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Nuon Power **Facility Name:** Willem-Alexander Centrale (WAC)
Location: (City/State/Prov) Haelen, Limburg **Facility Type:** Electric Utility
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Bit. coal 2,000 mt/d (max)
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 253 MWe
Product2:
Product3:
Syngas Cap.: 3,408,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 254.4 (Calculated)
Fuel Input: 702.6 (MWt) Gasifier licensor data (Source)
Syngas Output: 465.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Water-tube boiler with superheater (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus (O2 Blown)/SCOT (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.2 (Model) 156 (MWout)
HRSG: 1 (No.) Stork (Supplier) (Model) 300 (Production) **Steam Turbine:** 3 (No.) Siemens/KWU (Supplier) 1 HP/1IP/1 LP (Model) 128 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	240	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	Rüdersdorfer Zement GmbH					Plt. Owner Type:					
Plt. Operator:	Rüdersdorfer Zement GmbH					Plant Name:	Fuel Gas Plant				
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>					Lurgi Envirotherm GmbH <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>					claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Rüdersdorfer Zement GmbH	Facility Name:	Rüdersdorf Cement Kiln
Location: (City/State/Prov)	Rüdersdorf	Facility Type:	Other
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	320.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Biomass	320 mt/d			
Feed2:	Wastes				
Feed3:	Carbon ash				
Main Product:	Gaseous fuels <small>(Category)</small>				
Product1:	Fuel gas	100	MWth		
Product2:					
Product3:					
			Syngas Cap.:	732,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	54.6 <small>(Calculated)</small>	
			Fuel Input:	110.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	100.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>							
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>					
Syngas Cooler:						Soot Handling:		
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>			<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:					Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>	
Prin. Contractor:				Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

 (Country) **Facility Status:**

 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Main Product:

(Category)

Fuel Input:

(MWt) (Source)

Product1:

Syngas Output:

(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-03

Key Gasifier Information

Facility ID:	58	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1997
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Elcogas SA				Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Elcogas SA				Plant Name:	Puertollano GCC Plant				
Gas'n Tech.:	Krupp Koppers PRENFLO Gasification Technology <small>(Technology Name)</small>			Krupp Uhde <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	H. Max Hooper <small>(Contact)</small>				hooperm@usa.kud.thyssenkrupp.com <small>(Email)</small>					

Facility Information

Facility Owner:	Elcogas SA	Facility Name:	Puertollano Power Plant
Location: (City/State/Prov)	Puertollano	Facility Type:	Electric Utility
(Country)	Spain	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Coal & petcoke	2,600 mt/d				Syngas Cap.:	4,300,000 <small>(Nm³/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	321.0 <small>(Calculated)</small>
Main Product:	Power <small>(Category)</small>					Fuel Input:	734.8 <small>(MWt)</small>
Product1:	Electricity	335 MWe					Gasifier licensor data <small>(Source)</small>
Product2:						Syngas Output:	587.8 <small>(MWt)</small>
Product3:							Gasifier licensor data <small>(Source)</small>

Other Information

O ₂ Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Convective syngas cooler <small>(Cooler Type)</small>	Steinmüller <small>(Cooler Supplier)</small>		Soot Handling: <small>(MWth Duty)</small>
Gas Cleanup:	Krupp Uhde <small>(Supplier)</small>	MDEA <small>(Process)</small>	Sulfur Removal:	Claus <small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	Siemens/KWU <small>(Supplier)</small>	V94.3 <small>(Model)</small>	182.3 <small>(MWout)</small>
HRSG:	1 <small>(No.)</small>	Babcock & Wilcox <small>(Supplier)</small>		135.4 <small>(MWout)</small>
Prin. Contractor:	Krupp Uhde		Engineer:	Krupp Uhde
			Constructor:	B&W/Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 57 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** Oct. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shell Nederland Raffinaderij BV **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell Nederland Raffinaderij BV **Plant Name:** Pernis Shell IGCC/Hydrogen Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell Nederland Raffinaderij BV **Facility Name:** Pernis Refinery
Location: (City/State/Prov) Rotterdam **Facility Type:** Refinery
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,650.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,650 mt/d **Syngas Cap.:** 4,662,200 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 348.0 (Calculated)
Feed3: **Fuel Input:** 799.5 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 637.3 (MWt) Gasifier licensor data (Source)
Product1: H2 100 MMscf/d
Product2: Electricity 110 MW
Product3: Steam 200 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) SFL Netherlands (Cooler Supplier) 94.5 (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Shell (Supplier) Claus (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6B (Model) 86 (MWout)
HRSG: 2 (No.) (Supplier) (Model) 290 mt/hr (Production) **Steam Turbine:** 2 (No.) GE/Nuovo Pignone (Supplier) (Model) 41 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** Fluor Daniel B.V. **Constructor:** Fluor Daniel B.V.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 314 No. of Gasifiers: Op'g/Sp/Total 1/ 0/ 1 Gasifier Status: Operating Start Date: Jan. 1998
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Power
Plt. Owner: Lahden Lämpövoima Oy Plt. Owner Type: Utility
Plt. Operator: Lahden Lämpövoima Oy Plant Name: Kymijärvi ACFBG Plant
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier Foster Wheeler International Fluidized-bed gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: John Hemmings john_hemmings@fwc.com
(Contact) (Email)

Facility Information

Facility Owner: Lahden Lämpövoima Oy Facility Name: Kymijärvi Power Station
Location: (City/State/Prov) Lahti Facility Type: Electric Utility
(Country) Finland Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste Rate (MAF):
(Category) (Classification) (mt/d) (Source)
Feed1: Biofuels mt/d Syngas Cap.: 351,118 Estimate
Feed2: (Source) (Nm3/d)
Feed3: Eq. IGCC Cap., MWe: 26.2
(Calculated)
Main Product: Power Fuel Input: 60.0 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Electricity 42 MWe Syngas Output: 48.0 Estimate
Product2: District heat (MWt) (Source)
Product3:

Other Information

O2 Supply: Air
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 1 49
(No.) (Supplier) (Model) (MWout)
HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Dec-00

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	268	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	Sept. 1999
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb			Plt. Owner Type:	Waste Processor		
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb			Plant Name:	Schwarze Pumpe Power/Methanol Plant		
Gas'n Tech.:	BGL Gasification Technology <small>(Technology Name)</small>		Allied Resources Corp. (Envirotherm) <small>(Licensor)</small>		Fixed-bed gasification <small>(Technology Type)</small>		
Vendor Contact:	Bill Jones <small>(Contact)</small>		bjones@safeguardintl.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH	Facility Name:	Secondary Raw Material Utilization Centre
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe	Facility Type:	Waste Processing
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	750.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Household waste	600 mt/d			
Feed2:	Bit. coal	150 mt/d			
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	75 MW			
Product2:	Methanol	375 mt/d			
Product3:					
			Syngas Cap.:	1,138,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	85.0 <small>(Calculated)</small>	
			Fuel Input:	194.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	155.6 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:
Gas Turbine:			
HRSG:			
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	54	No. of Gasifiers: Op'g/Sp/Total	2 / 0 / 2	Gasifier Status:	Operating	Start Date:	July 1999
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	ISAB Energy			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	ISAB Energy			Plant Name:	ISAB Energy IGCC Project		
Gas'n Tech.:	GE Gasification Technology (Technology Name)	GE (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	ISAB S.p.A.		Facility Name:	Priolo Gargallo Refinery	
Location: (City/State/Prov)	Priolo Gargallo, Sicily		Facility Type:	Refinery	
(Country)	Italy		Facility Status:	Operating	
(Region)	Europe				

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	3,163.0 (mt/d)	Gasifier contractor (Source)
Feed1:	ROSE asphalt	3,168 mt/d			
Feed2:					
Feed3:					
Main Product:	Power (Category)		Syngas Cap.:	8,800,000 (Nm ³ /d)	Gasifier contractor (Source)
Product1:	Electricity	512 MWe	Eq. IGCC Cap., MWe:	656.9 (Calculated)	
Product2:			Fuel Input:	1,360.0 (MWt) Gasifier contractor (Source)	
Product3:			Syngas Output:	1,203.0 (MWt) Estimate (Source)	

Other Information

O ₂ Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	Across-the-fence/No integration (ASU Integration)		
Syngas Cooler:	Direct water quench cooler (Cooler Type)		(Cooler Supplier)	(MWth Duty)	Soot Handling: Naphtha recovery & recy
Gas Cleanup:	Dow Chemical Co. (Supplier)	MDEA (Process)	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm (Supplier)	Claus (O ₂ blown) (Process)
Gas Turbine:	2 (No.)	Siemens/Ansaldo (Supplier)	V94.2K (Model)	330 (MWout)	
HRSG:	2 (No.)	Siemens/Ansaldo (Supplier)	(Model)	(Production)	Steam Turbine: 2 (No.) Siemens/Ansaldo (Supplier) (Model) 230 (MWout)
Prin. Contractor:	Snamprogetti		Engineer:	Snamprogetti-Foster Wheeler	
			Constructor:	Snamprogetti-Foster Wheeler	

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID: 55 No. of Gasifiers: Op'g/Sp/Total 3/0/3 Gasifier Status: Operating Start Date: April 2000
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Power
Plt. Owner: SARLUX srl Plt. Owner Type: Special Joint Venture
Plt. Operator: SARLUX srl Plant Name: SARLUX IGCC Project
Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Saras S.p.A. Facility Name: Saras S.p.A. Raffinerie Sarde
Location: (City/State/Prov) Sarroch, Cagliari, Sardinia Facility Type: Refinery
(Country) Italy Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 3,545.0 Gasifier contractor
(Category) (Classification) (mt/d) (Source)
Feed1: Visbreaker residue 3,552 mt/d Syngas Cap.: 10,400,000 Gasifier contractor
Feed2: Nm3/d (Source)
Feed3: Eq. IGCC Cap., MWe: 776.4 (Calculated)
Main Product: Power (Category) Fuel Input: 1,586.3 Gasifier contractor
(MWt) (Source)
Product1: Electricity 551 MWe Syngas Output: 1,271.2 Gasifier contractor
Product2: H2 960,000 Nm3/d (MWt) (Source)
Product3: Steam 185 mt/hr

Other Information

O2 Supply: Oxygen Air Liquide Across-the-fence/No integration
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler Soot Handling: Naphtha recovery & recy
(Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: UOP LLC Selextol Sulfur Removal: Lurgi Oel•Gas•Chemie Gm Claus (O2 blown)
(Supplier) (Process) (Supplier) (Process)
Gas Turbine: 3 General Electric Co. 9E 414
(No.) (Supplier) (Model) (MWout)
HRSG: 3 General Electric Co. 700 t/hr Steam Turbine: 3 General Electric Co. 152.4
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Snamprogetti Engineer: RTI Constructor: RTI

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	322	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	May	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	DEA Mineraloel AG					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	DEA Mineraloel AG					Plant Name:	Wesseling Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	DEA Mineraloel AG	Facility Name:	Wesseling Refinery
Location: (City/State/Prov)	Wesseling	Facility Type:	Refinery
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Residual oil	544 mt/d				Syngas Cap.:	1,500,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	112.0 <small>(Calculated)</small>
Feed3:						Fuel Input:	250.1 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	205.1 Estimate <small>(MWt) (Source)</small>
Product1:	Methanol	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:	Edeleanu GmbH		Engineer:	Edeleanu GmbH		Constructor:	Edeleanu GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 395 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:**
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:**
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: BGL Gasification Technology (Technology Name) Allied Resources Corp. (Envirotherm) (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Bill Jones (Contact) bjones@safeguardintl.com (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:**
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:**
 (Country) Germany **Facility Status:**
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** 0.0 (mt/d) (Source)
 (Category) (Classification)
Feed1: Biomass 0
Feed2: Coal 0
Feed3: 0
Syngas Cap.: 1,120,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 83.6 (Calculated)
Main Product: Power (Category) **Fuel Input:** 191.0 (MWt) (Source)
Product1: Electricity 0 **Syngas Output:** 164.0 (MWt) (Source)
Product2: 0
Product3: 0

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

Key Gasifier Information

Facility ID:	242	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:		2000	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Gases		
Plt. Owner:	EPZ				Plt. Owner Type:						
Plt. Operator:	EPZ				Plant Name:	Amercentrale Fuel Gas Plant					
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>				Lurgi Envirotherm GmbH <small>(Licensor)</small>		Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>						

Facility Information

Facility Owner:	EPZ			Facility Name:	Amercentrale Plant		
Location: (City/State/Prov)	Geertruidenberg			Facility Type:			
(Country)	Netherlands			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>	
Feed1:	Demolition wood	500 mt/d				
Feed2:						
Feed3:						
Main Product:	Power <small>(Category)</small>					
Product1:	Electricity	85 MWth				
Product2:						
Product3:						
			Syngas Cap.:	614,300 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	45.9 <small>(Calculated)</small>		
			Fuel Input:	105.0 <small>(MWt)</small>	Estimate <small>(Source)</small>	
			Syngas Output:	84.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
Syngas Cooler:	Water-tube <small>(Cooler Type)</small>	Baumgarte <small>(Cooler Supplier)</small>		Soot Handling:			
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Scrubber <small>(Process)</small>	Sulfur Removal:				
Gas Turbine:							
HRSG:							
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 21-Feb-01

Key Gasifier Information

Facility ID:	280	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2001
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Corenso United Oy Ltd.					Plt. Owner Type:	Pulp & Paper Processing		
Plt. Operator:	Corenso United Oy Ltd.					Plant Name:	Varkaus ACFBG Plant		
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>		Fluidized-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	John Hemmings <small>(Contact)</small>				john_hemmings@fwc.com <small>(Email)</small>				

Facility Information

Facility Owner:	Corenso United Oy Ltd.	Facility Name:	Varkaus Gas Plant
Location: (City/State/Prov)	Varkaus	Facility Type:	Pulp & Paper Mill
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):			
				<small>(mt/d)</small>	<small>(Source)</small>	
Feed1:	Packaging wastes		mt/d			
Feed2:						
Feed3:						
Main Product:	Gaseous fuels <small>(Category)</small>					
Product1:	Syngas		Nm3/d			
Product2:						
Product3:						
				Syngas Cap.:	234,133	Estimate <small>(Source)</small>
					<small>(Nm3/d)</small>	
				Eq. IGCC Cap., MWe:	17.5	 <small>(Calculated)</small>
				Fuel Input:	40.0	Gasifier licensor data <small>(Source)</small>
					<small>(MWt)</small>	
				Syngas Output:	32.0	Estimate <small>(Source)</small>
					<small>(MWt)</small>	

Other Information

O2 Supply:	Air <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	1		12.5	kg/s	Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	
					<small>(Supplier)</small>	<small>(Model)</small>	
						<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 329 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Startup **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: AGIP Raffinazione S.p.A. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: AGIP Raffinazione S.p.A. **Plant Name:** Agip IGCC
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: AGIP Raffinazione S.p.A. **Facility Name:** Sannazzaro Refinery
Location: (City/State/Prov) Sannazzaro **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,150.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,200 mt/d **Syngas Cap.:** 3,340,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 249.3 (Calculated)
Feed3: **Fuel Input:** 556.8 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category) **Syngas Output:** 456.6 (MWt) Gasifier licensor data (Source)
Product1: Electricity MW
Product2: H2 Nm3/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	333	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Sokolovska Uhelna, A.S.		Plt. Owner Type:	Mining Company			
Plt. Operator:	Sokolovska Uhelna, A.S.		Plant Name:	Thermoselece Vresova			
Gas'n Tech.:	Siemens SFG Gasification Process <small>(Technology Name)</small>	Siemens Power Generation <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Harry Morehead <small>(Contact)</small>	harry.morehead@siemens.com <small>(Email)</small>					

Facility Information

Facility Owner:	Chemoprojekt, a.s.	Facility Name:	Thermoselece Vresova
Location: (City/State/Prov)	Vresova	Facility Type:	Lignite Processing
(Country)	Czech Republic	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	 <small>(mt/d)</small>	 <small>(Source)</small>
Feed1:	Lignite	1,968 mt/d	Syngas Cap.:	750,147 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:			Eq. IGCC Cap., MWe:	56.0 <small>(Calculated)</small>	
Feed3:					
Main Product:	Gaseous fuels <small>(Category)</small>		Fuel Input:	175.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Product1:			Syngas Output:	140.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Product2:					
Product3:					

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>			
Syngas Cooler:	 <small>(Cooler Type)</small>	 <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>	Soot Handling:		
Gas Cleanup:	 <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	 <small>(Supplier)</small>	 <small>(Process)</small>	
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	9E <small>(Model)</small>	400 <small>(MWout)</small>		
HRSG:	 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(Production)</small>	Steam Turbine:	
		 <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model)</small>	 <small>(MWout)</small>	
Prin. Contractor:		Engineer:	Krupp Unde/Lurgi Envirotherm		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	327	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2009	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	ATI Sulcis				Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	ATI Sulcis				Plant Name:	Sulcis IGCC Project				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	ATI Sulcis			Facility Name:	Portoscuso Power Plant		
Location: (City/State/Prov)	Portoscuso, Sardinia			Facility Type:	IPP		
(Country)	Italy			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	3,065.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	4,356 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	450 MW			
Product2:					
Product3:					
			Syngas Cap.:	7,000,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	522.6 <small>(Calculated)</small>	
			Fuel Input:	1,196.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	956.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		On-site/No integration <small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling:	
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol-M <small>(Process)</small>	Sulfur Removal:			Claus/SCOT <small>(Process)</small>	
Gas Turbine:	2 <small>(No.)</small>	Ansaldo <small>(Supplier)</small>	V94.2 <small>(Model)</small>	346 <small>(MWout)</small>			
HRSG:	2 <small>(No.)</small>				Steam Turbine:	1 <small>(No.)</small>	239 <small>(MWout)</small>
Prin. Contractor:			Engineer:	Fluor Daniel		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 283 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1977
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Hoechst Celanese Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Hoechst Celanese Plant Name: Houston Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Hoechst Celanese Facility Name: Houston Chemical Plant
Location: (City/State/Prov) Houston, TX Facility Type: Chemical Plant
(Country) United States Facility Status: Operating
(Region) North America

Feed/Product Information

Main Feed: Gaseous Gas Rate (MAF): (mt/d) (Source)
(Category) (Classification)
Feed1: Natural gas 820,850 Nm3/d Syngas Cap.: 2,100,000 Gasifier licensor
(Nm3/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 156.8
(Calculated)
Feed3:
Main Product: Chemicals Fuel Input: 337.8 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Oxochemicals mt/d Syngas Output: 287.1 Gasifier licensor data
(MWt) (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: 286 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1978
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Exxon Chemical Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Exxon Chemical Co. **Plant Name:** Baton Rouge Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Exxon Chemical Co. **Facility Name:** Baton Rouge Chemical Plant
Location: (City/State/Prov) Baton Rouge, LA **Facility Type:** Chemical Plant
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 196.0 (mt/d) Estimate (Source)
Feed1: Heavy fuel oil 196 mt/d **Syngas Cap.:** 570,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 42.6 (Calculated)
Feed3: **Fuel Input:** 95.0 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 77.9 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	212	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1979	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Millenium (Quantum)					Plt. Owner Type:	Industrial Gas Supply			
Plt. Operator:	Millenium (Quantum)					Plant Name:	LaPorte Syngas Plant			
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Millenium (Quantum)	Facility Name:	Deer Park Chemical Plant
Location: (City/State/Prov)	Deer Park/LaPorte, TX	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):					
				<small>(mt/d)</small>	<small>(Source)</small>			
Feed1:	Natural gas	70 MMscf/d				Syngas Cap.:	4,800,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	358.3 <small>(Calculated)</small>	
Feed3:						Fuel Input:	772.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	656.2 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
Product1:	Methanol	mt/d						
Product2:	CO	mt/d						
Product3:								

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Products & Chemicals, Inc. <small>(ASU Supplier)</small>					
			<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench/syngas cooler combination <small>(Cooler Type)</small>					Soot Handling:	Total recycle to gasifier
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
						<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:					Engineer:		
					Constructor:	Du Pont	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	296	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1983
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Sunoco					Plt. Owner Type:	Unspecified		
Plt. Operator:	Sunoco					Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	6 MMscf/d				Syngas Cap.:	400,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	64.4 Estimate <small>(MWt)</small>
Product1:	Oxochemicals	mt/d				Syngas Output:	54.7 Gasifier licensor data <small>(MWt)</small>
Product2:							<small>(Source)</small>
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Dvay McKee					Constructor:	
				<small>(Engineer)</small>	<small>(Constructor)</small>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID:	297	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	1983
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Dow (former Union Carbide)			Plt. Owner Type:	Unspecified		
Plt. Operator:	Dow (former Union Carbide)			Plant Name:	Texas City Syngas Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Unspecified owner		Facility Name:	Unspecified facility	
Location:	(City/State/Prov)	Unspecified location	Facility Type:	Unknown	
	(Country)	United States	Facility Status:	Operating	
	(Region)	North America			

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):		
			(mt/d)	(Source)	
Feed1:	Natural gas	12 MMscf/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)		Syngas Cap.:	830,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	Oxochemicals	mt/d	Eq. IGCC Cap., MWe:	62.0 (Calculated)	
Product2:			Fuel Input:	133.5 (MWt)	Estimate (Source)
Product3:			Syngas Output:	113.5 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)					
	(ASU Supplier)		(ASU Integration)			
Syngas Cooler:	Radiant syngas cooler (Cooler Type)				Soot Handling:	
			(Cooler Supplier)	(MWth Duty)		
Gas Cleanup:			Sulfur Removal:			
	(Supplier)	(Process)	(Supplier)	(Process)		
Gas Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:						
	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine:	
			(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Davy McKee		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	27	No. of Gasifiers: Op'g/Sp/Total	1/	1/	2	Gasifier Status:	Operating	Start Date:	July	1983	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Eastman Chemical Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Eastman Chemical Co.					Plant Name:	Kingsport Integrated Coal Gasification Facility				
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification					
	(Technology Name)				(Licensor)	(Technology Type)					
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	Eastman Chemical Co.	Facility Name:	Kingsport Chemical Complex
Location: (City/State/Prov)	Kingsport, TN	Facility Type:	Petrochemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	750.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Bit. coal	1,225 t/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	Acetic anhydride	680 mt/d			
Product2:	Methanol	550 mt/d			
Product3:					
			Syngas Cap.:	1,600,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	119.4	
				(Calculated)	
			Fuel Input:	291.6	Estimate
				(MWt)	(Source)
			Syngas Output:	218.7	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen	Air Products & Chemicals, Inc.	Across-the-fence
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Linde AG	Rectisol	Sulfur Removal:
	(Supplier)	(Process)	Claus/SCOT
			(Supplier) (Process)
Gas Turbine:			
	(No.) (Supplier)	(Model)	(MWout)
HRSG:	1		200000 lb/hr
	(No.) (Supplier)	(Model)	(Production)
		Steam Turbine:	
			(No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Bechtel		Engineer: Bechtel
			Constructor: John Brown

