IRON AND STEEL[1]

(Data in million metric tons of metal unless otherwise noted)

Domestic Production and Use: The iron and steel industry and ferrous foundries produced goods in 2006 that were valued at about $150 billion. The industry consisted of about 59 companies that produced raw steel at about 106 plants, with combined production capability of about 112 million tons. Indiana accounted for about 24% of total raw steel production, followed by Ohio, 16%, and Pennsylvania and Michigan with 6% each. Pig iron was produced by 8 companies operating integrated steel mills in 18 locations. The distribution of steel shipments was estimated to be: warehouses and steel service centers, 22%; construction, 16%; transportation (predominantly for automotive production), 13%; cans and containers, 2%; and other, 47%. About 1,100 ferrous foundries continued to import pig iron into the United States, mainly from Brazil, Russia, and Ukraine.

Salient Statistics—United States:	**2002**	**2003**	**2004**	**2005**	**2006**[e]
Pig iron production[2]	40.2	40.6	42.3	37.2	39.3
Steel production:	91.6	93.7	99.7	94.9	96.4
Basic oxygen furnaces, percent	49.6	49.0	47.9	45.0	43.4
Electric arc furnaces, percent	50.4	51.0	52.1	55.0	56.6
Continuously cast steel, percent	97.2	97.3	97.1	96.8	96.8
Shipments:					
Steel mill products	90.7	96.1	101	95.2	102
Steel castings[3]	0.7	0.7	0.7	0.7	0.7
Iron castings[3]	7.8	7.5	7.5	7.4	7.4
Imports of steel mill products	29.6	21.0	32.5	29.1	46.6
Exports of steel mill products	5.4	2.5	7.2	8.5	9.8
Apparent steel consumption[4]	107	107	117	109	130
Producer price index for steel mill products (1982=100)[5]	104.8	109.5	147.2	161.3	180.5
Steel mill product stocks at service centers yearend[6]	13.7	12.3	14.4	11.7	12.0
Total employment, average, number:[7]					
Blast furnaces and steel mills	124,000	127,000	123,000	122,000	122,000
Iron and steel foundries[e]	116,000	116,000	116,000	115,000	115,000
Net import reliance[8] as a percentage of apparent consumption	15	10	14	15	21

Recycling: See Iron and Steel Scrap and Iron and Steel Slag.

Import Sources (2002-05): Canada, 18%; European Union[9], 18%; Mexico, 13%; Brazil, 8%; and other, 43%.

Tariff: Item	Number	Normal Trade Relations 12-31-06
Pig iron	7201.10.0000	Free.
Carbon steel:		
Semifinished	7207.12.0050	Free.
Structural shapes	7216.33.0090	Free.
Bars, hot-rolled	7213.20.0000	Free.
Sheets, hot-rolled	7208.39.0030	Free.
Hot-rolled, pickled	7208.27.0060	Free.
Cold-rolled	7209.18.2550	Free.
Galvanized	7210.49.0090	Free.
Stainless steel:		
Semifinished	7218.91.0015	Free.
	7218.99.0015	Free.
Bars, cold-finished	7222.20.0075	Free.
Pipe and tube	7304.41.3045	Free.
Cold-rolled sheets	7219.33.0035	Free.

Depletion Allowance: Not applicable.

Government Stockpile: None.

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IRON AND STEEL

Events, Trends, and Issues: Gross domestic product (GDP) growth may be considered a predictor of the health of the steelmaking and steel manufacturing industries worldwide and domestically. In 2005, the World Bank forecast that the world's GDP growth would increase to 3.5% in 2007 from 3.2% in 2006, and the U.S. GDP growth would increase to 3.6% in 2007 from 3.5% in 2006. The U.S. Congressional Budget Office forecast U.S. GDP growth declining to 3.1% on average from 2008 through 2011, and to 3.4% in 2007 from 3.6% in 2006.

The Organisation for Economic Co-operation and Development forecast that global raw steelmaking capacity will increase to more than 1.31 billion tons in 2006 from 1.27 billion tons in 2005. Global steel production may reach 1.18 billion tons in 2007. The International Iron and Steel Institute estimated that global consumption of finished steel products will increase by 7.3% in 2006, but by only 5.8% in 2007, compared with that of the previous year. Demand in the United States is expected to increase in 2006 and 2007 by 5.0% and 6.7%, respectively; in the European Union, by 3.9% and 1.5%, respectively; in Russia and Ukraine, by 3.2% and 1.6%, respectively; and in China and India, by 14% and 10%, respectively.

Economic activity in China, which is the world's leading steel producer, continued to be an important influence on the world economy and steel markets. China's steel production was 350 million tons in 2005, up from 280 million tons in 2004, and may reach an estimated 420 million tons in 2006. China's steel-product consumption is expected to grow by 14% in 2006, compared with that of 2005, accounting for 35% of world demand. Hot-rolled steel capacity in China was forecast to increase by 214% to 160 million tons per year in 2010 from 51 million tons per year in 2004. Cold-rolled steel capacity is expected to increase by 27% by 2008 compared with that of 2006.

World Production:

	Pig iron		Raw steel	
	2005	2006[e]	2005	2006[e]
United States	37	39	95	96
Brazil	33	35	33	32
China	330	380	349	420
France*	13	14	20	20
Germany	29	29	45	45
Italy*	10	12	29	29
Japan	83	83	113	114
Korea, Republic of	27	28	48	48
Russia	48	52	66	70
Ukraine	31	32	39	40
United Kingdom*	10	10	13	14
Other countries	*174	*144	*280	*272
World total (rounded)	825	858	1,130	1,200

World Resources: Not applicable. See Iron Ore.

Substitutes: Iron is the least expensive and most widely used metal. In most applications, iron and steel compete either with less expensive nonmetallic materials or with more expensive materials that have a performance advantage. Iron and steel compete with lighter materials, such as aluminum and plastics, in the motor vehicle industry; aluminum, concrete, and wood in construction; and aluminum, glass, paper, and plastics in containers.

[e]Estimated. *Corrections posted on July 9, 2007, to replace European Union by adding France, Italy, and the United Kingdom and making resulting revisions to data for "Other countries."
[1]Production and shipments data source is the American Iron and Steel Institute; see also Iron Ore and Iron and Steel Scrap.
[2]More than 95% of iron made is transported in molten form to steelmaking furnaces located at the same site.
[3]U.