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	32	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Motiva Enterprises LLC					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Motiva Enterprises LLC					Plant Name:	Convent H2 Plant		
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification			
	(Technology Name)				(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com			
	(Contact)					(Email)			

Facility Information

Facility Owner:	Motiva Enterprises LLC	Facility Name:	Star Enterprise Convent Refinery
Location: (City/State/Prov)	Convent, LA	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	650.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	H-Oil bottoms	650 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	H2	63 MMscf/d			
Product2:					
Product3:					
			Syngas Cap.:	1,880,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	140.3	
				(Calculated)	
			Fuel Input:	313.4	Estimate
				(MWt)	(Source)
			Syngas Output:	257.0	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen		
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:			
	(Supplier)	(Process)	(Process)
Gas Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
HRSG:			
	(No.)	(Supplier)	(Model) (MWout)
Steam Turbine:			
	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Fluor Daniel		
	(Contractor)	(Engineer)	(Constructor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 24 **No. of Gasifiers: Op'g/Sp/Total** 12/ 2/ 14 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Dakota Gasification Co. **Plt. Owner Type:** Utility
Plt. Operator: Dakota Gasification Co. **Plant Name:** Great Plains Synfuels Plant
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Dakota Gasification Co. **Facility Name:** Great Plains Synfuels Plant
Location: (City/State/Prov) Bismarck, ND **Facility Type:** Electric Utility
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 8,000.0 Gasifier licensor data
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 14,000 t/d **Syngas Cap.:** 13,900,000 Estimate
Feed2: Ref. residue 50 t/d (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 1,037.7
 (Calculated)
Main Product: Gaseous fuels **Fuel Input:** 2,533.7 Estimate
 (Category) (MWt) (Source)
Product1: SNG 160 MMscf/d **Syngas Output:** 1,900.3 Estimate
Product2: CO2 5,000 mt/d (MWt) (Source)
Product3:

Other Information

O2 Supply: Oxygen Linde AG Across-the-fence/No integration
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube Soot Handling:
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: NH3-based SO2 scrubber
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: C-E Lummus/Kaiser **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

14-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**
Project Count: **Plt. Type:** **Project Reality:** **Application:**
Plt. Owner: **Plt. Owner Type:**
Plt. Operator: **Plant Name:**
Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)
Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**
Location: (City/State/Prov) **Facility Type:**
(Country) **Facility Status:**
(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)
Feed1:
Feed2:
Feed3:
Main Product:
(Category)
Product1:
Product2:
Product3:
Syngas Cap.:
(Nm3/d) (Source)
Eq. IGCC Cap., MWe:
(Calculated)
Fuel Input:
(MWt) (Source)
Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)
Gas Turbine:
(No.) (Supplier) (Model) (MWout)
HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	36	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	April	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	T & P Syngas (Texaco/Praxair)					Plt. Owner Type:	Special Joint Venture				
Plt. Operator:	Praxair					Plant Name:	Texas City Syngas Plant				
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	T & P Syngas (Texaco/Praxair)	Facility Name:	Texas City Industrial Gas Utility Island
Location: (City/State/Prov)	Texas City, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous	Gas	Rate (MAF):		
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Natural gas	32	MMscf/d		
Feed2:					
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	H2	40	MMscf/d		
Product2:	CO	24	MMscf/d		
Product3:					
				1,920,000	Estimate
				(Nm3/d)	(Source)
			143.3		
			(Calculated)		
			348.0	Estimate	
			(MWt)	(Source)	
			278.0	Estimate	
			(MWt)	(Source)	

Other Information

O2 Supply:	Oxygen	Praxair, Inc.	Integrated
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Radiant syngas cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Texaco		
	(Supplier)	(Process)	(Supplier)
Gas Turbine:			
	(No.)	(Supplier)	(Model)
HRSG:			
	(No.)	(Supplier)	(Model)
Steam Turbine:			
	(No.)	(Supplier)	(Model)
Prin. Contractor:	Howe-Baker		Howe-Baker
	(Contractor)	(Contractor)	(Contractor)

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	<u>37</u>	No. of Gasifiers: Op'g/Sp/Total	<u>1/</u> <u>0/</u> <u>1</u>	Gasifier Status:	<u>Operating</u>	Start Date:	<u>Oct.</u> <u>1996</u>
Project Count:	<u>1</u>	Plt. Type:	<u>Commercial</u>	Project Reality:	<u>Active-Real</u>	Application:	<u>Syngas for Power</u>
Plt. Owner:	<u>Tampa Electric Co.</u>		Plt. Owner Type:	<u>Utility</u>			
Plt. Operator:	<u>Tampa Electric Co.</u>		Plant Name:	<u>Polk County IGCC Project</u>			
Gas'n Tech.:	<u>GE Gasification Technology</u> (Technology Name)	<u>GE</u> (Licensor)	<u>Entrained-flow gasification</u> (Technology Type)				
Vendor Contact:	<u>Tim Huskey</u> (Contact)	<u>timothy.huskey@ge.com</u> (Email)					

Facility Information

Facility Owner:	<u>Tampa Electric Co.</u>	Facility Name:	<u>Polk Power Station, Unit No. 1</u>
Location: (City/State/Prov)	<u>Mulberry, FL</u>	Facility Type:	<u>Electric Utility</u>
(Country)	<u>United States</u>	Facility Status:	<u>Operating</u>
(Region)	<u>North America</u>		

Feed/Product Information

Main Feed:	<u>Solid</u> (Category)	<u>Coal</u> (Classification)	Rate (MAF):	<u>1,541.0</u> (mt/d)	<u>Estimate</u> (Source)	
Feed1:	<u>Coal/Petcoke</u>	<u>2,200 mt/d</u>	Syngas Cap.:	<u>3,300,000</u> (Nm ³ /d)	<u>Gasifier licensor</u> (Source)	
Feed2:			Eq. IGCC Cap., MWe:	<u>246.4</u> (Calculated)		
Feed3:			Fuel Input:	<u>601.5</u> (MWt)	<u>Estimate</u> (Source)	
Main Product:	<u>Power</u> (Category)	Syngas Output:	<u>451.1</u> (MWt)	<u>Gasifier licensor data</u> (Source)		
Product1:	<u>Electricity</u>	<u>250</u>	<u>MWe (net)</u>			
Product2:						
Product3:						

Other Information

O2 Supply:	<u>Oxygen</u> (Oxidant)	<u>Air Products & Chemicals, Inc.</u> (ASU Supplier)	<u>Integrated</u> (ASU Integration)				
Syngas Cooler:	<u>Radiant & convective syngas coolers</u> (Cooler Type)		<u>MAN GHG AG</u> (Cooler Supplier)	<u></u> (MWth Duty)	Soot Handling:	<u>Separate handling unit</u>	
Gas Cleanup:		<u>MDEA</u> (Supplier)	<u></u> (Process)	Sulfur Removal:	<u>Monsanto</u> (Supplier)	<u>Sulfuric Acid Plant</u> (Process)	
Gas Turbine:	<u>1</u> (No.)	<u>General Electric Co.</u> (Supplier)	<u>7FA</u> (Model)	<u>192</u> (MWout)			
HRSG:	<u>1</u> (No.)	<u>General Electric Co.</u> (Supplier)	<u>Vogt/GE</u> (Model)	<u></u> (Production)	Steam Turbine:	<u>1</u> (No.) <u>General Electric Co.</u> (Supplier) <u>125</u> (Model) (MWout)	
Prin. Contractor:	<u>Bechtel</u>		Engineer:	<u>Bechtel</u>		Constructor:	<u>Bechtel</u>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production)

Steam Turbine:
(No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID:	299	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Texas Eastman			Plt. Owner Type:	Unspecified		
Plt. Operator:	Texas Eastman			Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				(mt/d)	(Source)		
Feed1:	Natural gas	5 MMscf/d					
Feed2:							
Feed3:							
Main Product:	Chemicals <small>(Category)</small>						
Product1:	Oxochemicals	mt/d					
Product2:							
Product3:							
			Syngas Cap.:	350,000	Gasifier licensor		
				(Nm3/d)	(Source)		
			Eq. IGCC Cap., MWe:	26.1			
				(Calculated)			
			Fuel Input:	56.2	Estimate		
				(MWt)	(Source)		
			Syngas Output:	47.8	Gasifier licensor data		
				(MWt)	(Source)		

Other Information

O2 Supply:	Oxygen	Air Liquide					
	(Oxidant)	(ASU Supplier)	(ASU Integration)				
Syngas Cooler:	Direct water quench cooler					Soot Handling:	
	(Cooler Type)		(Cooler Supplier)	(MWth Duty)			
Gas Cleanup:				Sulfur Removal:			
	(Supplier)	(Process)		(Supplier)	(Process)		
Gas Turbine:							
	(No.)	(Supplier)	(Model)	(MWout)			
HRSG:				Steam Turbine:			
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)
Prin. Contractor:		Engineer:	Kvaerner John Brown		Constructor:	Kellogg Brown & Root	

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Date Modified:

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Key Gasifier Information

Facility ID:	<input type="text" value="35"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="1"/> / <input type="text" value="2"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text" value="July"/> <input type="text" value="2000"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Gases"/>
Plt. Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plt. Owner Type:	<input type="text" value="Oil Refining & Chemicals"/>		
Plt. Operator:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>			Plant Name:	<input type="text" value="Coffeyville Syngas Plant"/>		
Gas'n Tech.:	<input type="text" value="GE Gasification Technology"/> <small>(Technology Name)</small>	<input type="text" value="GE"/> <small>(Licensor)</small>	<input type="text" value="Entrained-flow gasification"/> <small>(Technology Type)</small>				
Vendor Contact:	<input type="text" value="Tim Huskey"/> <small>(Contact)</small>	<input type="text" value="timothy.huskey@ge.com"/> <small>(Email)</small>					

Facility Information

Facility Owner:	<input type="text" value="Coffeyville Resources Refining and Marketing, LLC"/>	Facility Name:	<input type="text" value="Coffeyville Nitrogen Plant"/>
Location: (City/State/Prov)	<input type="text" value="Coffeyville, KS"/>	Facility Type:	<input type="text" value="Petrochemical Plant"/>
(Country)	<input type="text" value="United States"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="North America"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/> <small>(Category)</small>	<input type="text" value="Petcoke"/> <small>(Classification)</small>	Rate (MAF):	<input type="text" value="1,100.0"/> <small>(mt/d)</small>	<input type="text" value="Gasifier operator data"/> <small>(Source)</small>
Feed1:	<input type="text" value="Petcoke"/>	<input type="text" value="1,100 mt/d"/>			
Feed2:	<input type="text"/>	<input type="text"/>			
Feed3:	<input type="text"/>	<input type="text"/>			
Main Product:	<input type="text" value="Chemicals"/> <small>(Category)</small>				
Product1:	<input type="text" value="Ammonia"/>	<input type="text" value="1,000 mt/d"/>			
Product2:	<input type="text" value="UAN"/>	<input type="text" value="1,545 mt/d"/>			
Product3:	<input type="text"/>	<input type="text"/>			
			Syngas Cap.:	<input type="text" value="2,141,200"/> <small>(Nm3/d)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Eq. IGCC Cap., MWe:	<input type="text" value="159.8"/> <small>(Calculated)</small>	
			Fuel Input:	<input type="text" value="390.3"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>
			Syngas Output:	<input type="text" value="292.7"/> <small>(MWt)</small>	<input type="text" value="Estimate"/> <small>(Source)</small>

Other Information

O2 Supply:	<input type="text" value="Oxygen"/> <small>(Oxidant)</small>	<input type="text" value="BOC Gases"/> <small>(ASU Supplier)</small>	<input type="text" value="Across-the-fence"/> <small>(ASU Integration)</small>
Syngas Cooler:	<input type="text" value="Direct water quench cooler"/> <small>(Cooler Type)</small>		<input type="text"/> <small>(Cooler Supplier)</small>
			<input type="text"/> <small>(MWth Duty)</small>
Gas Cleanup:	<input type="text" value="UOP LLC"/> <small>(Supplier)</small>	<input type="text" value="Selexol"/> <small>(Process)</small>	Sulfur Removal:
			<input type="text" value="Tessenderlo Kerley"/> <small>(Supplier)</small>
			<input type="text" value="Claus/Ammonium thiosul"/> <small>(Process)</small>
Gas Turbine:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
HRSG:	<input type="text" value="0"/> <small>(No.)</small>	<input type="text" value="N.A."/> <small>(Supplier)</small>	<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(Production)</small>
			Steam Turbine:
			<input type="text" value="0"/> <small>(No.)</small>
			<input type="text" value="N.A."/> <small>(Supplier)</small>
			<input type="text" value="0"/> <small>(Model)</small>
			<input type="text" value="0"/> <small>(MWout)</small>
Prin. Contractor:	<input type="text" value="Black & Veatch Pritchard"/>		
Engineer:	<input type="text"/>		
Constructor:	<input type="text"/>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	270	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	April	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	ExxonMobil					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	ExxonMobil					Plant Name:	Baytown Syngas Plant				
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	ExxonMobil	Facility Name:	Baytown Chemical Plant
Location: (City/State/Prov)	Baytown, TX	Facility Type:	Chemical Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid	Petroleum	Rate (MAF):	875.0	Estimate
	(Category)	(Classification)		(mt/d)	(Source)
Feed1:	Deasphalter pitch	1,100 mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels				
	(Category)				
Product1:	Syngas	2,540,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	2,540,000	Gasifier licensor
				(Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	189.6	
				(Calculated)	
			Fuel Input:	423.4	Estimate
				(MWt)	(Source)
			Syngas Output:	347.2	Gasifier licensor data
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen	Air Products & Chemicals, Inc.	Across-the-fence
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	Direct water quench cooler		
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	(Supplier)	(Process)	(Supplier)
Gas Turbine:	0	N.A.	0
	(No.)	(Supplier)	(Model)
		(Production)	(MWout)
HRSG:	0	N.A.	0
	(No.)	(Supplier)	(Model)
		(Production)	(MWout)
Steam Turbine:	0	N.A.	0
	(No.)	(Supplier)	(Model)
		(Production)	(MWout)
Prin. Contractor:	Parsons		
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 344 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2Q 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Air Liquide America Corp. **Plt. Owner Type:** Industrial Gas Supply
Plt. Operator: Air Liquide America Corp. **Plant Name:** Longview Gasification Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Air Liquide America Corp. **Facility Name:** Longview Industrial Gas Plant
Location: (City/State/Prov) Longview, TX **Facility Type:** Gas Plant
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) **Rate (MAF):** (mt/d) (Source)
Feed1: Natural gas 23 MMscf/d **Syngas Cap.:** 1,558,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 116.3 (Calculated)
Feed3: **Fuel Input:** 250.6 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 213.0 (MWt) Gasifier licensor data (Source)
Product1: Syngas 48 MMscf/d
Product2: Steam lb/hr
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Howe-Baker Engineers, Inc. **Engineer:** Howe-Baker Engineers, Inc. **Constructor:** Howe-Baker Engineers, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	31	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	2002	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Power	
Plt. Owner:	Valero				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Valero				Plant Name:	Delaware Clean Energy Cogeneration Project				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Premcor, Inc.	Facility Name:	Premcor Delaware City Refinery
Location: (City/State/Prov)	Delaware City, DE	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Pecoke <small>(Classification)</small>	Rate (MAF):	1,775.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Fluid pecoke	2,100 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	160 MW (net)			
Product2:	Steam	791,000 lb/hr			
Product3:					
			Syngas Cap.:	3,800,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	283.7 <small>(Calculated)</small>	
			Fuel Input:	692.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	519.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Praxair, Inc. <small>(ASU Supplier)</small>	Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>		Soot Handling: Separate handling unit
Gas Cleanup:		MDEA <small>(Supplier) (Process)</small>	Sulfur Removal: Claus/SCOT <small>(Supplier) (Process)</small>
Gas Turbine:	2 <small>(No.)</small>	General Electric Co. <small>(Supplier)</small>	6FA 180 <small>(Model) (MWout)</small>
HRSG:	2 <small>(No.)</small>	Nooter-Erikson <small>(Supplier)</small>	359 mt/hr <small>(Production)</small>
		2 <small>(No.)</small>	Steam Turbine: <small>(Supplier) (Model) (MWout)</small>
Prin. Contractor:	Parsons Process Group Inc.		Engineer: Parsons Process Group Inc.
			Constructor: Parsons Process Group Inc.

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Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	372	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Startup	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Opti Canada				Plt. Owner Type:				
Plt. Operator:	Opti Canada				Plant Name:	Long Lake Integrated Upgrading Project			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Opti Canada	Facility Name:	Opti Canada Refinery
Location: (City/State/Prov)	Port McMurray	Facility Type:	Refinery
(Country)	Canada	Facility Status:	Planning
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Asphalt	3,100 mt/d				Syngas Cap.:	7,500,000 <small>(Nm3/d)</small>
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	559.9 <small>(Calculated)</small>
Main Product:	Gaseous fuels <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt)</small>
Product1:	H2	0				Syngas Output:	1,025.0 <small>(MWt)</small>
Product2:	Steam	0					
Product3:	Power	0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:			0		Soot Handling:		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0		Steam Turbine:	0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	
					<small>(Supplier)</small>	<small>(Model)</small>	
						<small>(MWout)</small>	
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 409 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Development **Start Date:** 2010
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: ERORA/Christian Co. Development LLC **Plt. Owner Type:** _____
Plt. Operator: ERORA/Christian Co. Development LLC **Plant Name:** Taylorville Energy Center
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: ERORA/Christian Co. Development LLC **Facility Name:** _____
Location: (City/State/Prov) Taylorville, IL **Facility Type:** _____
 (Country) United States **Facility Status:** _____
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Power (Category)
Product1: Electricity 630 MW
Product2: 0
Product3: 0
Syngas Cap.: 8,450,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 630.8 (Calculated)
Fuel Input: 1,530.0 (MWt) _____ (Source)
Syngas Output: 1,150.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1: MW

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: MW

Product2: BCF/yr

Product3: BCF/yr

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID:	408	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	Duke Energy Indiana				Plt. Owner Type:	Utility				
Plt. Operator:	Duke Energy Indiana				Plant Name:	Edwardsport IGCC				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Duke Energy Indiana	Facility Name:	
Location: (City/State/Prov)	Edwardsport, IN	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0			Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>
Feed2:			0			Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>
Feed3:			0			Fuel Input:	1,530.0 <small>(MWt)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	1,150.0 <small>(MWt)</small>
Product1:	Electricity		630	MW			
Product2:			0				
Product3:			0				

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:			0
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>
Gas Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>
Steam Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 362 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2011
Project Count: 0 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Rentech Development **Plt. Owner Type:** _____
Plt. Operator: Rentech Development **Plant Name:** East Dubuque Fischer Tropsch
Gas'n Tech.: E-GAS (Destec/Dow) Gasification Process (Technology Name) ConocoPhillips (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Phil R. Amick (Contact) Phil.Amick@ConocoPhillips.com (Email)

Facility Information

Facility Owner: Rentech Development **Facility Name:** Rentech & Royster Clark
Location: (City/State/Prov) Illinois (Country) United States (Region) North America **Facility Type:** _____
Facility Status: _____

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 2,500 t/d **Syngas Cap.:** 2,600,000 (Nm3/d) _____ (Source)
Feed2: _____ 0 **Eq. IGCC Cap., MWe:** 194.1 (Calculated)
Feed3: _____ 0 **Fuel Input:** 445.0 (MWt) _____ (Source)
Main Product: FT liquids (Category) **Syngas Output:** 355.0 (MWt) _____ (Source)
Product1: FT Liquids 0
Product2: _____ 0
Product3: _____ 0

Other Information

O2 Supply: Oxygen (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: Fire-tube cooler (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** Dry Barrier
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 1 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1:
Product2:
Product3:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:
30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

**2007 Gasification Database
Plants sorted by Technology**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

14-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Main Product:

(Category)

Fuel Input:

(MWt) (Source)

Product1:

Syngas Output:

(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1: MW

Product2: BCF/yr

Product3: BCF/yr

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

15-Jun-07

Key Gasifier Information

Facility ID:	362	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Development	Start Date:	2011
Project Count:	0	Plt. Type:	Commercial	Project Reality:	Planning	Application:	
Plt. Owner:	Rentech Development			Plt. Owner Type:			
Plt. Operator:	Rentech Development			Plant Name:	East Dubuque Fischer Tropsch		
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process (Technology Name)		ConocoPhillips (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Phil R. Amick (Contact)		Phil.Amick@ConocoPhillips.com (Email)				

Facility Information

Facility Owner:	Rentech Development		Facility Name:	Rentech & Royster Clark	
Location: (City/State/Prov)	Illinois		Facility Type:		
(Country)	United States		Facility Status:		
(Region)	North America				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)	(Source)
Feed1:	Coal	2,500 t/d			
Feed2:		0			
Feed3:		0			
Main Product:	FT liquids (Category)				
Product1:	FT Liquids	0			
Product2:		0			
Product3:		0			
			Syngas Cap.:	2,600,000 (Nm3/d)	(Source)
			Eq. IGCC Cap., MWe:	194.1 (Calculated)	
			Fuel Input:	445.0 (MWt)	(Source)
			Syngas Output:	355.0 (MWt)	(Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)		
Syngas Cooler:	Fire-tube cooler (Cooler Type)	(Cooler Supplier)	0 (MWth Duty)	Soot Handling:	Dry Barrier
Gas Cleanup:	(Supplier)	(Process)		Sulfur Removal:	(Supplier) (Process)
Gas Turbine:	0 (No.)	(Supplier)	0 (Model)	(MWout)	
HRSG:	0 (No.)	(Supplier)	0 (Model)	(Production)	Steam Turbine: 1 (No.) (Supplier) (Model) (MWout)
Prin. Contractor:		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

DateModified:

30-Aug-07

Key Gasifier Information

Facility ID:	358	No. of Gasifiers: Op'g/Sp/Total	2/ 1/ 3	Gasifier Status:	Development	Start Date:	2013
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Power
Plt. Owner:	Excelsior Energy		Plt. Owner Type:	Technology Developer			
Plt. Operator:	Excelsior Energy		Plant Name:	Mesaba Energy Project			
Gas'n Tech.:	E-GAS (Destec/Dow) Gasification Process (Technology Name)		ConocoPhillips (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Phil R. Amick (Contact)		Phil.Amick@ConocoPhillips.com (Email)				

Facility Information

Facility Owner:	Excelsior Energy		Facility Name:	Mesaba Energy Project		
Location: (City/State/Prov)	Minnesota		Facility Type:			
(Country)	United States		Facility Status:			
(Region)	North America					

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):	0.0 (mt/d)	(Source)
Feed1:	Coal	5,000 t/d			
Feed2:		0			
Feed3:		0			
Main Product:	Power (Category)		Syngas Cap.:	9,849,600 (Nm3/d)	(Source)
Product1:	Electricity	600 MW	Eq. IGCC Cap., MWe:	735.3 (Calculated)	
Product2:		0	Fuel Input:	1,683.1 (MWt)	(Source)
Product3:		0	Syngas Output:	1,346.6 (MWt)	(Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)						
Syngas Cooler:	Fire-tube cooler (Cooler Type)	(Cooler Supplier)	0 (MWth Duty)	Soot Handling:	Dry Barrier				
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier)	(Process)				
Gas Turbine:	2 (No.)	(Supplier)	(Model)	0 (MWout)					
HRSG:	2 (No.)	(Supplier)	(Model)	0 (Production)	Steam Turbine:	1 (No.)	(Supplier)	(Model)	0 (MWout)
Prin. Contractor:		Engineer:		Constructor:					

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1:

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

DateModified:

10-Aug-04

Key Gasifier Information

Facility ID:	<input type="text" value="319"/>	No. of Gasifiers: Op'g/Sp/Total	<input type="text" value="1"/> / <input type="text" value="0"/> / <input type="text" value="1"/>	Gasifier Status:	<input type="text" value="Operating"/>	Start Date:	<input type="text"/> / <input type="text"/> / <input type="text" value="1985"/>
Project Count:	<input type="text" value="1"/>	Plt. Type:	<input type="text" value="Commercial"/>	Project Reality:	<input type="text" value="Active-Real"/>	Application:	<input type="text" value="Syngas for Fuels"/>
Plt. Owner:	<input type="text" value="Portucel"/>			Plt. Owner Type:	<input type="text" value="Pulp & Paper Processing"/>		
Plt. Operator:	<input type="text" value="Portucel"/>			Plant Name:	<input type="text" value="Rodao ACFBG Unit"/>		
Gas'n Tech.:	<input type="text" value="Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier"/>	<input type="text" value="Foster Wheeler International"/>	<input type="text" value="Fluidized-bed gasification"/>				
	(Technology Name)	(Licensor)	(Technology Type)				
Vendor Contact:	<input type="text" value="John Hemmings"/>	<input type="text" value="john_hemmings@fwc.com"/>					
	(Contact)	(Email)					

Facility Information

Facility Owner:	<input type="text" value="Portucel"/>	Facility Name:	<input type="text" value="Rodao Mill"/>
Location: (City/State/Prov)	<input type="text" value="Rodao"/>	Facility Type:	<input type="text" value="Pulp & Paper Mill"/>
(Country)	<input type="text" value="Portugal"/>	Facility Status:	<input type="text" value="Operating"/>
(Region)	<input type="text" value="Europe"/>		

Feed/Product Information

Main Feed:	<input type="text" value="Solid"/>	<input type="text" value="Biomass/Waste"/>	Rate (MAF):	<input type="text"/>	<input type="text"/>
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	<input type="text" value="Bark"/>	<input type="text"/>	<input type="text" value="mt/d"/>	Syngas Cap.:	<input type="text" value="87,800"/>
Feed2:	<input type="text"/>	<input type="text"/>		(Nm3/d)	<input type="text" value="Estimate"/>
Feed3:	<input type="text"/>	<input type="text"/>		(Source)	
				Eq. IGCC Cap., MWe:	<input type="text" value="6.6"/>
				(Calculated)	
Main Product:	<input type="text" value="Gaseous fuels"/>				
	(Category)				
Product1:	<input type="text" value="Syngas"/>	<input type="text" value="15"/>	<input type="text" value="MWth"/>	Fuel Input:	<input type="text" value="15.0"/>
Product2:	<input type="text"/>	<input type="text"/>		(MWt)	<input type="text" value="Gasifier licensor data"/>
Product3:	<input type="text"/>	<input type="text"/>		(Source)	
				Syngas Output:	<input type="text" value="15.0"/>
				(MWt)	<input type="text" value="Estimate"/>
				(Source)	

Other Information

O2 Supply:	<input type="text" value="Air"/>	<input type="text"/>	<input type="text"/>
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	<input type="text"/>	<input type="text"/>	Sulfur Removal:
	(Supplier)	(Process)	<input type="text"/>
			(Supplier)
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>
	(No.)	(Supplier)	(Model) (Production)
			Steam Turbine:
			<input type="text"/>
			(No.) (Supplier) (Model) (MWout)
Prin. Contractor:	<input type="text"/>	Engineer:	<input type="text"/>
		Constructor:	<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	314	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	Jan.	1998	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Lahden Lämpövoima Oy					Plt. Owner Type:	Utility				
Plt. Operator:	Lahden Lämpövoima Oy					Plant Name:	Kymijärvi ACFBG Plant				
Gas'n Tech.:	Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>			Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	John Hemmings <small>(Contact)</small>					john_hemmings@fwc.com <small>(Email)</small>					

Facility Information

Facility Owner:	Lahden Lämpövoima Oy	Facility Name:	Kymijärvi Power Station
Location: (City/State/Prov)	Lahti	Facility Type:	Electric Utility
(Country)	Finland	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Biofuels		mt/d			Syngas Cap.:	351,118 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	26.2 <small>(Calculated)</small>
Feed3:						Fuel Input:	60.0 Gasifier licensor data <small>(MWt) (Source)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	48.0 Estimate <small>(MWt) (Source)</small>
Product1:	Electricity	42	MWe				
Product2:	District heat						
Product3:							

Other Information

O2 Supply:	Air <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>			
Syngas Cooler:				Soot Handling:	
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:				Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	1		49		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:				Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 21-Feb-01

Key Gasifier Information

Facility ID: 280 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Corenso United Oy Ltd. **Plt. Owner Type:** Pulp & Paper Processing
Plt. Operator: Corenso United Oy Ltd. **Plant Name:** Varkaus ACFBG Plant
Gas'n Tech.: Foster Wheeler Atmospheric Circulating Fluidized Bed Gasifier (Technology Name) Foster Wheeler International (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: John Hemmings (Contact) john_hemmings@fwc.com (Email)

Facility Information

Facility Owner: Corenso United Oy Ltd. **Facility Name:** Varkaus Gas Plant
Location: (City/State/Prov) Varkaus **Facility Type:** Pulp & Paper Mill
 (Country) Finland **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** (mt/d) (Source)
 (Category) (Classification)
Feed1: Packaging wastes (mt/d)
Feed2:
Feed3:
Main Product: Gaseous fuels (Category)
Product1: Syngas (Nm3/d)
Product2:
Product3:
Syngas Cap.: 234,133 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 17.5 (Calculated)
Fuel Input: 40.0 Gasifier licensor data (MWt) (Source)
Syngas Output: 32.0 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) (Production) 12.5 kg/s **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

23-Feb-01

Key Gasifier Information

Facility ID:	275	No. of Gasifiers: Op'g/Sp/Total	1	0	1	Gasifier Status:	Operating	Start Date:	June	1993	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Power		
Plt. Owner:	Sydkraft AB					Plt. Owner Type:	Utility				
Plt. Operator:	Sydkraft AB					Plant Name:	Värnamo IGCC Demonstration Plant				
Gas'n Tech.:	Foster Wheeler Pressurized Circulating Fluidized Bed Gasifier <small>(Technology Name)</small>			Foster Wheeler International <small>(Licensor)</small>			Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Lawford C. Howells <small>(Contact)</small>					Lawford_Howells@fwc.com <small>(Email)</small>					

Facility Information

Facility Owner:	Sydkraft AB	Facility Name:	Malmö/Värnamo Plant
Location: (City/State/Prov)	Malmö/Värnamo	Facility Type:	Electric Utility
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	55.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Biofuels	55 mt/d			
Feed2:					
Feed3:					
Main Product:	Power <small>(Category)</small>				
Product1:	Electricity	6 MWe			
Product2:	District heat	9 MWth			
Product3:					
			Syngas Cap.:	105,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	7.8 <small>(Calculated)</small>	
			Fuel Input:	18.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	14.4 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>			
	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:				Soot Handling:
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	1 <small>(No.)</small>	Alstom UK <small>(Supplier)</small>	Typhoon <small>(Model)</small>	4.2 <small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>
Steam Turbine:	1 <small>(No.)</small>	Nadrowski <small>(Supplier)</small>		2 <small>(MWout)</small>
		<small>(Supplier)</small>	<small>(Model)</small>	
Prin. Contractor:			Engineer:	
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	188	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1963
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	PRAOIL					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	PRAOIL					Plant Name:	Gela Ragusa H2 Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	PRAOIL	Facility Name:	Gela Ragusa Refinery
Location: (City/State/Prov)	Gela Ragusa	Facility Type:	Refinery
(Country)	Italy	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	17 MMscf/d				Syngas Cap.:	1,150,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	85.8 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	184.9 Estimate <small>(MWt) (Source)</small>
Product1:	H2	MMscf/d				Syngas Output:	157.2 Estimate <small>(MWt) (Source)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:					Engineer:	Foster Wheeler	
					Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 202 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 1967
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Chemische Werke Hüls AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Chemische Werke Hüls AG **Plant Name:** Marl Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Chemische Werke Hüls AG **Facility Name:** Marl Chemical Plant
Location: (City/State/Prov) Marl **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 206.0 (mt/d) Estimate (Source)
Feed1: Heavy fuel oil 206 mt/d **Syngas Cap.:** 600,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 44.8 (Calculated)
Feed3: **Fuel Input:** 100.0 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 82.0 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHG AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Total recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup:
(Supplier) (Process) (Supplier) (Process)

Sulfur Removal:

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Steam Turbine:

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 207 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1974
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BASF AG **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: BASF AG **Plant Name:** Ludwigshafen Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: BASF AG **Facility Name:** Ludwigshafen Chemical Plant
Location: (City/State/Prov) Ludwigshafen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 860.0 (mt/d) Estimate (Source)
Feed1: Vac. residue & heavy 860 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Methanol mt/d
Product2:
Product3:
Syngas Cap.: 2,500,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 186.6 (Calculated)
Fuel Input: 416.8 (MWt) Estimate (Source)
Syngas Output: 341.8 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) MAN GHH AG (Cooler Supplier) (MWth Duty) **Soot Handling:** Partial recycle to gasifier
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** BASF

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: 119	No. of Gasifiers: Op'g/Sp/Total 1 / 0 / 1	Gasifier Status: Operating	Start Date: 1977
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Oxochimie S.A.		Plt. Owner Type: Oil Refining & Chemicals	
Plt. Operator: Oxochimie S.A.		Plant Name: Lavéra Syngas Plant	
Gas'n Tech.: GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>
Vendor Contact: Tim Huskey <small>(Contact)</small>	timothy.huskey@ge.com <small>(Email)</small>		

Facility Information

Facility Owner: Oxochimie S.A.	Facility Name: Lavéra Plant
Location: (City/State/Prov) Lavéra	Facility Type: Chemical Plant
(Country) France	Facility Status: Operating
(Region) Europe	

Feed/Product Information

Main Feed: Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF): <small>(mt/d) (Source)</small>
Feed1: Natural gas	9 MMscf/d	Syngas Cap.: 590,976 Gasifier contractor <small>(Nm3/d) (Source)</small>
Feed2: 		Eq. IGCC Cap., MWe: 44.1 <small>(Calculated)</small>
Feed3: 		Fuel Input: 98.5 Estimate <small>(MWt) (Source)</small>
Main Product: Chemicals <small>(Category)</small>		Syngas Output: 80.8 Estimate <small>(MWt) (Source)</small>
Product1: Oxochemicals mt/d		
Product2: 		
Product3: 		

Other Information

O2 Supply: Oxygen <small>(Oxidant)</small>	 <small>(ASU Supplier)</small>	 <small>(ASU Integration)</small>
Syngas Cooler: Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>	 <small>(MWth Duty)</small>
Gas Cleanup: <small>(Supplier)</small>	 <small>(Process)</small>	Sulfur Removal: <small>(Supplier) (Process)</small>
Gas Turbine: <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model) (MWout)</small>
HRSG: <small>(No.)</small>	 <small>(Supplier)</small>	 <small>(Model) (Production)</small>
	Steam Turbine: <small>(No.)</small>	 <small>(Supplier) (Model) (MWout)</small>
Prin. Contractor: 	Engineer: Uhde	Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 210 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1977
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Celanese Chemical (Ruhrchemie) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Celanese Chemical (Ruhrchemie) **Plant Name:** Oxochemicals Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Celanese Chemical (Ruhrchemie) **Facility Name:** Oberhausen Chemical Plant
Location: (City/State/Prov) Oberhausen-Holteln **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 330.0 (mt/d) Estimate (Source)
Feed1: Heavy fuel oil & vac. 330 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Oxochemicals mt/d
Product2:
Product3:
Syngas Cap.: 960,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 71.7 (Calculated)
Fuel Input: 160.0 (MWt) Estimate (Source)
Syngas Output: 131.2 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	214	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1980
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Akzo Nobel/Berol-Kemi					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Akzo Nobel					Plant Name:	Stenungsund Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Akzo Nobel/Berol-Kemi	Facility Name:	Stenungsund Chemical Plant
Location: (City/State/Prov)	Stenungsund	Facility Type:	Chemical Plant
(Country)	Sweden	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	70.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Heavy fuel oil	70 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	14.9 <small>(Calculated)</small>	
			Fuel Input:	33.3 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	27.3 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>							
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>	MAN GHH AG <small>(Cooler Supplier)</small>		<small>(MWth Duty)</small>	Soot Handling:	Total recycle to gasifier		
Gas Cleanup:					Sulfur Removal:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>				
Gas Turbine:								
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:					Steam Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>	
						<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Davy Powergas		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 163 **No. of Gasifiers: Op'g/Sp/Total** 2/ 1/ 3 **Gasifier Status:** Operating **Start Date:** July 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Gujarat Narmada Valley Fertilizers Co. Ltd. **Plant Name:** Narmada Ammonia/Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Gujarat Narmada Valley Fertilizers Co. Ltd. **Facility Name:** Narmada Fertilizer Complex
Location: (City/State/Prov) Bharuch, Gujarat **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 1,030.0 (mt/d) Estimate (Source)
Feed1: Ref. residual oil 1,030 mt/d **Syngas Cap.:** 2,964,600 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 221.3 (Calculated)
Feed3: **Fuel Input:** 506.6 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 405.3 (MWt) Estimate (Source)
Product1: Ammonia 1,350 mt/d
Product2: Methanol 60 mt/d
Product3:

Other Information

O2 Supply: Oxygen Linde AG (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Linde AG Rectisol (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Linde AG **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 179 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1982
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Ube Ammonia Industry Co. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Ube Ammonia Industry Co. Ltd. **Plant Name:** Ube City CO Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Ube Ammonia Industry Co. Ltd. **Facility Name:** Ube City Chemical Plant
Location: (City/State/Prov) Ube City **Facility Type:** Chemical Plant
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 95.0 (mt/d) Estimate (Source)
Feed1: Petcoke 95 mt/d **Syngas Cap.:** 200,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 14.9 (Calculated)
Feed3: **Fuel Input:** 36.4 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 27.3 (MWt) Gasifier licensor data (Source)
Product1: CO 6,500,000 scf/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Ube **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	215	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1982	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Daicel				Plt. Owner Type:	Unspecified				
Plt. Operator:	Daicel				Plant Name:	Methanol Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Unspecified owner			Facility Name:	Unspecified Chemical Plant		
Location: (City/State/Prov)	Unspecified location			Facility Type:	Chemical Plant		
(Country)	Japan			Facility Status:	Operating		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	190.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	190 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Methanol	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	550,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	41.1 <small>(Calculated)</small>	
			Fuel Input:	91.7 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	75.2 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>				Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Total recycle to gasifier	
Gas Cleanup:					Sulfur Removal:
		<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>
Gas Turbine:					
		<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:					Steam Turbine:
		<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:	Ube	
			Constructor:	Ube	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	15	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	1983
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Zhenhai Refining & Chemical Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Zhenhai Refining & Chemical Co.			Plant Name:	Zhenhai Ammonia Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Zhenhai Refining & Chemical Co.	Facility Name:	Zhenhai Refinery
Location: (City/State/Prov)	Ningbo, Zhejiang	Facility Type:	Refinery
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	722.5 (mt/d)	Estimate (Source)
Feed1:	Visbreaker residue	900 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Ammonia	1,000 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 (Nm3/d)	Estimate (Source)
			Eq. IGCC Cap., MWe:	156.8 (Calculated)	
			Fuel Input:	350.0 (MWt)	Estimate (Source)
			Syngas Output:	287.1 (MWt)	Estimate (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)				
	(ASU Supplier)		(ASU Integration)		
Syngas Cooler:	Direct water quench cooler (Cooler Type)				
			(Cooler Supplier)	(MWth Duty)	Soot Handling:
Gas Cleanup:					
	(Supplier)	(Process)	Sulfur Removal:		
			(Supplier)	(Process)	
Gas Turbine:					
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:					
	(No.)	(Supplier)	(Model)	(Production)	
			Steam Turbine:		
			(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:	Ube	Engineer:	Ube	Constructor:	Ube

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 27 **No. of Gasifiers: Op'g/Sp/Total** 1/ 1/ 2 **Gasifier Status:** Operating **Start Date:** July 1983
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Eastman Chemical Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Eastman Chemical Co. **Plant Name:** Kingsport Integrated Coal Gasification Facility
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Eastman Chemical Co. **Facility Name:** Kingsport Chemical Complex
Location: (City/State/Prov) Kingsport, TN **Facility Type:** Petrochemical Plant
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 750.0 (mt/d) Estimate (Source)
Feed1: Bit. coal 1,225 t/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Acetic anhydride 680 mt/d
Product2: Methanol 550 mt/d
Product3:
Syngas Cap.: 1,600,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 119.4 (Calculated)
Fuel Input: 291.6 (MWt) Estimate (Source)
Syngas Output: 218.7 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) 200000 lb/hr (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Bechtel **Engineer:** Bechtel **Constructor:** John Brown

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	296	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1983
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Sunoco					Plt. Owner Type:	Unspecified		
Plt. Operator:	Sunoco					Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	6 MMscf/d				Syngas Cap.:	400,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	64.4 Estimate <small>(MWt)</small>
Product1:	Oxochemicals	mt/d				Syngas Output:	54.7 Gasifier licensor data <small>(MWt)</small>
Product2:							<small>(Source)</small>
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Dvay McKee					Constructor:	
				<small>(Engineer)</small>	<small>(Constructor)</small>		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 162 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** Aug. 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Chinese Petroleum Corp. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Chinese Petroleum Corp. **Plant Name:** Kaohsiung Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Chinese Petroleum Corp. **Facility Name:** Kaohsiung Petrochemical Complex
Location: (City/State/Prov) Kaohsiung **Facility Type:** Petrochemical Plant
 (Country) Taiwan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,000.0 (mt/d) Estimate (Source)
Feed1: Bitumen 1,000 mt/d
Feed2:
Feed3:
Syngas Cap.: 2,143,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 160.0 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 390.7 (MWt) Estimate (Source)
Product1: H2 158,200 Nm3/hr **Syngas Output:** 293.0 (MWt) Gasifier licensor data (Source)
Product2: CO 4,530 Nm3/hr
Product3: Methanol SG 26,500 Nm3/hr

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench/syngas cooler combination (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Linde AG **Engineer:**
Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	18	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	July	1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Ube Ammonia Industry Co. Ltd.				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Ube Ammonia Industry Co. Ltd.				Plant Name:	Ube City Ammonia Plant					
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Ube Ammonia Industry Co. Ltd.	Facility Name:	Ube City Chemical Plant
Location: (City/State/Prov)	Ube City	Facility Type:	Chemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal & petcoke	1,650			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	1,250			
Product2:					
Product3:					
			Syngas Cap.:	2,150,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	160.5 <small>(Calculated)</small>	
			Fuel Input:	391.9 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	293.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		Integrated <small>(ASU Supplier)</small>		Integrated <small>(ASU Integration)</small>
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>				Soot Handling: _____
Gas Cleanup:					Sulfur Removal: _____
Gas Turbine:					
HRSG:					
Prin. Contractor:	Ube				Constructor: _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	32	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Motiva Enterprises LLC				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Motiva Enterprises LLC				Plant Name:	Convent H2 Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Motiva Enterprises LLC	Facility Name:	Star Enterprise Convent Refinery
Location: (City/State/Prov)	Convent, LA	Facility Type:	Refinery
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	650.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	H-Oil bottoms	650 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	H2	63 MMscf/d				
Product2:						
Product3:						
			Syngas Cap.:	1,880,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	140.3 <small>(Calculated)</small>		
			Fuel Input:	313.4 <small>(MWt)</small>	Estimate <small>(Source)</small>	
			Syngas Output:	257.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:			<small>(Supplier)</small>	<small>(Process)</small>	Sulfur Removal:		<small>(Process)</small>
			<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:			<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>		
HRSG:			<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(MWout)</small>		<small>(No.)</small>
Prin. Contractor:	Fluor Daniel			Engineer:		Constructor:	

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Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 46 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1985
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Rheinbraun **Plt. Owner Type:**
Plt. Operator: Rheinbraun **Plant Name:** Ville Methanol Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Rheinbraun **Facility Name:** Ville/Berrenrath Coal Briquetting Plant
Location: (City/State/Prov) Ville **Facility Type:** Other
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 977.0 (mt/d) Estimate (Source)
Feed1: Coal 977 mt/d **Syngas Cap.:** 2,231,500 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 166.6 (Calculated)
Feed3: **Fuel Input:** 381.3 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 305.1 (MWt) Estimate (Source)
Product1: Methanol 1,000 mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Uhde **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	48	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1986
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	SAR GmbH				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	SAR GmbH				Plant Name:	SAR Plant-II				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	SAR GmbH	Facility Name:	Oberhausen Chemical Plant
Location: (City/State/Prov)	Oberhausen-Holten	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	415.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	730 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Oxochemicals	mt/d			
Product2:	H2	Nm3/d			
Product3:					
			Syngas Cap.:	1,200,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	89.6 <small>(Calculated)</small>	
			Fuel Input:	200.0 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	164.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>				
Syngas Cooler:	Direct water quench/syngas cooler combination <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:				
				<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
						<small>(MWout)</small>	
Prin. Contractor:	Uhde		Engineer:	Uhde		Constructor:	Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	298	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1987
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	MSK-Radna					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	MSK-Radna					Plant Name:	Methanol Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	MSK-Radna	Facility Name:	Kikinda Chemical Plant
Location: (City/State/Prov)	Kikinda	Facility Type:	Chemical Plant
(Country)	Former Yugoslavia	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	23 MMscf/d				Syngas Cap.:	1,540,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	115.0 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	247.6 Estimate <small>(MWt) (Source)</small>
Product1:	Methanol	mt/d				Syngas Output:	210.5 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>					Soot Handling:	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
Prin. Contractor:	Technip				Engineer:		
					Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date: / /

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:
(Country) Facility Status:
(Region)

Feed/Product Information

Main Feed: Rate (MAF): /
(Category) (Classification) (mt/d) (Source)

Feed1: Syngas Cap.:
(Nm³/d) (Source)

Feed2: Eq. IGCC Cap., MWe:
(Calculated)

Feed3:

Main Product: Fuel Input:
(Category) (MWt) (Source)

Product1: Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O₂ Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	43	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	1991
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Air Liquide (Dow Stade GmbH)					Plt. Owner Type:	Industrial Gas Supply		
Plt. Operator:	Air Liquide (Dow Stade GmbH)					Plant Name:	Stade Syngas Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>			

Facility Information

Facility Owner:	Air Liquide (Dow Stade GmbH)	Facility Name:	Stade Chemical Plant
Location: (City/State/Prov)	Stade	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	3,855,000 MMscf/d				Syngas Cap.:	264,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	19.7 <small>(Calculated)</small>
Feed3:						Fuel Input:	42.5 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	36.1 Estimate <small>(MWt) (Source)</small>
Product1:	CO	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>						Soot Handling:
				<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:						Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:						Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:	Linde				Engineer:		Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Sep-04

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID:	22	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Aug.	1996	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Air Products & Chemicals, Inc.				Plt. Owner Type:	Industrial Gas Supply					
Plt. Operator:	Air Products & Chemicals, Inc.				Plant Name:	LaPorte Syngas Plant					
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Air Products & Chemicals, Inc.	Facility Name:	LaPorte Industrial Gas Complex
Location: (City/State/Prov)	LaPorte, TX	Facility Type:	Gas Plant
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	28,677,100 MMscf/d				Syngas Cap.:	1,850,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	138.1 <small>(Calculated)</small>
Feed3:						Fuel Input:	315.9 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	252.7 Estimate <small>(MWt) (Source)</small>
Product1:	H2	50 MMscf/d					
Product2:	CO	16 MMscf/d					
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Products & Chemicals, Inc. <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>	
Syngas Cooler:	Radiant syngas cooler <small>(Cooler Type)</small>			Soot Handling: _____
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:			Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(No.)</small>	<small>(Supplier)</small>
		<small>(Model)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	KTI		Engineer:	KTI
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Main Product:
(Category)

Fuel Input:
(MWt) (Source)

Product1:

Syngas Output:
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG:
(No.) (Supplier) (Model) (Production)

Steam Turbine:
(No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

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Key Gasifier Information

Facility ID:	36	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	April 1996
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	T & P Syngas (Texaco/Praxair)			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	Praxair			Plant Name:	Texas City Syngas Plant		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	T & P Syngas (Texaco/Praxair)			Facility Name:	Texas City Industrial Gas Utility Island		
Location: (City/State/Prov)	Texas City, TX			Facility Type:	Gas Plant		
(Country)	United States			Facility Status:	Operating		
(Region)	North America						

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):			
				(mt/d)	(Source)	
Feed1:	Natural gas		32 MMscf/d			
Feed2:						
Feed3:						
Main Product:	Chemicals (Category)					
Product1:	H2		40 MMscf/d			
Product2:	CO		24 MMscf/d			
Product3:						
				Syngas Cap.:	1,920,000 Estimate (Nm3/d)	(Source)
				Eq. IGCC Cap., MWe:	143.3 (Calculated)	
				Fuel Input:	348.0 Estimate (MWt)	(Source)
				Syngas Output:	278.0 Estimate (MWt)	(Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	Praxair, Inc. (ASU Supplier)	Integrated (ASU Integration)	
Syngas Cooler:	Radiant syngas cooler (Cooler Type)		(Cooler Supplier)	(MWth Duty)
Soot Handling:				
Gas Cleanup:	Texaco (Supplier)		(Process)	
Sulfur Removal:			(Supplier)	(Process)
Gas Turbine:		(Supplier)	(Model)	(MWout)
HRSG:		(Supplier)	(Model)	(Production)
Steam Turbine:		(Supplier)	(Model)	(MWout)
Prin. Contractor:	Howe-Baker		Engineer:	Praxair/Texaco
Constructor:	Howe-Baker			

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Key Gasifier Information

Facility ID:	14	No. of Gasifiers: Op'g/Sp/Total	2/	1/	3	Gasifier Status:	Operating	Start Date:	Feb.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Weihe Fertilizer Co.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Weihe Fertilizer Co.					Plant Name:	Shaanxi Ammonia Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>					GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>					timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	Weihe Fertilizer Co.	Facility Name:	Weihe Chemical Fertilizer Plant
Location: (City/State/Prov)	Xian, Shaanxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	953.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Coal	1,640 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	900 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,040,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	152.3 <small>(Calculated)</small>	
			Fuel Input:	371.9 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	278.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>					
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:	
Gas Cleanup:					Sulfur Removal:		
Gas Turbine:							
HRSG:					Steam Turbine:		
Prin. Contractor:	Ube			Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

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Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

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Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID: 300 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: BP Samsung **Plt. Owner Type:** Unspecified
Plt. Operator: BP Samsung **Plant Name:** CO Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Unspecified owner **Facility Name:** Unspecified facility
Location: (City/State/Prov) Unspecified location **Facility Type:** Unknown
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 206.4 (mt/d) Estimate (Source)
Feed1: Naphtha 206 mt/d **Syngas Cap.:** 600,000 (Nm3/d) Gasifier licensor (Source)
Feed2:
Feed3:
Eq. IGCC Cap., MWe: 44.8 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 100.0 (MWt) Estimate (Source)
Product1: CO mt/d **Syngas Output:** 82.0 (MWt) Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Radiant syngas cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Linde **Engineer:**
Constructor:

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Date Modified: 15-Sep-04

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Key Gasifier Information

Facility ID: 391 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Chemical & Coking (Shanghai Pacific) **Plant Name:** Gas Plant No. 2
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Shanghai Chemical & Coking (Shanghai Pacific) **Facility Name:** Gas Plant No. 2
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Methanol 0
Product2: Town gas 0
Product3: Acetic acid 0
Syngas Cap.: 765,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 57.1 (Calculated)
Fuel Input: 0.0 (MWt) (Source)
Syngas Output: 104.6 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** ()

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Key Gasifier Information

Facility ID:	299	No. of Gasifiers: Op'g/Sp/Total	1/ 0/ 1	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Texas Eastman			Plt. Owner Type:	Unspecified		
Plt. Operator:	Texas Eastman			Plant Name:	Oxochemicals Plant		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>		GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>		timothy.huskey@ge.com <small>(Email)</small>				

Facility Information

Facility Owner:	Unspecified owner	Facility Name:	Unspecified facility
Location: (City/State/Prov)	Unspecified location	Facility Type:	Unknown
(Country)	United States	Facility Status:	Operating
(Region)	North America		

Feed/Product Information

Main Feed:	Gaseous <small>(Category)</small>	Gas <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Natural gas	5 MMscf/d				Syngas Cap.:	350,000 <small>(Nm3/d)</small>
Feed2:							Gasifier licensor <small>(Source)</small>
Feed3:						Eq. IGCC Cap., MWe:	26.1 <small>(Calculated)</small>
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	56.2 Estimate <small>(MWt)</small>
Product1:	Oxochemicals	mt/d				Syngas Output:	47.8 Gasifier licensor data <small>(MWt)</small>
Product2:							
Product3:							

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	Air Liquide <small>(ASU Supplier)</small>				
			<small>(ASU Integration)</small>			
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:					Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:		Engineer:	Kvaerner John Brown	Constructor:	Kellogg Brown & Root	

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Key Gasifier Information

Facility ID:	54	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	July 1999
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	ISAB Energy			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	ISAB Energy			Plant Name:	ISAB Energy IGCC Project		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	ISAB S.p.A.		Facility Name:	Priolo Gargallo Refinery		
Location: (City/State/Prov)	Priolo Gargallo, Sicily			Facility Type:	Refinery	
(Country)	Italy			Facility Status:	Operating	
(Region)	Europe					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	3,163.0 (mt/d)	Gasifier contractor (Source)	
Feed1:	ROSE asphalt		3,168 mt/d	Syngas Cap.:	8,800,000 (Nm3/d)	Gasifier contractor (Source)
Feed2:				Eq. IGCC Cap., MWe:	656.9 (Calculated)	
Feed3:				Fuel Input:	1,360.0 (MWt)	Gasifier contractor (Source)
Main Product:	Power (Category)			Syngas Output:	1,203.0 (MWt)	Estimate (Source)
Product1:	Electricity		512 MWe			
Product2:						
Product3:						

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	Across-the-fence/No integration (ASU Integration)						
Syngas Cooler:	Direct water quench cooler (Cooler Type)		(Cooler Supplier)	(MWth Duty)	Soot Handling:	Naphtha recovery & recy			
Gas Cleanup:	Dow Chemical Co. (Supplier)	MDEA (Process)	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm (Supplier)	Claus (O2 blown) (Process)				
Gas Turbine:	2 (No.)	Siemens/Ansaldo (Supplier)	V94.2K (Model)	330 (MWout)					
HRSG:	2 (No.)	Siemens/Ansaldo (Supplier)	(Model)	(Production)	Steam Turbine:	2 (No.)	Siemens/Ansaldo (Supplier)	(Model)	230 (MWout)
Prin. Contractor:	Snamprogetti		Engineer:	Snamprogetti-Foster Wheeler		Constructor:	Snamprogetti-Foster Wheeler		

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Key Gasifier Information

Facility ID: 185	No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3	Gasifier Status: Operating	Start Date: Aug. 2000
Project Count: 1	Plt. Type: Commercial	Project Reality: Active-Real	Application: Syngas for Chemicals
Plt. Owner: Huainan General Chemical Works	Plt. Owner Type: Oil Refining & Chemicals		
Plt. Operator: Huainan General Chemical Works	Plant Name: Hefei City Ammonia Plant		
Gas'n Tech.: GE Gasification Technology (Technology Name)	GE (Licensor)	Entrained-flow gasification (Technology Type)	
Vendor Contact: Tim Huskey (Contact)	timothy.huskey@ge.com (Email)		

Facility Information

Facility Owner: Huainan General Chemical Works	Facility Name: Hefei City Chemical Plant
Location: (City/State/Prov) Hefei City, Anhui	Facility Type: Chemical Plant
(Country) China	Facility Status: Operating
(Region) Asia/Australia	

Feed/Product Information

Main Feed: Solid Coal (Category) (Classification)	Rate (MAF): 655.0 (mt/d)	Estimate (Source)
Feed1: Coal 898 mt/d	Syngas Cap.: 1,400,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:	Eq. IGCC Cap., MWe: 104.5 (Calculated)	
Feed3:	Fuel Input: 255.2 (MWt)	Estimate (Source)
Main Product: Chemicals (Category)	Syngas Output: 191.4 (MWt)	Gasifier licensor data (Source)
Product1: Ammonia 667 mt/d		
Product2:		
Product3:		

Other Information

O2 Supply: Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	(Supplier)	(Process)
Sulfur Removal:	(Supplier)	(Process)
Gas Turbine:	(No.) (Supplier) (Model) (MWout)	
HRSG:	(No.) (Supplier) (Model) (Production)	Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor:	Engineer: Ube	Constructor:

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Key Gasifier Information

Facility ID:	322	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	May	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	DEA Mineraloel AG					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	DEA Mineraloel AG					Plant Name:	Wesseling Syngas Plant				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	DEA Mineraloel AG	Facility Name:	Wesseling Refinery
Location: (City/State/Prov)	Wesseling	Facility Type:	Refinery
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):				
				<small>(mt/d)</small>	<small>(Source)</small>		
Feed1:	Residual oil	544 mt/d				Syngas Cap.:	1,500,000 Estimate <small>(Nm3/d) (Source)</small>
Feed2:						Eq. IGCC Cap., MWe:	112.0 <small>(Calculated)</small>
Feed3:						Fuel Input:	250.1 Estimate <small>(MWt) (Source)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	205.1 Estimate <small>(MWt) (Source)</small>
Product1:	Methanol	mt/d					
Product2:							
Product3:							

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:						Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:	Edeleanu GmbH				Engineer:	Edeleanu GmbH	
					Constructor:	Edeleanu GmbH	

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Key Gasifier Information

Facility ID: 20 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** June 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Linde AG **Plt. Owner Type:** Special Joint Venture
Plt. Operator: Linde AG **Plant Name:** Singapore Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Singapore Syngas Pte. Ltd. (Texaco/Messer) **Facility Name:** Pulau Merlimau Gas Plant
Location: (City/State/Prov) Jurong Island **Facility Type:** Gas Plant
 (Country) Singapore **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 554.0 (mt/d) Estimate (Source)
Feed1: Ref. residue 572 mt/d **Syngas Cap.:** 1,610,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 120.2 (Calculated)
Feed3: **Fuel Input:** 268.4 (MWt) Estimate (Source)
Main Product: Chemicals (Category) **Syngas Output:** 220.1 (MWt) Gasifier licensor data (Source)
Product1: H2 25 MMscf/d
Product2: CO 25 MMscf/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Messer Griesheim (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde AG **Constructor:** M.W. Kellogg/Chiyoda

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Key Gasifier Information

Facility ID: 270 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** April 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: ExxonMobil **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: ExxonMobil **Plant Name:** Baytown Syngas Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: ExxonMobil **Facility Name:** Baytown Chemical Plant
Location: (City/State/Prov) Baytown, TX **Facility Type:** Chemical Plant
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 875.0 (mt/d) Estimate (Source)
Feed1: Deasphalter pitch 1,100 mt/d
Feed2:
Feed3:
Syngas Cap.: 2,540,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 189.6 (Calculated)
Main Product: Gaseous fuels (Category) **Fuel Input:** 423.4 (MWt) Estimate (Source)
Product1: Syngas 2,540,000 Nm3/d **Syngas Output:** 347.2 (MWt) Gasifier licensor data (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Parsons **Engineer:**
Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID:	126	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	Oct.	2000	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	BOC Gases					Plt. Owner Type:	Industrial Gas Supply				
Plt. Operator:	BOC Gases					Plant Name:	Brisbane H2 Plant				
Gas'n Tech.:	GE Gasification Technology					GE	Entrained-flow gasification				
	(Technology Name)					(Licensor)	(Technology Type)				
Vendor Contact:	Tim Huskey					timothy.huskey@ge.com					
	(Contact)					(Email)					

Facility Information

Facility Owner:	BOC Gases	Facility Name:	Brisbane Industrial Gas Complex
Location: (City/State/Prov)	Brisbane, Queensland	Facility Type:	Gas Plant
(Country)	Australia	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Gaseous	Gas	Rate (MAF):		
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Natural gas	15	MMscf/d		
Feed2:	Ref. off-gases				
Feed3:					
Main Product:	Chemicals				
	(Category)				
Product1:	H2	30	MMscf/d		
Product2:					
Product3:					
Syngas Cap.:	805,000	Gasifier licensor			
	(Nm3/d)	(Source)			
Eq. IGCC Cap., MWe:	60.1				
	(Calculated)				
Fuel Input:	129.4 Estimate				
	(MWt) (Source)				
Syngas Output:	110.0 Gasifier licensor data				
	(MWt) (Source)				

Other Information

O2 Supply:	Oxygen	BOC Gases		
	(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:	Direct water quench cooler			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:				
	(Supplier)	(Process)	(Process)	
Gas Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
HRSG:				
	(No.)	(Supplier)	(Model)	(Production)
Steam Turbine:				
	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:				
Engineer:	Kvaerner			
Constructor:				

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 35 No. of Gasifiers: Op'g/Sp/Total 1/ 1/ 2 Gasifier Status: Operating Start Date: July 2000

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Gases

Plt. Owner: Coffeyville Resources Refining and Marketing, LLC Plt. Owner Type: Oil Refining & Chemicals

Plt. Operator: Coffeyville Resources Refining and Marketing, LLC Plant Name: Coffeyville Syngas Plant

Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Coffeyville Resources Refining and Marketing, LLC Facility Name: Coffeyville Nitrogen Plant

Location: (City/State/Prov) Coffeyville, KS Facility Type: Petrochemical Plant
(Country) United States Facility Status: Operating
(Region) North America

Feed/Product Information

Main Feed: Solid Petcoke Rate (MAF): 1,100.0 Gasifier operator data
(Category) (Classification) (mt/d) (Source)

Feed1: Petcoke 1,100 mt/d

Feed2:

Feed3:

Syngas Cap.: 2,141,200 Estimate
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 159.8
(Calculated)

Main Product: Chemicals
(Category)

Fuel Input: 390.3 Estimate
(MWt) (Source)

Product1: Ammonia 1,000 mt/d Syngas Output: 292.7 Estimate
(MWt) (Source)

Product2: UAN 1,545 mt/d

Product3:

Other Information

O2 Supply: Oxygen BOC Gases Across-the-fence
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Direct water quench cooler Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: UOP LLC Selexol Sulfur Removal: Tessenderlo Kerley Claus/Ammonium thiosul
(Supplier) (Process) (Supplier) (Process)

Gas Turbine: 0 N.A. 0
(No.) (Supplier) (Model) (MWout)

HRSG: 0 N.A. 0 Steam Turbine: 0 N.A. 0
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Black & Veatch Pritchard Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	55	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Operating	Start Date:	April 2000
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	SARLUX srl			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	SARLUX srl			Plant Name:	SARLUX IGCC Project		
Gas'n Tech.:	GE Gasification Technology (Technology Name)		GE (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Tim Huskey (Contact)		timothy.huskey@ge.com (Email)				

Facility Information

Facility Owner:	Saras S.p.A.	Facility Name:	Saras S.p.A. Raffinerie Sarde
Location:	(City/State/Prov) Sarroch, Cagliari, Sardinia	Facility Type:	Refinery
(Country)	Italy	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	3,545.0 (mt/d)	Gasifier contractor (Source)
Feed1:	Visbreaker residue	3,552 mt/d			
Feed2:					
Feed3:					
Main Product:	Power (Category)				
Product1:	Electricity	551 MWe			
Product2:	H2	960,000 Nm3/d			
Product3:	Steam	185 mt/hr			
			Syngas Cap.:	10,400,000 (Nm3/d)	Gasifier contractor (Source)
			Eq. IGCC Cap., MWe:	776.4 (Calculated)	
			Fuel Input:	1,586.3 (MWt)	Gasifier contractor (Source)
			Syngas Output:	1,271.2 (MWt)	Gasifier contractor (Source)

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	Across-the-fence/No integration (ASU Integration)	
Syngas Cooler:	Direct water quench cooler (Cooler Type)		Soot Handling:	Naphtha recovery & recy
			(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	UOP LLC (Supplier)	Selexol (Process)	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (O2 blown) (Process)
Gas Turbine:	3 (No.)	General Electric Co. (Supplier)	9E (Model)	414 (MWout)
HRSG:	3 (No.)	General Electric Co. (Supplier)	700 t/hr (Production)	Steam Turbine:
				3 (No.)
				General Electric Co. (Supplier)
				152.4 (MWout)
Prin. Contractor:	Snamprogetti		Engineer:	RTI
			Constructor:	RTI

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 271 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Esso Singapore Pty. Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Esso Singapore Pty. Ltd. **Plant Name:** Chawan IGCC Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Esso Singapore Pty. Ltd. **Facility Name:** Chawan Refinery
Location: (City/State/Prov) Pulau Ayer Chawan, Jurong Island **Facility Type:** Refinery
 (Country) Singapore **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 924.0 (mt/d) Estimate (Source)
Feed1: Residual oil 924 mt/d
Feed2:
Feed3:
Syngas Cap.: 2,660,000 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 198.6 (Calculated)
Main Product: Power (Category) **Fuel Input:** 450.0 (MWt) Estimate (Source)
Product1: Electricity 173 MW **Syngas Output:** 363.6 (MWt) Estimate (Source)
Product2: H2 MMscf/d
Product3: Steam lb/hr

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6FA (Model) 173.2 (MWout)
HRSG: 2 (No.) General Electric Co. (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: M.W. Kellogg **Engineer:** M.W. Kellogg **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: _____

10-Aug-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Soot Handling:

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

10-Aug-04

Key Gasifier Information

Facility ID: 184 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2001
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Jilin Chemical Industrial Corp. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Jilin Chemical Industrial Corp. **Plant Name:** Jilin Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Jilin Chemical Industrial Corp. **Facility Name:** Jilin Chemical Plant
Location: (City/State/Prov) Jilin **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 739.5 (mt/d) Estimate (Source)
Feed1: Visbreaker residue 740 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia 1,000 mt/d
Product2:
Product3:
Syngas Cap.: 2,096,500 (Nm3/d) Estimate (Source)
Eq. IGCC Cap., MWe: 156.5 (Calculated)
Fuel Input: 358.3 (MWt) Estimate (Source)
Syngas Output: 286.6 (MWt) Estimate (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Linde AG (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Unspecified vendor (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** Linde Impianti Italia SpA **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 31 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Valero **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Valero **Plant Name:** Delaware Clean Energy Cogeneration Project
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Premcor, Inc. **Facility Name:** Premcor Delaware City Refinery
Location: (City/State/Prov) Delaware City, DE **Facility Type:** Refinery
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid (Category) Petcoke (Classification) **Rate (MAF):** 1,775.0 (mt/d) Estimate (Source)
Feed1: Fluid petcoke 2,100 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 160 MW (net)
Product2: Steam 791,000 lb/hr
Product3:

Syngas Cap.: 3,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 283.7 (Calculated)
Fuel Input: 692.7 (MWt) Estimate (Source)
Syngas Output: 519.5 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Praxair, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) MDEA (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6FA (Model) 180 (MWout)
HRSG: 2 (No.) Nooter-Erikson (Supplier) (Model) 359 mt/hr (Production) **Steam Turbine:** 2 (No.) (Supplier) (Model) 80 (MWout)
Prin. Contractor: Parsons Process Group Inc. **Engineer:** Parsons Process Group Inc. **Constructor:** Parsons Process Group Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date:

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:
(Country) Facility Status:
(Region)

Feed/Product Information

Main Feed: Rate (MAF):
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm³/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O₂ Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 122 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** May 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Nanjing Chemical Industry Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nanjing Chemical Industry Co. **Plant Name:** Nanjing Ammonia Plant
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nanjing Chemical Industry Co. **Facility Name:** Nanjing Chemical Plant
Location: (City/State/Prov) Nanjing, Jiangsu **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid Petroleum (Category) (Classification) **Rate (MAF):** 769.0 (mt/d) Estimate (Source)
Feed1: Eureka pitch 385 mt/d
Feed2: Vacuum residue oil 385 mt/d
Feed3: _____
Main Product: Chemicals (Category)
Product1: Ammonia 1,000 mt/d
Product2: _____
Product3: _____

Syngas Cap.: 2,200,000 (Nm3/d) Gasifier contractor (Source)
Eq. IGCC Cap., MWe: 164.2 (Calculated)
Fuel Input: 346.0 (MWt) Gasifier contractor (Source)
Syngas Output: 300.8 (MWt) Estimate (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) N2 feeds NH3 prod'n (ASU Integration)

Syngas Cooler: Direct water quench cooler (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** Flash & filtration

Gas Cleanup: Linde AG (Supplier) Rectisol (Process) **Sulfur Removal:** _____ (Supplier) Outside Battery Limits (Process)

Gas Turbine: _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)

HRSG: _____ (No.) _____ (Supplier) _____ (Model) _____ (Production) **Steam Turbine:** _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)

Prin. Contractor: Snamprogetti **Engineer:** Snamprogetti **Constructor:** Nanjing Chemical Industry Co.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 121 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** July 2003
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nippon Petroleum Refining Co. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Nippon Petroleum Refining Co. **Plant Name:** Negishi IGCC
Gas'n Tech.: GE Gasification Technology (Technology Name) GE (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Tim Huskey (Contact) timothy.huskey@ge.com (Email)

Facility Information

Facility Owner: Nippon Petroleum Refining Co. **Facility Name:** Negishi Refinery
Location: (City/State/Prov) Yokohama **Facility Type:** Refinery
 (Country) Japan **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,000.0 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,992 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 342 MWnet
Product2:
Product3:
Syngas Cap.: 5,800,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 433.0 (Calculated)
Fuel Input: 967.0 (MWt) Gasifier licensor data (Source)
Syngas Output: 792.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell/JGC (Supplier) ADIP (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) OxyClaus/Scot (Process)
Gas Turbine: 1 (No.) Mitsubishi Heavy Industri 701F (Supplier) (Model) 301 (MWout)
HRSG: 1 (No.) Mitsubishi Heavy Industri (Supplier) Vertical (Model) 430 mt/hr (Production) **Steam Turbine:** 1 (No.) Mitsubishi Heavy Industri Down Flow (Supplier) (Model) 130 (MWout)
Prin. Contractor: JGC Corp. **Engineer:** JGC Corp. **Constructor:** JGC Corp.

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID:	385	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Feb.	2004
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	BP/Formosa				Plt. Owner Type:					
Plt. Operator:	BP/Formosa				Plant Name:	Mai Liao Refinery				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>				GE <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>				timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:		Facility Name:	Mai Liao Refinery	
Location: (City/State/Prov)	Mai Liao	Facility Type:	Refinery	
(Country)	Taiwan	Facility Status:	Operating	
(Region)	Asia/Australia			

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Naphtha		0			Syngas Cap.:	1,080,000 <small>(Nm3/d)</small>	
Feed2:			0			Eq. IGCC Cap., MWe:	80.6 <small>(Calculated)</small>	
Feed3:			0			Fuel Input:	0.0 <small>(MWt)</small>	
Main Product:	Chemicals <small>(Category)</small>				Syngas Output:		147.6 <small>(MWt)</small>	
Product1:	Methanol		0					
Product2:			0					
Product3:			0					

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:			0	Soot Handling:				
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>					
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>			
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Sep-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	383	No. of Gasifiers: Op'g/Sp/Total	1 / 0 / 1	Gasifier Status:	Operating	Start Date:	2004
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	China 1 (Expansion)			Plt. Owner Type:			
Plt. Operator:				Plant Name:	China 1		
Gas'n Tech.:	GE Gasification Technology	GE	Entrained-flow gasification	(Technology Name)	(Licensor)	(Technology Type)	
Vendor Contact:	Tim Huskey	timothy.huskey@ge.com			(Contact)	(Email)	

Facility Information

Facility Owner:	China 1 (Expansion)	Facility Name:	China 1
Location: (City/State/Prov)	Haolianghe, Heilongjiang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0			
	(Category)	(Classification)	(mt/d)	(Source)			
Feed1:	Coal	0				Syngas Cap.:	2,045,000
Feed2:		0					(Nm3/d) (Source)
Feed3:		0				Eq. IGCC Cap., MWe:	152.7
							(Calculated)
Main Product:	Chemicals					Fuel Input:	0.0
	(Category)						(MWt) (Source)
Product1:	Methanol	0				Syngas Output:	279.6
Product2:		0					(MWt) (Source)
Product3:		0					

Other Information

O2 Supply:					
	(Oxidant)	(ASU Supplier)	(ASU Integration)		
Syngas Cooler:			0		Soot Handling:
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)		
Gas Cleanup:					Sulfur Removal:
	(Supplier)	(Process)	(Supplier)	(Process)	
Gas Turbine:	0		0		
	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:	0		0		Steam Turbine:
	(No.)	(Supplier)	(Model)	(Production)	(No.)
	(Supplier)	(Model)	(Production)	(No.)	(Supplier)
	(Supplier)	(Model)	(Production)	(No.)	(Supplier)
Prin. Contractor:		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	388	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	
Plt. Owner:	China 4					Plt. Owner Type:			
Plt. Operator:						Plant Name:	China 4		
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>					

Facility Information

Facility Owner:	China 4	Facility Name:	China 4
Location: (City/State/Prov)		Facility Type:	
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>
Feed2:	Petcoke		0			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>
Feed3:			0			Fuel Input:	0.0 <small>(MWt)</small>
Main Product:	Chemicals <small>(Category)</small>					Syngas Output:	287.1 <small>(MWt)</small>
Product1:	Ammonia		0				
Product2:	Urea		0				
Product3:			0				

Other Information

O2 Supply:								
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>					
Syngas Cooler:			0		Soot Handling:			
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>					
Gas Cleanup:				Sulfur Removal:				
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>				
HRSG:	0		0	Steam Turbine:	0		0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	
Prin. Contractor:			Engineer:			Constructor:		

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID:	384	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	2005
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases/Chemicals
Plt. Owner:	China 2					Plt. Owner Type:			
Plt. Operator:						Plant Name:	China 2		
Gas'n Tech.:	GE Gasification Technology				GE	Entrained-flow gasification			
	(Technology Name)				(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey				timothy.huskey@ge.com				
	(Contact)				(Email)				

Facility Information

Facility Owner:	China 2	Facility Name:	China 2
Location: (City/State/Prov)	Jinling, Nanjing	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0			
	(Category)	(Classification)		(mt/d)	(Source)		
Feed1:	Coal		0			Syngas Cap.:	1,275,000
							(Nm3/d) (Source)
Feed2:			0			Eq. IGCC Cap., MWe:	95.2
							(Calculated)
Feed3:			0			Fuel Input:	0.0
							(MWt) (Source)
Main Product:	Chemicals					Syngas Output:	174.3
	(Category)						(MWt) (Source)
Product1:	Methanol		0				
Product2:			0				
Product3:			0				

Other Information

O2 Supply:							
	(Oxidant)	(ASU Supplier)	(ASU Integration)				
Syngas Cooler:			0	Soot Handling:			
	(Cooler Type)		(Cooler Supplier) (MWth Duty)				
Gas Cleanup:					Sulfur Removal:		
	(Supplier)	(Process)	(Supplier) (Process)				
Gas Turbine:	0		0				
	(No.)	(Supplier)	(Model)	(MWout)			
HRSG:	0		0	Steam Turbine:			
	(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model) (MWout)
Prin. Contractor:			Engineer:				

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID: 398
No. of Gasifiers: Op'g/Sp/Total 1/ 0/1
Gasifier Status: Startup
Start Date: 2006

Project Count: 1
Plt. Type: Commercial
Project Reality: Active-Real
Application: Syngas for Chemicals

Plt. Owner: Weihe Chemical Company
Plt. Owner Type:

Plt. Operator: Weihe Chemical Company
Plant Name: Weihe Chemical

Gas'n Tech.: GE Gasification Technology
GE
Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Tim Huskey
timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: Weihe Chemical Company
Facility Name:

Location: (City/State/Prov) Weinan, Shaanxi
Facility Type:

(Country) China
Facility Status:

(Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal
Rate (MAF): 0.0
(Category) (Classification) (mt/d) (Source)

Feed1: Coal 0

Feed2: 0

Feed3: 0

Main Product: Chemicals
(Category)

Product1: 0

Product2: 0

Product3: 0

Syngas Cap.: 2,900,000
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 216.5
(Calculated)

Fuel Input: 527.0
(MWt) (Source)

Syngas Output: 395.0
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: 0
Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup:
Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine: 0 0
(No.) (Supplier) (Model) (MWout)

HRSG: 0 0
Steam Turbine: 0 0
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor:
Engineer:
Constructor:

2007 Gasification Database Gasification Plant Entry Form

DateModified:

15-Sep-04

Key Gasifier Information

Facility ID:	386	No. of Gasifiers: Op'g/Sp/Total	3/ 0/ 3	Gasifier Status:	Development	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	
Plt. Owner:	China 5		Plt. Owner Type:				
Plt. Operator:				Plant Name:	China 5		
Gas'n Tech.:	GE Gasification Technology		GE	Entrained-flow gasification			
	(Technology Name)		(Licensor)	(Technology Type)			
Vendor Contact:	Tim Huskey		timothy.huskey@ge.com				
	(Contact)		(Email)				

Facility Information

Facility Owner:	China 5	Facility Name:	China 5
Location: (City/State/Prov)		Facility Type:	
(Country)	China	Facility Status:	Planning
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Coal	Rate (MAF):	0.0	
(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Coal	0		
Feed2:		0		
Feed3:		0		
Main Product:	Chemicals	Syngas Cap.:	2,080,000	
(Category)		(Nm3/d)	(Source)	
Product1:	Methanol	0		
Product2:		0		
Product3:		0		
		Eq. IGCC Cap., MWe:	155.3	
		(Calculated)		
		Fuel Input:	0.0	
		(MWt)	(Source)	
		Syngas Output:	284.3	
		(MWt)	(Source)	

Other Information

O2 Supply:			
(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:		0	Soot Handling:
(Cooler Type)	(Cooler Supplier)	(MWth Duty)	
Gas Cleanup:			Sulfur Removal:
(Supplier)	(Process)	(Supplier)	(Process)
Gas Turbine:	0	0	
(No.)	(Supplier)	(Model)	(MWout)
HRSG:	0	0	0
(No.)	(Supplier)	(Model)	(Production)
		Steam Turbine:	0
		(No.)	(Supplier)
		(Model)	(MWout)
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: 409 No. of Gasifiers: Op'g/Sp/Total 2/ 1/ 3 Gasifier Status: Development Start Date: 2010

Project Count: 1 Plt. Type: Commercial Project Reality: Planning Application: Syngas for Power

Plt. Owner: ERORA/Christian Co. Development LLC Plt. Owner Type:

Plt. Operator: ERORA/Christian Co. Development LLC Plant Name: Taylorville Energy Center

Gas'n Tech.: GE Gasification Technology GE Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)

Vendor Contact: Tim Huskey timothy.huskey@ge.com
(Contact) (Email)

Facility Information

Facility Owner: ERORA/Christian Co. Development LLC Facility Name:

Location: (City/State/Prov) Taylorville, IL Facility Type:

(Country) United States Facility Status:

(Region) North America

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): 0.0
(Category) (Classification) (mt/d) (Source)

Feed1: Coal 0
Feed2: 0
Feed3: 0

Main Product: Power
(Category)

Product1: Electricity 630 MW
Product2: 0
Product3: 0

Syngas Cap.: 8,450,000
(Nm3/d) (Source)

Eq. IGCC Cap., MWe: 630.8
(Calculated)

Fuel Input: 1,530.0
(MWt) (Source)

Syngas Output: 1,150.0
(MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 Soot Handling:

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: 0 (No.) (Supplier) (Model) (MWout)

HRSG: 0 (No.) (Supplier) (Model) (Production) Steam Turbine: 0 (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID:	414	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Development	Start Date:	2010	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Chemicals	
Plt. Owner:	Eastman Chemical Co.				Plt. Owner Type:					
Plt. Operator:	Eastman Chemical Co.				Plant Name:	Faustina Hydrogen Products LLC				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Eastman Chemical Co.		Facility Name:		
Location: (City/State/Prov)	St. James Parish, LA		Facility Type:		
(Country)	United States		Facility Status:		
(Region)	North America				

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Petcoke <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>				
Feed1:	Petcoke		0			Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>	
Feed2:	Coal		0			Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>	
Feed3:			0			Fuel Input:	1,530.0 <small>(MWt)</small>	
Main Product:	Chemicals <small>(Category)</small>				Syngas Output:		1,150.0 <small>(MWt)</small>	
Product1:	Ammonia		0					
Product2:	Methanol		0					
Product3:			0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0			Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0			Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
	<small>(Model)</small>		<small>(MWout)</small>		<small>(Model)</small>		<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID:	408	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Development	Start Date:	2011	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Planning		Application:	Syngas for Power	
Plt. Owner:	Duke Energy Indiana				Plt. Owner Type:	Utility				
Plt. Operator:	Duke Energy Indiana				Plant Name:	Edwardsport IGCC				
Gas'n Tech.:	GE Gasification Technology <small>(Technology Name)</small>			GE <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Tim Huskey <small>(Contact)</small>			timothy.huskey@ge.com <small>(Email)</small>						

Facility Information

Facility Owner:	Duke Energy Indiana	Facility Name:	
Location: (City/State/Prov)	Edwardsport, IN	Facility Type:	
(Country)	United States	Facility Status:	
(Region)	North America		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0			Syngas Cap.:	8,450,000 <small>(Nm3/d)</small>
Feed2:			0			Eq. IGCC Cap., MWe:	630.8 <small>(Calculated)</small>
Feed3:			0			Fuel Input:	1,530.0 <small>(MWt)</small>
Main Product:	Power <small>(Category)</small>					Syngas Output:	1,150.0 <small>(MWt)</small>
Product1:	Electricity		630	MW			
Product2:			0				
Product3:			0				

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0		Soot Handling:		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0		Steam Turbine:	0	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>		<small>(No.)</small>	<small>(Supplier)</small>
		<small>(Model)</small>	<small>(Production)</small>			<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

10-Aug-04

Key Gasifier Information

Facility ID: 114 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1992
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals/Power
Plt. Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plt. Owner Type:** Waste Processor
Plt. Operator: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb **Plant Name:** Schwarze Pumpe Power/Methanol Plant
Gas'n Tech.: GSP Gasification Process (Technology Name) Future Energy GmbH (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dirk Volkmann (Contact) d.volkmann@future-energy.de (Email)

Facility Information

Facility Owner: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH **Facility Name:** Secondary Raw Material Utilization Centre
Location: (City/State/Prov) Lausitz, Schwarze Pumpe **Facility Type:** Waste Processing
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 150.0 (mt/d) Estimate (Source)
Feed1: Waste oil/slurry tar 150 mt/d
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 75 MW
Product2: Methanol 375 mt/d
Product3:
Syngas Cap.: 1,200,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 89.6 (Calculated)
Fuel Input: 234.2 (MWt) Estimate (Source)
Syngas Output: 164.0 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) AGA (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: Direct water quench cooler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 27-Aug-03

27-Aug-03

Key Gasifier Information

Facility ID: 160 **No. of Gasifiers: Op'g/Sp/Total** 6/ 2/ 8 **Gasifier Status:** Operating **Start Date:** 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shanghai Pacific Chemical (Group) Co., Ltd. **Plant Name:** Wujing Gas Plant No. 2
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) _____ (Email)

Facility Information

Facility Owner: Shanghai Pacific Chemical (Group) Co., Ltd. **Facility Name:** Wujing Coking and Chemical Plant
Location: (City/State/Prov) Wujing, Shanghai **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** _____ (mt/d) _____ (Source)
Feed1: Bit. coal 800 mt/d
Feed2: _____
Feed3: _____
Main Product: Gaseous fuels (Category)
Product1: Fuel gas 3,000,000 Nm3/d
Product2: Town gas 500,000 Nm3/d
Product3: _____
Syngas Cap.: 3,000,000 Estimate (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 224.0 (Calculated)
Fuel Input: 512.6 Estimate (MWt) (Source)
Syngas Output: 410.1 Estimate (MWt) (Source)

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** Design Institute of Shanghai **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: 159 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2002
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: IBIL Energy Systems Ltd. (IES) **Plt. Owner Type:**
Plt. Operator: IBIL Energy Systems Ltd. (IES) **Plant Name:** Sanghi IGCC Plant
Gas'n Tech.: GTI (IGT) U-GAS Gasification Process (Technology Name) Carbona/Enviropower (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: J.G. Patel (Contact) (Email)

Facility Information

Facility Owner: IBIL Energy Systems Ltd. (IES) **Facility Name:** IES Power Plant
Location: (City/State/Prov) Kutch, Gujarat **Facility Type:** IPP
 (Country) India **Facility Status:** Construction
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 350.0 Estimate
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 350 mt/d **Syngas Cap.:** 804,000 Estimate
Feed2: **Eq. IGCC Cap., MWe:** 60.0
Feed3: (Calculated)
Main Product: Power **Fuel Input:** 136.4 Estimate
 (Category) (MWt) (Source)
Product1: Electricity 53 MW **Syngas Output:** 109.1 Estimate
Product2: Steam 40 t/hr (MWt) (Source)
Product3:

Other Information

O2 Supply: Air (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 1 General Electric Co. 6B 35.9
 (No.) (Supplier) (Model) (MWout)
HRSG: 1 (No.) (Supplier) (Model) (Production) **Steam Turbine:** 1 General Electric Co. 21.2
 (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Enviropower **Engineer:** Carbona Inc. **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

04-Mar-99

Key Gasifier Information

Facility ID: 256 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Operating Start Date: 1952
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Fabrika Azotnih Jendinjnja Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Fabrika Azotnih Jendinjnja Plant Name: Gorazde Ammonia Plant
Gas'n Tech.: Low Pressure Winkler Gasification Process (Technology Name) Kvaerner Process Technology (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: (Contact) (Email)

Facility Information

Facility Owner: Fabrika Azotnih Jendinjnja Facility Name: Gorazde Plant
Location: (City/State/Prov) Gorazde Facility Type: Chemical Plant
(Country) Former Yugoslavia Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): (mt/d) (Source)
(Category) (Classification)
Feed1: Lignite 53 mt/d Syngas Cap.: 120,000 Estimate
(Nm3/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 9.0
(Calculated)
Feed3: Fuel Input: 20.5 Estimate
(MWt) (Source)
Main Product: Chemicals Syngas Output: 16.4 Estimate
(Category) (MWt) (Source)
Product1: Ammonia mt/d
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Bamag Verfah. Constructor: Bamag Verfah.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 400 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Clean Coal Power R&D Co., Ltd. **Plt. Owner Type:** Independent Power Producer
Plt. Operator: Clean Coal Power R&D Co., Ltd. **Plant Name:** Nakoso IGCC
Gas'n Tech.: MHI Air-blown Gasifier (Technology Name) Mitsubishi Heavy Industries, Ltd. (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Koji Ota (Contact) kota@mpshq.com (Email)

Facility Information

Facility Owner: Clean Coal Power R&D Co., Ltd. **Facility Name:** Nakoso IGCC
Location: (City/State/Prov) Nakoso, Iwaki-city, Fukushima Prefecture **Facility Type:**
 (Country) Japan **Facility Status:**
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Power (Category)
Product1: Electricity 250 MW
Product2: 0
Product3: 0
Syngas Cap.: 3,350,000 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 250.1 (Calculated)
Fuel Input: 610.0 (MWt) (Source)
Syngas Output: 455.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: () **Engineer:** () **Constructor:** ()

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-03

Key Gasifier Information

Facility ID:	58	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	Sept. 1997
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Power
Plt. Owner:	Elcogas SA			Plt. Owner Type:	Special Joint Venture		
Plt. Operator:	Elcogas SA			Plant Name:	Puertollano GCC Plant		
Gas'n Tech.:	Krupp Koppers PRENFLO Gasification Technology (Technology Name)		Krupp Uhde (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	H. Max Hooper (Contact)		hooperm@usa.kud.thyssenkrupp.com (Email)				

Facility Information

Facility Owner:	Elcogas SA		Facility Name:	Puertollano Power Plant	
Location: (City/State/Prov)	Puertollano		Facility Type:	Electric Utility	
(Country)	Spain		Facility Status:	Operating	
(Region)	Europe				

Feed/Product Information

Main Feed:	Solid (Category)	Coal (Classification)	Rate (MAF):			
			(mt/d)	(Source)		
Feed1:	Coal & petcoke		2,600 mt/d			
Feed2:						
Feed3:						
Main Product:	Power (Category)					
Product1:	Electricity	335	MWe			
Product2:						
Product3:						
Syngas Cap.:	4,300,000		Gasifier licensor (Nm3/d)	(Source)		
Eq. IGCC Cap., MWe:	321.0		(Calculated)			
Fuel Input:	734.8		Gasifier licensor data (MWt)	(Source)		
Syngas Output:	587.8		Gasifier licensor data (MWt)	(Source)		

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)	Integrated (ASU Integration)	
Syngas Cooler:	Convective syngas cooler (Cooler Type)		Steinmüller (Cooler Supplier)	
			(MWth Duty)	Soot Handling:
Gas Cleanup:	Krupp Uhde (Supplier)	MDEA (Process)	Sulfur Removal:	
			(Supplier)	Claus (Process)
Gas Turbine:	1 (No.)	Siemens/KWU (Supplier)	V94.3 (Model)	182.3 (MWout)
HRSG:	1 (No.)	Babcock & Wilcox (Supplier)		
			Steam Turbine:	1 (No.)
			(Supplier)	Siemens/KWU (Model)
				135.4 (MWout)
Prin. Contractor:	Krupp Uhde		Engineer:	Krupp Uhde
			Constructor:	B&W/Krupp Uhde

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID:	240	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Sept.	1996	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Gases		
Plt. Owner:	Rüdersdorfer Zement GmbH					Plt. Owner Type:					
Plt. Operator:	Rüdersdorfer Zement GmbH					Plant Name:	Fuel Gas Plant				
Gas'n Tech.:	Lurgi Circulating Fluidized Bed Gasification Process <small>(Technology Name)</small>					Lurgi Envirotherm GmbH <small>(Licensor)</small>	Fluidized-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>					claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Rüdersdorfer Zement GmbH	Facility Name:	Rüdersdorf Cement Kiln
Location: (City/State/Prov)	Rüdersdorf	Facility Type:	Other
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Biomass/Waste <small>(Classification)</small>	Rate (MAF):	320.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Biomass	320 mt/d			
Feed2:	Wastes				
Feed3:	Carbon ash				
Main Product:	Gaseous fuels <small>(Category)</small>				
Product1:	Fuel gas	100	MWth		
Product2:					
Product3:					
			Syngas Cap.:	732,000 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	54.6 <small>(Calculated)</small>	
			Fuel Input:	110.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	100.0 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Air <small>(Oxidant)</small>				
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>		
Syngas Cooler:					Soot Handling:
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:		
	<small>(Supplier)</small>	<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
				<small>(Supplier)</small>	<small>(Model)</small>
Prin. Contractor:			Engineer:		
				Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: 242 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: EPZ **Plt. Owner Type:** _____
Plt. Operator: EPZ **Plant Name:** Amercentrale Fuel Gas Plant
Gas'n Tech.: Lurgi Circulating Fluidized Bed Gasification Process (Technology Name) Lurgi Envirotherm GmbH (Licensor) Fluidized-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: EPZ **Facility Name:** Amercentrale Plant
Location: (City/State/Prov) Geertruidenberg **Facility Type:** _____
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid Biomass/Waste **Rate (MAF):** 500.0 Gasifier licensor data
 (Category) (Classification) (mt/d) (Source)
Feed1: Demolition wood 500 mt/d **Syngas Cap.:** 614,300 Estimate
Feed2: _____ (Nm3/d) (Source)
Feed3: _____ **Eq. IGCC Cap., MWe:** 45.9
 (Calculated)
Main Product: Power (Category) **Fuel Input:** 105.0 Estimate
 (MWt) (Source)
Product1: Electricity 85 MWth **Syngas Output:** 84.0 Gasifier licensor data
 (MWt) (Source)
Product2: _____
Product3: _____

Other Information

O2 Supply: Air (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: Water-tube (Cooler Type) Baumgarte (Cooler Supplier) _____ (MWth Duty) **Soot Handling:** _____
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Scrubber (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
HRSG: _____ (No.) _____ (Supplier) _____ (Model) _____ (Production) **Steam Turbine:** _____ (No.) _____ (Supplier) _____ (Model) _____ (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jun-03

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID:	236	No. of Gasifiers: Op'g/Sp/Total	7/	0/	7	Gasifier Status:	Operating	Start Date:	1964	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power	
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processing			
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant			
Gas'n Tech.:	Lurgi Dry Ash Gasification Process					Lurgi GmbH	Moving-bed gasification			
	(Technology Name)					(Licensor)	(Technology Type)			
Vendor Contact:	Pauli Bauman					pauli.bauman@sasol.com				
	(Contact)					(Email)				

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH	Facility Name:	Secondary Raw Material Utilization Centre
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe	Facility Type:	Waste Processing Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Solid	Biomass/Waste	Rate (MAF):	1,500.0	Estimate
	(Category)	(Classification)	(mt/d)	(Source)	
Feed1:	Municipal waste	1,850 mt/d			
Feed2:					
Feed3:					
Main Product:	Power				
	(Category)				
Product1:	Electricity	75 MW			
Product2:	Methanol	375 mt/d			
Product3:					
				Syngas Cap.:	3,000,000
				(Nm3/d)	(Source)
				Eq. IGCC Cap., MWe:	224.0
				(Calculated)	
				Fuel Input:	494.1
				(MWt)	(Source)
				Syngas Output:	410.1
				(MWt)	(Source)

Other Information

O2 Supply:	Oxygen	AGA	Not integrated
	(Oxidant)	(ASU Supplier)	(ASU Integration)
Syngas Cooler:			
	(Cooler Type)	(Cooler Supplier)	(MWth Duty)
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	(Supplier)	(Process)	(Supplier) (Process)
Gas Turbine:	1	General Electric Co.	MS6001B 44.5
	(No.)	(Supplier)	(Model) (MWout)
HRSG:	1		240 t/hr
	(No.)	(Supplier)	(Production)
		1	30
		(No.)	(Supplier) (Model) (MWout)
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-04

Key Gasifier Information

Facility ID: 145 **No. of Gasifiers: Op'g/Sp/Total** 40/ 0/ 40 **Gasifier Status:** Operating **Start Date:** 1977
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Fuels/Chemicals
Plt. Owner: Sasol (Pty) Ltd. **Plt. Owner Type:** Synthetic Fuels & Chemicals
Plt. Operator: Sasol Synfuels (Pty) Ltd. **Plant Name:** Sasol Synfuels
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sasol (Pty) Ltd. **Facility Name:** Sasol Synfuels
Location: (City/State/Prov) Secunda, Mpumalanga **Facility Type:** Petrochemical Plant
 (Country) South Africa **Facility Status:** Operating
 (Region) Africa/Middle East

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 24,780.0 (mt/d) Operator/licensor (Source)
Feed1: Subbit. coal 1,475 mt/hr **Syngas Cap.:** 39,600,000 (Nm3/d) Operator/licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 2,956.2 (Calculated)
Feed3: **Fuel Input:** 8,810.0 (MWt) Operator/licensor (Source)
Main Product: FT liquids (Category) **Syngas Output:** 7,048.0 (MWt) Operator/licensor (Source)
Product1: Gas
Product2: Chemicals
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) Air Liquide (ASU Supplier) Not integrated (ASU Integration)
Syngas Cooler: No SG cooler; series of air & water coolers (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** N.A.
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Sasol/Linde (Supplier) Sulfolin (Stretford variant) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Lurgi **Engineer:** Fluor Daniel, Inc. **Constructor:** Fluor Daniel, Inc.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-04

30-Aug-04

Key Gasifier Information

Facility ID:	146	No. of Gasifiers: Op'g/Sp/Total	40/ 0/ 40	Gasifier Status:	Operating	Start Date:	1982
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Fuels/Chemicals
Plt. Owner:	Sasol (Pty) Ltd.			Plt. Owner Type:	Synthetic Fuels & Chemicals		
Plt. Operator:	Sasol Synfuels (Pty) Ltd.			Plant Name:	Gasification East Plant		
Gas'n Tech.:	Sasol Lurgi fixed bed, dry bottom <small>(Technology Name)</small>		Sasol Lurgi GmbH <small>(Licensor)</small>	Fixed-bed gasification <small>(Technology Type)</small>			
Vendor Contact:	Pauli Bauman <small>(Contact)</small>			pauli.bauman@sasol.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sasol (Pty) Ltd.	Facility Name:	Sasol Synfuels
Location: (City/State/Prov)	Secunda, Mpumalanga	Facility Type:	Petrochemical Plant
(Country)	South Africa	Facility Status:	Operating
(Region)	Africa/Middle East		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	24,780.0	Operator/licensor
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Subbit. coal	1,475 mt/hr			
Feed2:					
Feed3:					
Main Product:	FT liquids				
	<small>(Category)</small>				
Product1:	Gas				
Product2:	Chemicals				
Product3:					
			Syngas Cap.:	39,600,000	Operator/licensor
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	2,956.2	
				<small>(Calculated)</small>	
			Fuel Input:	8,810.0	Operator/licensor
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	7,048.0	Operator/licensor
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:	Oxygen	Air Liquide	Not integrated
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	No SG cooler; series of air & water coolers		
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH	Rectisol	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Process)</small>
Sulfur Removal:	Sasol/Linde	Sulfolin (Stretford variant)	
	<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
	<small>(Production)</small>	<small>(MWout)</small>	
HRSG:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
	<small>(Production)</small>	<small>(MWout)</small>	
Steam Turbine:	0	N.A.	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
	<small>(Production)</small>	<small>(MWout)</small>	
Prin. Contractor:	Lurgi		Engineer: Fluor Daniel, Inc.
	<small>(Contractor)</small>		<small>(Engineer)</small>
			Constructor: Fluor Daniel, Inc.
	<small>(Contractor)</small>		<small>(Constructor)</small>

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 24 **No. of Gasifiers: Op'g/Sp/Total** 12/ 2/ 14 **Gasifier Status:** Operating **Start Date:** 1984
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Gases
Plt. Owner: Dakota Gasification Co. **Plt. Owner Type:** Utility
Plt. Operator: Dakota Gasification Co. **Plant Name:** Great Plains Synfuels Plant
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Dakota Gasification Co. **Facility Name:** Great Plains Synfuels Plant
Location: (City/State/Prov) Bismarck, ND **Facility Type:** Electric Utility
 (Country) United States **Facility Status:** Operating
 (Region) North America

Feed/Product Information

Main Feed: Solid Coal **Rate (MAF):** 8,000.0 Gasifier licensor data
 (Category) (Classification) (mt/d) (Source)
Feed1: Lignite 14,000 t/d **Syngas Cap.:** 13,900,000 Estimate
Feed2: Ref. residue 50 t/d (Nm3/d) (Source)
Feed3: **Eq. IGCC Cap., MWe:** 1,037.7
 (Calculated)
Main Product: Gaseous fuels **Fuel Input:** 2,533.7 Estimate
 (Category) (MWt) (Source)
Product1: SNG 160 MMscf/d **Syngas Output:** 1,900.3 Estimate
Product2: CO2 5,000 mt/d (MWt) (Source)
Product3:

Other Information

O2 Supply: Oxygen Linde AG Across-the-fence/No integration
 (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube Soot Handling:
 (Cooler Type) (Cooler Supplier) (MWth Duty)
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH Rectisol Sulfur Removal: NH3-based SO2 scrubber
 (Supplier) (Process) (Supplier) (Process)
Gas Turbine: 0 N.A. 0
 (No.) (Supplier) (Model) (MWout)
HRSG: 0 N.A. 0 **Steam Turbine:** 0 N.A. 0
 (No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)
Prin. Contractor: C-E Lummus/Kaiser **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

12-Aug-04

Key Gasifier Information

Facility ID: 154 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** July 1987
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: China National Technology Import Co. (CNTIC) **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: China National Technology Import Co. (CNTIC) **Plant Name:** Shaanxi Ammonia Plant
Gas'n Tech.: Sasol Lurgi fixed bed, dry bottom (Technology Name) Sasol Lurgi GmbH (Licensor) Fixed-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: China National Technology Import Co. (CNTIC) **Facility Name:** Shaanxi Chemical Fertilizer Plant
Location: (City/State/Prov) Shaanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 1,050.0 (mt/d) Estimate (Source)
Feed1: Anthracite 1,200 mt/d **Syngas Cap.:** 2,282,492 (Nm3/d) Estimate (Source)
Feed2:
Feed3:
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Main Product: Chemicals (Category) **Fuel Input:** 367.1 (MWt) Estimate (Source)
Product1: Ammonia mt/d **Syngas Output:** 312.0 (MWt) Estimate (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Direct-quench/fire-tube (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Lurgi Oel•Gas•Chemie Gm (Supplier) Claus (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 274 **No. of Gasifiers: Op'g/Sp/Total** 13/ 13/ 26 **Gasifier Status:** Operating **Start Date:** 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Sokolovska Uhelna, A.S. **Plt. Owner Type:** Mining
Plt. Operator: Sokolovska Uhelna, A.S. **Plant Name:** Vresova IGCC Plant
Gas'n Tech.: Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Pauli Bauman (Contact) pauli.bauman@sasol.com (Email)

Facility Information

Facility Owner: Sokolovska Uhelna, A.S. **Facility Name:** Vresova Town Gas Plant
Location: (City/State/Prov) Vresova **Facility Type:** Lignite Processing Plant
 (Country) Czech Republic **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,040.0 (mt/d) Estimate (Source)
Feed1: Lignite 2,040 mt/d **Syngas Cap.:** 4,700,000 (Nm3/d) Estimate (Source)
Feed2: **Eq. IGCC Cap., MWe:** 350.9 (Calculated)
Feed3: **Fuel Input:** 795.5 (MWt) Estimate (Source)
Main Product: Power (Category) **Syngas Output:** 636.4 (MWt) Estimate (Source)
Product1: Electricity 350 MW
Product2: Steam t/hr
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 9E (Model) 400 (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 394 **No. of Gasifiers: Op'g/Sp/Total** 3/ 1/ 4 **Gasifier Status:** Operating **Start Date:** 2000
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Zhong Yuan Dahua Group Ltd. **Plt. Owner Type:**
Plt. Operator: Zhong Yuan Dahua Group Ltd. **Plant Name:** Zhong Yuan Dahua Group Ltd.
Gas'n Tech.: Sasol Lurgi Dry Ash Gasification Process (Technology Name) Lurgi GmbH (Licensor) Moving-bed gasification (Technology Type)
Vendor Contact: Claus Greil (Contact) claus_greil@lurgi.de (Email)

Facility Information

Facility Owner: Zhong Yuan Dahua Group Ltd. **Facility Name:**
Location: (City/State/Prov) Puyang, Henan **Facility Type:**
 (Country) China **Facility Status:**
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) (Source)
Feed1: Coal 0
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: 2,282,492 (Nm3/d) (Source)
Eq. IGCC Cap., MWe: 170.4 (Calculated)
Fuel Input: 367.0 (MWt) (Source)
Syngas Output: 312.0 (MWt) (Source)

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) 0 (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) (Model) 0 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 10-Aug-04

Key Gasifier Information

Facility ID:	42	No. of Gasifiers: Op'g/Sp/Total	3/	1/	4	Gasifier Status:	Operating	Start Date:	2000	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals	
Plt. Owner:	Henan				Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Henan				Plant Name:	Puyang Ammonia Plant				
Gas'n Tech.:	Sasol Lurgi Dry Ash Gasification Process <small>(Technology Name)</small>				Lurgi GmbH <small>(Licensor)</small>	Moving-bed gasification <small>(Technology Type)</small>				
Vendor Contact:	Claus Greil <small>(Contact)</small>				claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Henan	Facility Name:	Puyang Chemical Fertilizer Plant
Location: (City/State/Prov)	Puyang	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,000.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Anthracite	1,200 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,282,492 <small>(Nm3/d)</small>	Estimate <small>(Source)</small>
			Eq. IGCC Cap., MWe:	170.4 <small>(Calculated)</small>	
			Fuel Input:	367.1 <small>(MWt)</small>	Estimate <small>(Source)</small>
			Syngas Output:	312.0 <small>(MWt)</small>	Estimate <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>				
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>		
Syngas Cooler:					Soot Handling:
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	Lurgi Oel•Gas•Chemie Gm <small>(Supplier)</small>	Claus <small>(Process)</small>
Gas Turbine:					
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>	
HRSG:					Steam Turbine:
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>
					<small>(Supplier)</small>
Prin. Contractor:			Engineer:		
				Constructor: 	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID:	281	No. of Gasifiers: Op'g/Sp/Total	5/	0/	5	Gasifier Status:	Operating	Start Date:	1968
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals/Power
Plt. Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plt. Owner Type:	Waste Processor		
Plt. Operator:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe Gmb					Plant Name:	Schwarze Pumpe Power/Methanol Plant		
Gas'n Tech.:	Lurgi Multi Purpose Gasification Process <small>(Technology Name)</small>			Lurgi Oel • Gas • Chemie GmbH <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Claus Greil <small>(Contact)</small>			claus_greil@lurgi.de <small>(Email)</small>					

Facility Information

Facility Owner:	Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe GmbH			Facility Name:	Secondary Raw Material Utilization Centre			
Location: (City/State/Prov)	Lausitz, Schwarze Pumpe			Facility Type:	Waste Processing			
(Country)	Germany			Facility Status:	Operating			
(Region)	Europe							

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	625.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>					
Feed1:	Oil	480 mt/d			Syngas Cap.:	1,440,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>			
Feed2:	Slurry	144 mt/d			Eq. IGCC Cap., MWe:	107.5 <small>(Calculated)</small>				
Feed3:					Fuel Input:	246.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>			
Main Product:	Power <small>(Category)</small>				Syngas Output:	196.9 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>			
Product1:	Electricity	75 MW								
Product2:	Methanol	375 mt/d								
Product3:										

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>	AGA <small>(ASU Supplier)</small>	Not integrated <small>(ASU Integration)</small>							
Syngas Cooler:	Direct water quench cooler <small>(Cooler Type)</small>					Soot Handling:				
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>		Sulfur Removal:					
Gas Turbine:										
HRSG:					Steam Turbine:					
Prin. Contractor:			Engineer:				Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	70	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	May	1961	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Mitsubishi Petrochemicals				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Mitsubishi Petrochemicals				Plant Name:	Yokkaichi Syngas Plant					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	Mitsubishi Petrochemicals	Facility Name:	Yokkaichi Petrochemical Plant
Location: (City/State/Prov)	Yokkaichi	Facility Type:	Petrochemical Plant
(Country)	Japan	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	137.6 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Bunker C fuel oil	138 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Syngas	400,000 Nm3/d				
Product2:						
Product3:						
			Syngas Cap.:	400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	29.9 <small>(Calculated)</small>		
			Fuel Input:	66.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	54.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Shell <small>(Supplier)</small>	Adip <small>(Process)</small>	Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:		Engineer:	
		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

08-Dec-99

Key Gasifier Information

Facility ID:	90	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Jan.	1965	
Project Count:	1	Plt. Type:	Commercial		Project Reality:	Active-Real		Application:	Syngas for Chemicals		
Plt. Owner:	Kemira Chemicals Oy				Plt. Owner Type:	Oil Refining & Chemicals					
Plt. Operator:	Kemira Chemicals Oy				Plant Name:	Oulu Syngas Plant-I					
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>						

Facility Information

Facility Owner:	Kemira Chemicals Oy			Facility Name:	Oulu Chemical Plant		
Location: (City/State/Prov)	Oulu			Facility Type:	Chemical Plant		
(Country)	Finland			Facility Status:	Operating		
(Region)	Europe						

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	105.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>		
Feed1:	Bunker C fuel oil			bbl/d			
Feed2:							
Feed3:							
Main Product:	Chemicals <small>(Category)</small>						
Product1:	Syngas	300,000	Nm3/d				
Product2:							
Product3:							
		Syngas Cap.:	300,000	Nm3/d	Gasifier licensor		
		Eq. IGCC Cap., MWe:	22.4	<small>(Calculated)</small>			
		Fuel Input:	50.0	MWt	Estimate		
		Syngas Output:	41.0	MWt	Estimate		

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler				Soot Handling:		
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>		<small>(Supplier)</small>	<small>(Process)</small>	
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:					Steam Turbine:		
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
					<small>(Model)</small>	<small>(MWout)</small>	
Prin. Contractor:	Lurgi GmbH		Engineer:			Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID:	96	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Operating	Start Date:	Oct.	1969	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Lucky Goldstar Chemical Ltd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	Lucky Goldstar Chemical Ltd.					Plant Name:	Naju Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Lucky Goldstar Chemical Ltd.	Facility Name:	Naju Chemical Plant
Location: (City/State/Prov)	Naju, Seoul	Facility Type:	Chemical Plant
(Country)	South Korea	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	172.2 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. Residue	225 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	318 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	700,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	52.3 <small>(Calculated)</small>	
			Fuel Input:	83.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	68.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:				
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:	Shell <small>(Supplier)</small>	Sulfinol <small>(Process)</small>	Sulfur Removal:	
				<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:	
			Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID:	98	No. of Gasifiers: Op'g/Sp/Total	2/ 0/ 2	Gasifier Status:	Operating	Start Date:	Feb. 1969
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	DEA Mineraloel AG			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	DEA Mineraloel AG			Plant Name:	Wesseling Methanol Plant-VI		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	DEA Mineraloel AG			Facility Name:	Wesseling Chemical Plant		
Location:	(City/State/Prov)	Wesseling		Facility Type:	Chemical Plant		
	(Country)	Germany		Facility Status:	Operating		
	(Region)	Europe					

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	447.2 (mt/d)	Estimate (Source)
Feed1:	Heavy cracked residu	447 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals (Category)				
Product1:	Methanol	582 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	1,300,000 (Nm3/d)	Gasifier licensor (Source)
			Eq. IGCC Cap., MWe:	97.0 (Calculated)	
			Fuel Input:	216.7 (MWt)	Gasifier licensor data (Source)
			Syngas Output:	177.7 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	(Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler:	Fire-tube boiler (Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier) (Process)
Gas Turbine:	(No.)	(Supplier)	(Model)	(MWout)
HRSG:	(No.)	(Supplier)	(Model)	(Production)
	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Lurgi GmbH		Engineer:	Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

09-Dec-99

Key Gasifier Information

Facility ID:	103	No. of Gasifiers: Op'g/Sp/Total	12/ 0/ 12	Gasifier Status:	Operating	Start Date:	1971
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Gases
Plt. Owner:	Falconbridge Dominicana		Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Falconbridge Dominicana		Plant Name:	Santo Domingo Syngas Plant			
Gas'n Tech.:	Shell Gasification Process (Technology Name)	Shell (Licensor)	Entrained-flow gasification (Technology Type)				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)	Piet.Zuideveld@shell.com (Email)					

Facility Information

Facility Owner:	Falconbridge Dominicana	Facility Name:	Santo Domingo Chemical Plant
Location: (City/State/Prov)	Santo Domingo	Facility Type:	Chemical Plant
(Country)	Dominican Republic	Facility Status:	Operating
(Region)	Central & South America/Caribbean		

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	495.5 (mt/d)	Estimate (Source)
Feed1:	Bunker C fuel oil	496 mt/d			
Feed2:					
Feed3:					
Main Product:	Gaseous fuels (Category)		Syngas Cap.:	1,440,000 (Nm3/d)	Gasifier licensor (Source)
Product1:	Reducing gas	MMscf/d	Eq. IGCC Cap., MWe:	107.5 (Calculated)	
Product2:			Fuel Input:	240.1 (MWt)	Gasifier licensor data (Source)
Product3:			Syngas Output:	196.9 (MWt)	Gasifier licensor data (Source)

Other Information

O2 Supply:	Air (Oxidant)	(ASU Supplier)	(ASU Integration)		
Syngas Cooler:	None (Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:	
Gas Cleanup:	(Supplier)	(Process)	Sulfur Removal:	(Supplier) (Process)	
Gas Turbine:	(No.)	(Supplier)	(Model)	(MWout)	
HRSG:	(No.)	(Supplier)	(Model)	(Production)	
Steam Turbine:	(No.)	(Supplier)	(Model)	(MWout)	
Prin. Contractor:		Engineer:		Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Jul-04

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 104 **No. of Gasifiers: Op'g/Sp/Total** 4/ 0/ 4 **Gasifier Status:** Operating **Start Date:** 1973
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Veba Oil Refining & Petrochemicals GmbH **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Veba Oil Refining & Petrochemicals GmbH **Plant Name:** Gelsenkirchen-Scholven Ammonia/Methanol Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Veba Oil Refining & Petrochemicals GmbH **Facility Name:** Gelsenkirchen-Scholven Chemical Plant
Location: (City/State/Prov) Gelsenkirchen **Facility Type:** Chemical Plant
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,479.4 (mt/d) Estimate (Source)
Feed1: Vac. residue 1,479 mt/d **Syngas Cap.:** 4,300,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 321.0 (Calculated)
Feed3: **Fuel Input:** 716.8 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 587.8 (MWt) Gasifier licensor data (Source)
Product1: Ammonia 1,200 mt/d
Product2: Methanol 600 mt/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
HRSG: 0 (No.) (Supplier) N.A. (Model) 0 (Production) **Steam Turbine:** 0 (No.) (Supplier) N.A. (Model) 0 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 283 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1977

Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals

Plt. Owner: Hoechst Celanese Plt. Owner Type: Oil Refining & Chemicals

Plt. Operator: Hoechst Celanese Plant Name: Houston Oxochemicals Plant

Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)

Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Hoechst Celanese Facility Name: Houston Chemical Plant

Location: (City/State/Prov) Houston, TX Facility Type: Chemical Plant

(Country) United States Facility Status: Operating

(Region) North America

Feed/Product Information

Main Feed: Gaseous (Category) Gas (Classification) Rate (MAF): (mt/d) (Source)

Feed1: Natural gas 820,850 Nm3/d

Feed2:

Feed3:

Syngas Cap.: 2,100,000 Nm3/d Gasifier licensor (Source)

Eq. IGCC Cap., MWe: 156.8 (Calculated)

Main Product: Chemicals (Category)

Fuel Input: 337.8 MWt Gasifier licensor data (Source)

Product1: Oxochemicals mt/d

Syngas Output: 287.1 MWt Gasifier licensor data (Source)

Product2:

Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:

Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)

Gas Turbine: (No.) (Supplier) (Model) (MWout)

HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	287	No. of Gasifiers: Op'g/Sp/Total	3/	0/	3	Gasifier Status:	Operating	Start Date:		1978	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	National Fertilizer Ltd.					Plt. Owner Type:	Oil Refining & Chemicals				
Plt. Operator:	National Fertilizer Ltd.					Plant Name:	Panipat Ammonia Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>				
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	National Fertilizer Ltd.	Facility Name:	Panipat Fertilizer Plant
Location: (City/State/Prov)	Panipat, Haryana	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	722.5 <small>(mt/d)</small>	Estimate <small>(Source)</small>	
Feed1:	Bunker C fuel oil	723 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Ammonia	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>		
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>						
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>						
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>				Soot Handling:
Gas Cleanup:							
	<small>(Supplier)</small>	<small>(Process)</small>					<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID:	285	No. of Gasifiers: Op'g/Sp/Total	4/	0/	4	Gasifier Status:	Operating	Start Date:	1978	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals	
Plt. Owner:	Hydro Agri Brunsbüttel GmbH					Plt. Owner Type:	Oil Refining & Chemicals			
Plt. Operator:	Hydro Agri Brunsbüttel GmbH					Plant Name:	Brunsbüttel Ammonia Plant			
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>					Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Hydro Agri Brunsbüttel GmbH	Facility Name:	Brunsbüttel Chemical Plant
Location: (City/State/Prov)	Brunsbüttel	Facility Type:	Chemical Plant
(Country)	Germany	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	1,600.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Hvy vis. residue	1,600 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	2,100 mt/d			
Product2:					
Product3:					
			Syngas Cap.:	4,700,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	350.9 <small>(Calculated)</small>	
			Fuel Input:	803.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	642.5 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>		Integrated/N2 feeds NH3 prod'n <small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
			Soot Handling: Separate handling unit
Gas Cleanup:		Rectisol <small>(Supplier)</small>	Sulfur Removal: <small>(Supplier)</small>
		N.A. <small>(Process)</small>	Claus <small>(Process)</small>
Gas Turbine:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>
		N.A. <small>(Model)</small>	0 <small>(MWout)</small>
HRSG:	0 <small>(No.)</small>		N.A. <small>(Supplier)</small>
		N.A. <small>(Model)</small>	0 <small>(MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 286 No. of Gasifiers: Op'g/Sp/Total 3/ 0/ 3 Gasifier Status: Operating Start Date: 1978
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Chemicals
Plt. Owner: Exxon Chemical Co. Plt. Owner Type: Oil Refining & Chemicals
Plt. Operator: Exxon Chemical Co. Plant Name: Baton Rouge Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process Shell Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld Piet.Zuideveld@shell.com
(Contact) (Email)

Facility Information

Facility Owner: Exxon Chemical Co. Facility Name: Baton Rouge Chemical Plant
Location: (City/State/Prov) Baton Rouge, LA Facility Type: Chemical Plant
(Country) United States Facility Status: Operating
(Region) North America

Feed/Product Information

Main Feed: Liquid Petroleum Rate (MAF): 196.0 Estimate
(Category) (Classification) (mt/d) (Source)
Feed1: Heavy fuel oil 196 mt/d Syngas Cap.: 570,000 Gasifier licensor
(Nm3/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 42.6
(Calculated)
Feed3:
Main Product: Chemicals Fuel Input: 95.0 Gasifier licensor data
(Category) (MWt) (Source)
Product1: Oxochemicals mt/d Syngas Output: 77.9 Gasifier licensor data
(MWt) (Source)
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:** / /

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 09-Dec-99

Key Gasifier Information

Facility ID:	289	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:		1979	
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals		
Plt. Owner:	Neyveli Lignite Corp. Ltd.					Plt. Owner Type:					
Plt. Operator:	Neyveli Lignite Corp. Ltd.					Plant Name:	Neyveli Syngas Plant				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>					
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>					

Facility Information

Facility Owner:	Neyveli Lignite Corp. Ltd.	Facility Name:	Neyveli Chemical Plant
Location: (City/State/Prov)	Neyveli, Tamil Nadu	Facility Type:	Chemical Plant
(Country)	India	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	275.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Bunker C fuel oil	275 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Syngas	800,000 Nm3/d			
Product2:					
Product3:					
			Syngas Cap.:	800,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	59.7 <small>(Calculated)</small>	
			Fuel Input:	133.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	109.4 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>			
		<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>			Soot Handling:
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:			Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:	
			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: 288 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** 1979
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: National Fertilizer Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: National Fertilizer Ltd. **Plant Name:** Bathinda Ammonia Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: National Fertilizer Ltd. **Facility Name:** Bathinda Fertilizer Plant
Location: (City/State/Prov) Bathinda **Facility Type:** Chemical Plant
 (Country) India **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 722.5 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 723 mt/d
Feed2:
Feed3:
Main Product: Chemicals (Category)
Product1: Ammonia mt/d
Product2:
Product3:
Syngas Cap.: 2,100,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 156.8 (Calculated)
Fuel Input: 350.1 (MWt) Gasifier licensor data (Source)
Syngas Output: 287.1 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID:	225	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1984
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Quimigal Adubos					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Quimigal Adubos					Plant Name:	Barreiro Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Quimigal Adubos	Facility Name:	Barreiro Chemical Plant
Location: (City/State/Prov)	Barreiro, Lavradio	Facility Type:	Chemical Plant
(Country)	Portugal	Facility Status:	Operating
(Region)	Europe		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	825.8 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	888 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,400,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	179.2 <small>(Calculated)</small>	
			Fuel Input:	400.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	328.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>		
	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	Soot Handling:
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
HRSG:			
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small> <small>(MWout)</small>
Prin. Contractor:	Lurgi GmbH		Engineer:
			Constructor: Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID: 45 **No. of Gasifiers: Op'g/Sp/Total** 6/ 0/ 6 **Gasifier Status:** Operating **Start Date:** 1985
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Mitteldeutsche Erdöl-Raffinerie GmbH **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Mitteldeutsche Erdöl-Raffinerie GmbH **Plant Name:** Leuna Methanol Anlage
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Mitteldeutsche Erdöl-Raffinerie GmbH **Facility Name:** Mider Refinery
Location: (City/State/Prov) Leuna **Facility Type:** Refinery
 (Country) Germany **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 2,400.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 2,400 mt/d **Syngas Cap.:** 7,200,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 537.5 (Calculated)
Feed3:
Main Product: Chemicals (Category) **Fuel Input:** 1,162.9 (MWt) Gasifier licensor data (Source)
Product1: H2 42 MMscf/d **Syngas Output:** 984.3 (MWt) Gasifier licensor data (Source)
Product2: Methanol 600,000 mt/yr
Product3: Electricity MW

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** NSRU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 02-Mar-99

Key Gasifier Information

Facility ID: 224 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Operating **Start Date:** 1987
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Qilu Petrochemical Ind. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Qilu Petrochemical Ind. **Plant Name:** Zibu Methanol/Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Qilu Petrochemical Ind. **Facility Name:** Zibu Chemical Plant
Location: (City/State/Prov) Zibu, Shandong **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 245.9 (mt/d) Estimate (Source)
Feed1: Vac. residue 246 mt/d **Syngas Cap.:** 715,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 53.4 (Calculated)
Feed3: **Fuel Input:** 119.1 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 97.7 (MWt) Gasifier licensor data (Source)
Product1: Methanol mt/d
Product2: Oxochemicals mt/d
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	226	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Operating	Start Date:	1991
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Fushun Detergent Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Unspecified operator			Plant Name:	Fushun Oxochemicals Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Fushun Detergent Co.			Facility Name:	Fushun Chemical Plant		
Location: (City/State/Prov)	Fushun, Liaoning			Facility Type:	Chemical Plant		
(Country)	China			Facility Status:	Operating		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Liquid (Category)	Petroleum (Classification)	Rate (MAF):	20.6 (mt/d)	Estimate (Source)	
Feed1:	Vac. residue		21 mt/d	Syngas Cap.:	60,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:				Eq. IGCC Cap., MWe:	4.5 (Calculated)	
Feed3:				Fuel Input:	10.0 (MWt)	Gasifier licensor data (Source)
Main Product:	Chemicals (Category)			Syngas Output:	8.2 (MWt)	Gasifier licensor data (Source)
Product1:	Oxochemicals	mt/d				
Product2:						
Product3:						

Other Information

O2 Supply:							
(Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:	Fire-tube boiler (Cooler Type)			Soot Handling:			
		(Cooler Supplier)	(MWth Duty)				
Gas Cleanup:				Sulfur Removal:			
	(Supplier)	(Process)		(Supplier)	(Process)		
Gas Turbine:							
(No.)	(Supplier)	(Model)	(MWout)				
HRSG:				Steam Turbine:			
(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH	

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Date Modified:

13-Mar-01

Key Gasifier Information

Facility ID:	19	No. of Gasifiers: Op'g/Sp/Total	6/ 0/ 6	Gasifier Status:	Operating	Start Date:	May 1993
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Fuels
Plt. Owner:	Shell MDS (Malaysia) Sdn. Bhd.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Shell MDS (Malaysia) Sdn. Bhd.			Plant Name:	Bintulu GTL Plant		
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)			Piet.Zuideveld@shell.com (Email)			

Facility Information

Facility Owner:	Shell MDS (Malaysia) Sdn. Bhd.		Facility Name:	Bintulu Middle Distillate Synthesis Plant	
Location: (City/State/Prov)	Bintulu, Sarawak		Facility Type:	Gas Plant	
(Country)	Malaysia		Facility Status:	Operating	
(Region)	Asia/Australia				

Feed/Product Information

Main Feed:	Gaseous (Category)	Gas (Classification)	Rate (MAF):			
			(mt/d)	(Source)		
Feed1:	Natural gas	100 MMscf/d				
Feed2:						
Feed3:						
Main Product:	FT liquids (Category)					
Product1:	Mid-distillates	12,500 bbl/d				
Product2:						
Product3:						
			Syngas Cap.:	7,552,000 (Nm3/d)	Gasifier licensor (Source)	
			Eq. IGCC Cap., MWe:	563.8 (Calculated)		
			Fuel Input:	1,214.6 (MWt)	Gasifier licensor data (Source)	
			Syngas Output:	1,032.4 (MWt)	Gasifier licensor data (Source)	

Other Information

O2 Supply:	Oxygen (Oxidant)	Air Liquide (ASU Supplier)				
			(ASU Integration)			
Syngas Cooler:	Fire-tube boiler with integrated superheater (Cooler Type)					Soot Handling:
			(Cooler Supplier)	(MWth Duty)		
Gas Cleanup:						
	(Supplier)	(Process)	Sulfur Removal:			
			(Supplier)	(Process)		
Gas Turbine:						
	(No.)	(Supplier)	(Model)	(MWout)		
HRSG:						
	(No.)	(Supplier)	(Model)	(Production)	Steam Turbine:	
					(No.)	(Supplier)
					(Model)	(MWout)
Prin. Contractor:	Lurgi GmbH		Engineer:		Constructor:	Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 56 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** April 1994
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Power
Plt. Owner: Nuon Power Buggenum **Plt. Owner Type:** Utility
Plt. Operator: Nuon Power Buggenum **Plant Name:** Buggenum IGCC Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Nuon Power **Facility Name:** Willem-Alexander Centrale (WAC)
Location: (City/State/Prov) Haelen, Limburg **Facility Type:** Electric Utility
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 2,000.0 (mt/d) Gasifier licensor data (Source)
Feed1: Bit. coal 2,000 mt/d (max)
Feed2:
Feed3:
Main Product: Power (Category)
Product1: Electricity 253 MWe
Product2:
Product3:
Syngas Cap.: 3,408,000 (Nm3/d) Gasifier licensor (Source)
Eq. IGCC Cap., MWe: 254.4 (Calculated)
Fuel Input: 702.6 (MWt) Gasifier licensor data (Source)
Syngas Output: 465.9 (MWt) Gasifier licensor data (Source)

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Integrated (ASU Integration)
Syngas Cooler: Water-tube boiler with superheater (Cooler Type) Steinmüller (Cooler Supplier) (MWth Duty) **Soot Handling:** Separate handling unit
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus (O2 Blown)/SCOT (Process)
Gas Turbine: 1 (No.) Siemens/KWU (Supplier) V94.2 (Model) 156 (MWout)
HRSG: 1 (No.) Stork (Supplier) (Model) 300 (Production) **Steam Turbine:** 3 (No.) Siemens/KWU (Supplier) 1 HP/1IP/1 LP (Model) 128 (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID:	229	No. of Gasifiers: Op'g/Sp/Total	2/	0/	2	Gasifier Status:	Operating	Start Date:	1996
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Juijiang Petrochemical Co.					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Juijiang Petrochemical Co.					Plant Name:	Juijiang Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Juijiang Petrochemical Co.	Facility Name:	Juijiang Fertilizer Plant
Location: (City/State/Prov)	Juijiang, Jiangxi	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	725.0 <small>(mt/d)</small>	Estimate <small>(Source)</small>
Feed1:	Vac. residue	672 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>	
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling: 	
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>		Rectisol <small>(Process)</small>	Sulfur Removal:			
				<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
Steam Turbine:							
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

02-Mar-99

Key Gasifier Information

Facility ID: 230 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Operating **Start Date:** 1996
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Lucky Goldstar Chemical Ltd. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Lucky Goldstar Chemical Ltd. **Plant Name:** Yochon Oxochemicals Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Lucky Goldstar Chemical Ltd. **Facility Name:** Yochon Chemical Plant
Location: (City/State/Prov) Yochon **Facility Type:** Chemical Plant
 (Country) South Korea **Facility Status:** Operating
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 132.0 (mt/d) Estimate (Source)
Feed1: Bunker C fuel oil 132 mt/d **Syngas Cap.:** 384,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 28.7 (Calculated)
Feed3: **Fuel Input:** 64.0 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 52.5 (MWt) Gasifier licensor data (Source)
Product1: Oxochemicals mt/d
Product2:
Product3:

Other Information

O2 Supply: (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** **Constructor:** Lurgi GmbH

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

16-Jan-02

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

27-Aug-03

Key Gasifier Information

Facility ID: 57 **No. of Gasifiers: Op'g/Sp/Total** 3/ 0/ 3 **Gasifier Status:** Operating **Start Date:** Oct. 1997
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** Syngas for Chemicals
Plt. Owner: Shell Nederland Raffinaderij BV **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: Shell Nederland Raffinaderij BV **Plant Name:** Pernis Shell IGCC/Hydrogen Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shell Nederland Raffinaderij BV **Facility Name:** Pernis Refinery
Location: (City/State/Prov) Rotterdam **Facility Type:** Refinery
 (Country) Netherlands **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,650.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,650 mt/d **Syngas Cap.:** 4,662,200 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 348.0 (Calculated)
Feed3: **Fuel Input:** 799.5 (MWt) Gasifier licensor data (Source)
Main Product: Chemicals (Category) **Syngas Output:** 637.3 (MWt) Gasifier licensor data (Source)
Product1: H2 100 MMscf/d
Product2: Electricity 110 MW
Product3: Steam 200 mt/hr

Other Information

O2 Supply: Oxygen (Oxidant) Air Products & Chemicals, Inc. (ASU Supplier) Across-the-fence/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) SFL Netherlands (Cooler Supplier) 94.5 (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: Lurgi Oel•Gas•Chemie GmbH (Supplier) Rectisol (Process) **Sulfur Removal:** Shell (Supplier) Claus (Process)
Gas Turbine: 2 (No.) General Electric Co. (Supplier) 6B (Model) 86 (MWout)
HRSG: 2 (No.) (Supplier) (Model) 290 mt/hr (Production) **Steam Turbine:** 2 (No.) GE/Nuovo Pignone (Supplier) (Model) 41 (MWout)
Prin. Contractor: Lurgi GmbH **Engineer:** Fluor Daniel B.V. **Constructor:** Fluor Daniel B.V.

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 22-Jul-04

22-Jul-04

Key Gasifier Information

Facility ID:	228	No. of Gasifiers: Op'g/Sp/Total	2/0/2	Gasifier Status:	Operating	Start Date:	1998
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Active-Real	Application:	Syngas for Chemicals
Plt. Owner:	Lanzhou Chemical Industrial Co.			Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Lanzhou Chemical Industrial Co.			Plant Name:	Lanzhou Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>		Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>			Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Lanzhou Chemical Industrial Co.			Facility Name:	Lanzhou Chemical Plant		
Location: (City/State/Prov)	Lanzhou, Gansu			Facility Type:	Chemical Plant		
(Country)	China			Facility Status:	Operating		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Liquid <small>(Category)</small>	Petroleum <small>(Classification)</small>	Rate (MAF):	<input type="text"/>	<input type="text"/>	
				<small>(mt/d)</small>	<small>(Source)</small>	
Feed1:	Natural Gas	700 mt/d				
Feed2:						
Feed3:						
Main Product:	Chemicals <small>(Category)</small>					
Product1:	Ammonia	mt/d				
Product2:						
Product3:						
			Syngas Cap.:	2,100,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>	
			Eq. IGCC Cap., MWe:	156.8 <small>(Calculated)</small>		
			Fuel Input:	350.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	
			Syngas Output:	287.1 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>	

Other Information

O2 Supply:	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>	
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>	<input type="text"/>	<input type="text"/>	Soot Handling: <input type="text"/>
		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>	
Gas Cleanup:	Lurgi Oel•Gas•Chemie GmbH <small>(Supplier)</small>	Rectisol <small>(Process)</small>	Sulfur Removal:	<input type="text"/>
				<small>(Supplier)</small> <small>(Process)</small>
Gas Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
HRSG:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Steam Turbine:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:	<input type="text"/>	Engineer:	<input type="text"/>	Constructor:
				<input type="text"/>

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 367 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Operating **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Active-Real **Application:** _____
Plt. Owner: Sinopec **Plt. Owner Type:** _____
Plt. Operator: Sinopec **Plant Name:** Sinopec, Zhijiang
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Sinopec **Facility Name:** _____
Location: (City/State/Prov) Zhijiang, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 2,000 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 273.4 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 20-Jul-04

Key Gasifier Information

Facility ID:	366	No. of Gasifiers: Op'g/Sp/Total	0/	0/	0	Gasifier Status:	Development	Start Date:	2005
Project Count:	0	Plt. Type:	Commercial		Project Reality:	Planning		Application:	
Plt. Owner:	Sinopec-Shell				Plt. Owner Type:				
Plt. Operator:	Sinopec-Shell				Plant Name:				
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>			Shell <small>(Licensor)</small>		Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>				Piet.Zuideveld@shell.com <small>(Email)</small>				

Facility Information

Facility Owner:	Sinopec-Shell	Facility Name:	
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal	2,000 t/d				Syngas Cap.:	
Feed2:		0					
Feed3:		0				Eq. IGCC Cap., MWe:	
Main Product:	Chemicals <small>(Category)</small>					Fuel Input:	0.0 <small>(MWt) (Source)</small>
Product1:		0				Syngas Output:	273.4 Gasifier licensor data <small>(MWt) (Source)</small>
Product2:		0					
Product3:		0					

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:			0			Soot Handling:	
	<small>(Cooler Type)</small>		<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>			
Gas Cleanup:					Sulfur Removal:		
	<small>(Supplier)</small>		<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0			Steam Turbine:	0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>			<small>(No.)</small>
	<small>(Supplier)</small>		<small>(Model)</small>		<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 12-Aug-04

12-Aug-04

Key Gasifier Information

Facility ID: 375 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Development **Start Date:** 2005
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Liuzhou Chemicals **Plt. Owner Type:** _____
Plt. Operator: Liuzhou Chemicals **Plant Name:** _____
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Liuzhou Chemicals **Facility Name:** _____
Location: (City/State/Prov) Liuzhou, Guanxi **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 1,200 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 1,700,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 126.9 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 232.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 364 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Shuanghuan Chemical **Plt. Owner Type:** _____
Plt. Operator: Shuanghuan Chemical **Plant Name:** Shell Shuanghuan Chemical
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Shuanghuan Chemical **Facility Name:** _____
Location: (City/State/Prov) Yingcheng, Hubei **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 900 t/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: 0
Product2: 0
Product3: 0
Syngas Cap.: _____ (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: _____ (Calculated)
Fuel Input: 0.0 (MWt) _____ (Source)
Syngas Output: 177.7 Gasifier licensor data (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	335	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Startup	Start Date:	2006
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Sinopec/Shell					Plt. Owner Type:	Oil Refining & Chemicals		
Plt. Operator:	Sinopec/Shell					Plant Name:	Dong Ting Ammonia Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Sinopec	Facility Name:	Dong Ting Fertilizer Plant
Location: (City/State/Prov)	Yueyang, Hunan	Facility Type:	Chemical Plant
(Country)	China	Facility Status:	Operating
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	1,500.0 <small>(mt/d)</small>	Gasifier licensor data <small>(Source)</small>
Feed1:	Coal	2,000 mt/d			
Feed2:					
Feed3:					
Main Product:	Chemicals <small>(Category)</small>				
Product1:	Ammonia	mt/d			
Product2:					
Product3:					
			Syngas Cap.:	3,410,000 <small>(Nm3/d)</small>	Gasifier licensor <small>(Source)</small>
			Eq. IGCC Cap., MWe:	254.6 <small>(Calculated)</small>	
			Fuel Input:	582.7 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>
			Syngas Output:	466.2 <small>(MWt)</small>	Gasifier licensor data <small>(Source)</small>

Other Information

O2 Supply:	Oxygen <small>(Oxidant)</small>					
	<small>(ASU Supplier)</small>		<small>(ASU Integration)</small>			
Syngas Cooler:	Fire-tube boiler <small>(Cooler Type)</small>					Soot Handling:
			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:					Sulfur Removal:	
	<small>(Supplier)</small>	<small>(Process)</small>			<small>(Supplier)</small>	<small>(Process)</small>
Gas Turbine:						
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>		
HRSG:					Steam Turbine:	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>
					<small>(Model)</small>	<small>(MWout)</small>
Prin. Contractor:			Engineer:			Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 329 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Startup **Start Date:** 2006
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: AGIP Raffinazione S.p.A. **Plt. Owner Type:** Oil Refining & Chemicals
Plt. Operator: AGIP Raffinazione S.p.A. **Plant Name:** Agip IGCC
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: AGIP Raffinazione S.p.A. **Facility Name:** Sannazzaro Refinery
Location: (City/State/Prov) Sannazzaro **Facility Type:** Refinery
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Liquid (Category) Petroleum (Classification) **Rate (MAF):** 1,150.0 (mt/d) Gasifier licensor data (Source)
Feed1: Visbreaker residue 1,200 mt/d **Syngas Cap.:** 3,340,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 249.3 (Calculated)
Feed3: **Fuel Input:** 556.8 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category) **Syngas Output:** 456.6 (MWt) Gasifier licensor data (Source)
Product1: Electricity MW
Product2: H2 Nm3/d
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:** SARU
Gas Cleanup: (Supplier) (Process) **Sulfur Removal:** (Supplier) (Process)
Gas Turbine: (No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) **Steam Turbine:** (No.) (Supplier) (Model) (MWout)
Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date:

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:
(Country) Facility Status:
(Region)

Feed/Product Information

Main Feed: Rate (MAF):
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 379 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yuntianhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yuntianhua Chemicals **Plant Name:** Anning Yuntianhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yuntianhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Anning, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

DateModified:

12-Aug-04

Key Gasifier Information

Facility ID:	382	No. of Gasifiers: Op'g/Sp/Total	1/0/1	Gasifier Status:	Engineering	Start Date:	2007
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	
Plt. Owner:	Yongcheng Chemicals			Plt. Owner Type:			
Plt. Operator:	Yongcheng Chemicals			Plant Name:			
Gas'n Tech.:	Shell Gasification Process (Technology Name)		Shell (Licensor)	Entrained-flow gasification (Technology Type)			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld (Contact)		Piet.Zuideveld@shell.com (Email)				

Facility Information

Facility Owner:	Yongcheng Chemicals			Facility Name:			
Location: (City/State/Prov)	Yongcheng, Henan			Facility Type:	Chemical Plant		
(Country)	China			Facility Status:	Planning		
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Coal	Rate (MAF):	0.0		
(Category)	(Classification)	(mt/d)	(Source)		
Feed1:	Coal	2,150 mt/d			
Feed2:		0			
Feed3:		0			
Main Product:	Chemicals				
(Category)					
Product1:	Methanol	0			
Product2:		0			
Product3:		0			
Syngas Cap.:	3,100,000				
(Nm3/d)	(Source)				
Eq. IGCC Cap., MWe:	231.4				
(Calculated)					
Fuel Input:	0.0				
(MWt)	(Source)				
Syngas Output:	424.0				
(MWt)	(Source)				

Other Information

O2 Supply:							
(Oxidant)	(ASU Supplier)	(ASU Integration)					
Syngas Cooler:		0	Soot Handling:				
(Cooler Type)	(Cooler Supplier)	(MWth Duty)					
Gas Cleanup:			Sulfur Removal:				
(Supplier)	(Process)	(Supplier)	(Process)				
Gas Turbine:	0		0				
(No.)	(Supplier)	(Model)	(MWout)				
HRSG:	0		0	Steam Turbine:	0		0
(No.)	(Supplier)	(Model)	(Production)	(No.)	(Supplier)	(Model)	(MWout)
Prin. Contractor:		Engineer:		Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 380 **No. of Gasifiers: Op'g/Sp/Total** 1/0/1 **Gasifier Status:** Startup **Start Date:** 2007
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** _____
Plt. Owner: Yunzhanhua Chemicals **Plt. Owner Type:** _____
Plt. Operator: Yunzhanhua Chemicals **Plant Name:** Huashan Yunzhanhua
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Yunzhanhua Chemicals **Facility Name:** _____
Location: (City/State/Prov) Huashan, Yunnan **Facility Type:** Chemical Plant
 (Country) China **Facility Status:** Planning
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Coal (Category) Rate (MAF): 0.0 (mt/d) (Source) _____
Feed1: Coal 2,700 mt/d
Feed2: 0
Feed3: 0
Main Product: Chemicals (Category)
Product1: Ammonia 0
Product2: 0
Product3: 0
Syngas Cap.: 3,400,000 (Nm3/d) (Source) _____
Eq. IGCC Cap., MWe: 253.8 (Calculated)
Fuel Input: 0.0 (MWt) (Source) _____
Syngas Output: 465.0 (MWt) (Source) _____

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID:	402	No. of Gasifiers: Op'g/Sp/Total	1/	0/	1	Gasifier Status:	Construction	Start Date:	2008
Project Count:	1	Plt. Type:	Commercial			Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Yongcheng Chemicals					Plt. Owner Type:			
Plt. Operator:	Yongcheng Chemicals					Plant Name:	Yongcheng Shell Plant		
Gas'n Tech.:	Shell Gasification Process <small>(Technology Name)</small>				Shell <small>(Licensor)</small>	Entrained-flow gasification <small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld <small>(Contact)</small>					Piet.Zuideveld@shell.com <small>(Email)</small>			

Facility Information

Facility Owner:	Yongcheng Chemicals			Facility Name:			
Location: (City/State/Prov)	Shangqui, Henan			Facility Type:			
(Country)	China			Facility Status:			
(Region)	Asia/Australia						

Feed/Product Information

Main Feed:	Solid <small>(Category)</small>	Coal <small>(Classification)</small>	Rate (MAF):	0.0 <small>(mt/d)</small>			
Feed1:	Coal		0				
Feed2:			0				
Feed3:			0				
Main Product:	Chemicals <small>(Category)</small>			Syngas Cap.:	3,120,000 <small>(Nm3/d)</small>		<small>(Source)</small>
Product1:			0	Eq. IGCC Cap., MWe:	232.9 <small>(Calculated)</small>		
Product2:			0	Fuel Input:	582.0 <small>(MWt)</small>		<small>(Source)</small>
Product3:			0	Syngas Output:	582.0 <small>(MWt)</small>		<small>(Source)</small>

Other Information

O2 Supply:							
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>				
Syngas Cooler:				0	Soot Handling:		
	<small>(Cooler Type)</small>			<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>		
Gas Cleanup:				Sulfur Removal:			
	<small>(Supplier)</small>		<small>(Process)</small>	<small>(Supplier)</small>	<small>(Process)</small>		
Gas Turbine:	0		0				
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(MWout)</small>			
HRSG:	0		0	Steam Turbine:	0	0	
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>	<small>(Production)</small>	<small>(No.)</small>	<small>(Supplier)</small>	
		<small>(Model)</small>		<small>(Model)</small>	<small>(MWout)</small>		
Prin. Contractor:			Engineer:			Constructor:	

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:
(Category)

Product1:

Product2:

Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1:
Feed2:
Feed3:

Main Product:
(Category)

Product1:
Product2:
Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 327 **No. of Gasifiers: Op'g/Sp/Total** 2/ 0/ 2 **Gasifier Status:** Development **Start Date:** 2009
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Power
Plt. Owner: ATI Sulcis **Plt. Owner Type:** Special Joint Venture
Plt. Operator: ATI Sulcis **Plant Name:** Sulcis IGCC Project
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: ATI Sulcis **Facility Name:** Portoscuso Power Plant
Location: (City/State/Prov) Portoscuso, Sardinia **Facility Type:** IPP
 (Country) Italy **Facility Status:** Operating
 (Region) Europe

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 3,065.0 (mt/d) Gasifier licensor data (Source)
Feed1: Coal 4,356 mt/d **Syngas Cap.:** 7,000,000 (Nm3/d) Gasifier licensor (Source)
Feed2: **Eq. IGCC Cap., MWe:** 522.6 (Calculated)
Feed3: **Fuel Input:** 1,196.1 (MWt) Gasifier licensor data (Source)
Main Product: Power (Category) **Syngas Output:** 956.9 (MWt) Gasifier licensor data (Source)
Product1: Electricity 450 MW
Product2:
Product3:

Other Information

O2 Supply: Oxygen (Oxidant) (ASU Supplier) On-site/No integration (ASU Integration)
Syngas Cooler: Fire-tube boiler (Cooler Type) (Cooler Supplier) (MWth Duty) **Soot Handling:**
Gas Cleanup: Shell (Supplier) Sulfinol-M (Process) **Sulfur Removal:** (Supplier) Claus/SCOT (Process)
Gas Turbine: 2 (No.) Ansaldo (Supplier) V94.2 (Model) 346 (MWout)
HRSG: 2 (No.) (Supplier) (Model) (Production) **Steam Turbine:** 1 (No.) (Supplier) (Model) 239 (MWout)
Prin. Contractor: **Engineer:** Fluor Daniel **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product:
(Category)

Product1: bpd **Syngas Output:**
(MWt) (Source)

Product2:

Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: No. of Gasifiers: Op'g/Sp/Total / / Gasifier Status: Start Date:

Project Count: Plt. Type: Project Reality: Application:

Plt. Owner: Plt. Owner Type:

Plt. Operator: Plant Name:

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: Facility Name:

Location: (City/State/Prov) Facility Type:
 (Country) Facility Status:
 (Region)

Feed/Product Information

Main Feed: Rate (MAF):
(Category) (Classification) (mt/d) (Source)

Feed1:
 Feed2:
 Feed3:

Main Product:
(Category)

Product1:
 Product2:
 Product3:

Syngas Cap.:
(Nm3/d) (Source)

Eq. IGCC Cap., MWe:
(Calculated)

Fuel Input:
(MWt) (Source)

Syngas Output:
(MWt) (Source)

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: Soot Handling:
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: Sulfur Removal:
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: Steam Turbine:
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: Engineer: Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

15-Jun-07

Key Gasifier Information

Facility ID: 405 **No. of Gasifiers: Op'g/Sp/Total** 1/ 0/ 1 **Gasifier Status:** Development **Start Date:** 2010
Project Count: 1 **Plt. Type:** Commercial **Project Reality:** Planning **Application:** Syngas for Chemicals
Plt. Owner: Unspecified Owner **Plt. Owner Type:** _____
Plt. Operator: Unspecified Owner **Plant Name:** Guizhou Chemical Plant
Gas'n Tech.: Shell Gasification Process (Technology Name) Shell (Licensor) Entrained-flow gasification (Technology Type)
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact) Piet.Zuideveld@shell.com (Email)

Facility Information

Facility Owner: Unspecified Owner **Facility Name:** _____
Location: (City/State/Prov) Guizhou **Facility Type:** _____
 (Country) China **Facility Status:** _____
 (Region) Asia/Australia

Feed/Product Information

Main Feed: Solid (Category) Coal (Classification) **Rate (MAF):** 0.0 (mt/d) _____ (Source)
Feed1: Coal 0
Feed2: _____ 0
Feed3: _____ 0
Main Product: Chemicals (Category)
Product1: _____ 0
Product2: _____ 0
Product3: _____ 0
Syngas Cap.: 4,125,000 (Nm3/d) _____ (Source)
Eq. IGCC Cap., MWe: 307.9 (Calculated)
Fuel Input: 703.0 (MWt) _____ (Source)
Syngas Output: 562.0 (MWt) _____ (Source)

Other Information

O2 Supply: _____ (Oxidant) _____ (ASU Supplier) _____ (ASU Integration)
Syngas Cooler: _____ (Cooler Type) _____ (Cooler Supplier) 0 (MWth Duty) **Soot Handling:** _____
Gas Cleanup: _____ (Supplier) _____ (Process) **Sulfur Removal:** _____ (Supplier) _____ (Process)
Gas Turbine: 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
HRSG: 0 (No.) _____ (Supplier) _____ (Model) 0 (Production) **Steam Turbine:** 0 (No.) _____ (Supplier) _____ (Model) 0 (MWout)
Prin. Contractor: _____ **Engineer:** _____ **Constructor:** _____

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 328	No. of Gasifiers: Op'g/Sp/Total 2/ 1/ 3	Gasifier Status: Development	Start Date: 2010
Project Count: 1	Plt. Type: Commercial	Project Reality: Planning	Application: Syngas for Chemicals
Plt. Owner: Indian Oil Corp. Ltd.	Plt. Owner Type: Oil Refining & Chemicals		
Plt. Operator: Indian Oil Corp. Ltd.	Plant Name: Paradip Gasification H2/Power Plant		
Gas'n Tech.: Shell Gasification Process (Technology Name)	Shell (Licensor)	Entrained-flow gasification (Technology Type)	
Vendor Contact: Dr. Ir. Piet L. Zuideveld (Contact)	Piet.Zuideveld@shell.com (Email)		

Facility Information

Facility Owner: Indian Oil Corp. Ltd.	Facility Name: Paradip Refinery
Location: (City/State/Prov) Nagapattinam, Orissa	Facility Type: Refinery
(Country) India	Facility Status: Construction
(Region) Asia/Australia	

Feed/Product Information

Main Feed: Solid Petcoke (Category) (Classification)	Rate (MAF): 2,850.0 (mt/d)	Gasifier licensor data (Source)
Feed1: Petcoke 3,500 mt/d	Syngas Cap.: 6,500,000 (Nm3/d)	Gasifier licensor (Source)
Feed2:	Eq. IGCC Cap., MWe: 485.2 (Calculated)	
Feed3:		
Main Product: Chemicals (Category)	Fuel Input: 1,110.8 (MWt)	Gasifier licensor data (Source)
Product1: H2 160 MMscf/d	Syngas Output: 888.6 (MWt)	Gasifier licensor data (Source)
Product2: Electricity 180 MW		
Product3:		

Other Information

O2 Supply: Oxygen (Oxidant)	(ASU Supplier)	(ASU Integration)	
Syngas Cooler: Fire-tube boiler (Cooler Type)	(Cooler Supplier)	(MWth Duty)	Soot Handling:
Gas Cleanup: Shell (Supplier)	Sulfinol (Process)	Sulfur Removal:	(Supplier) (Process)
Gas Turbine: 1 (No.)	General Electric Co. (Supplier)	180 (Model)	(MWout)
HRSG:	(No.) (Supplier)	(Model)	(Production)
Steam Turbine:	(No.) (Supplier)	(Model)	(MWout)
Prin. Contractor: Engineers India Ltd.	Engineer: Krupp Uhde	Constructor: Krupp Uhde	

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 15-Jun-07

Key Gasifier Information

Facility ID:	406	No. of Gasifiers: Op'g/Sp/Total	3 / 0 / 3	Gasifier Status:	Development	Start Date:	2011
Project Count:	1	Plt. Type:	Commercial	Project Reality:	Planning	Application:	Syngas for Chemicals
Plt. Owner:	Unspecified Owner			Plt. Owner Type:			
Plt. Operator:	Unspecified Owner			Plant Name:	Inner Mongolia Chemical Plant		
Gas'n Tech.:	Shell Gasification Process		Shell	Entrained-flow gasification			
	<small>(Technology Name)</small>		<small>(Licensor)</small>	<small>(Technology Type)</small>			
Vendor Contact:	Dr. Ir. Piet L. Zuideveld			Piet.Zuideveld@shell.com			
	<small>(Contact)</small>			<small>(Email)</small>			

Facility Information

Facility Owner:	Unspecified Owner	Facility Name:	Inner Mongolia Chemical Plant
Location: (City/State/Prov)	Inner Mongolia	Facility Type:	
(Country)	China	Facility Status:	
(Region)	Asia/Australia		

Feed/Product Information

Main Feed:	Solid	Coal	Rate (MAF):	0.0	
	<small>(Category)</small>	<small>(Classification)</small>		<small>(mt/d)</small>	<small>(Source)</small>
Feed1:	Coal	0			
Feed2:		0			
Feed3:		0			
Main Product:	Chemicals				
	<small>(Category)</small>				
Product1:		0			
Product2:		0			
Product3:		0			
			Syngas Cap.:	24,750,000	
				<small>(Nm3/d)</small>	<small>(Source)</small>
			Eq. IGCC Cap., MWe:	1,847.6	
				<small>(Calculated)</small>	
			Fuel Input:	4,216.0	
				<small>(MWt)</small>	<small>(Source)</small>
			Syngas Output:	3,373.0	
				<small>(MWt)</small>	<small>(Source)</small>

Other Information

O2 Supply:			
	<small>(Oxidant)</small>	<small>(ASU Supplier)</small>	<small>(ASU Integration)</small>
Syngas Cooler:			0
	<small>(Cooler Type)</small>	<small>(Cooler Supplier)</small>	<small>(MWth Duty)</small>
Gas Cleanup:			
	<small>(Supplier)</small>	<small>(Process)</small>	<small>(Supplier)</small>
			<small>(Process)</small>
Gas Turbine:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Model)</small>
			<small>(MWout)</small>
HRSG:	0		0
	<small>(No.)</small>	<small>(Supplier)</small>	<small>(Production)</small>
			<small>(No.)</small>
			<small>(Supplier)</small>
			<small>(Model)</small>
			<small>(MWout)</small>
Prin. Contractor:			
Engineer:			
Constructor:			

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

15-Jun-07

Key Gasifier Information

Facility ID: 333 No. of Gasifiers: Op'g/Sp/Total 1/0/1 Gasifier Status: Startup Start Date: 2007
Project Count: 1 Plt. Type: Commercial Project Reality: Active-Real Application: Syngas for Gases
Plt. Owner: Sokolovska Uhelna, A.S. Plt. Owner Type: Mining Company
Plt. Operator: Sokolovska Uhelna, A.S. Plant Name: Thermoselece Vresova
Gas'n Tech.: Siemens SFG Gasification Process Siemens Power Generation Entrained-flow gasification
(Technology Name) (Licensor) (Technology Type)
Vendor Contact: Harry Morehead harry.morehead@siemens.com
(Contact) (Email)

Facility Information

Facility Owner: Chemoprojekt, a.s. Facility Name: Thermoselece Vresova
Location: (City/State/Prov) Vresova Facility Type: Lignite Processing
(Country) Czech Republic Facility Status: Operating
(Region) Europe

Feed/Product Information

Main Feed: Solid Coal Rate (MAF): (mt/d) (Source)
(Category) (Classification)
Feed1: Lignite 1,968 mt/d Syngas Cap.: 750,147 Gasifier licensor
(Nm³/d) (Source)
Feed2: Eq. IGCC Cap., MWe: 56.0
Feed3: (Calculated)
Main Product: Gaseous fuels Fuel Input: 175.0 Estimate
(Category) (MWt) (Source)
Product1: Syngas Output: 140.0 Estimate
Product2: (MWt) (Source)
Product3:

Other Information

O₂ Supply: Oxygen (Oxidant) (ASU Supplier) (ASU Integration)
Syngas Cooler: (Cooler Type) (Cooler Supplier) (MWth Duty) Soot Handling:
Gas Cleanup: (Supplier) Rectisol (Process) Sulfur Removal: (Supplier) (Process)
Gas Turbine: 2 General Electric Co. 9E 400
(No.) (Supplier) (Model) (MWout)
HRSG: (No.) (Supplier) (Model) (Production) Steam Turbine: (No.) (Supplier) (Model) (MWout)
Prin. Contractor: Engineer: Krupp Unde/Lurgi Envirotherm Constructor:

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: **Facility Type:**

(City/State/Prov)

Facility Status:

(Country)

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**

(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**

(Calculated)

Feed3: **Fuel Input:**

(MWt) (Source)

Main Product:

(Category) **Syngas Output:**

(MWt) (Source)

Product1:

Product2:

Product3:

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified:

20-Dec-00

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:
(Technology Name) (Licensor) (Technology Type)

Vendor Contact:
(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**
 (Country) **Facility Status:**
 (Region)

Feed/Product Information

Main Feed: **Rate (MAF):**
(Category) (Classification) (mt/d) (Source)

Feed1: **Syngas Cap.:**
(Nm3/d) (Source)

Feed2: **Eq. IGCC Cap., MWe:**
(Calculated)

Feed3: **Fuel Input:**
(MWt) (Source)

Main Product: **Syngas Output:**
(Category) (MWt) (Source)

Product1:
Product2:
Product3:

Other Information

O2 Supply:
(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**
(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**
(Supplier) (Process) (Supplier) (Process)

Gas Turbine:
(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**
(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**

2007 Gasification Database Gasification Plant Entry Form

Date Modified: 30-Aug-07

30-Aug-07

Key Gasifier Information

Facility ID: **No. of Gasifiers: Op'g/Sp/Total** / / **Gasifier Status:** **Start Date:**

Project Count: **Plt. Type:** **Project Reality:** **Application:**

Plt. Owner: **Plt. Owner Type:**

Plt. Operator: **Plant Name:**

Gas'n Tech.:

(Technology Name) (Licensor) (Technology Type)

Vendor Contact:

(Contact) (Email)

Facility Information

Facility Owner: **Facility Name:**

Location: (City/State/Prov) **Facility Type:**

(Country) **Facility Status:**

(Region)

Feed/Product Information

Main Feed: **Rate (MAF):**

(Category) (Classification) (mt/d) (Source)

Feed1:

Feed2:

Feed3:

Main Product:

(Category)

Product1: MW

Product2:

Product3:

Syngas Cap.:

(Nm3/d) (Source)

Eq. IGCC Cap., MWe:

(Calculated)

Fuel Input:

(MWt) (Source)

Syngas Output:

(MWt) (Source)

Other Information

O2 Supply:

(Oxidant) (ASU Supplier) (ASU Integration)

Syngas Cooler: **Soot Handling:**

(Cooler Type) (Cooler Supplier) (MWth Duty)

Gas Cleanup: **Sulfur Removal:**

(Supplier) (Process) (Supplier) (Process)

Gas Turbine:

(No.) (Supplier) (Model) (MWout)

HRSG: **Steam Turbine:**

(No.) (Supplier) (Model) (Production) (No.) (Supplier) (Model) (MWout)

Prin. Contractor: **Engineer:** **Constructor:**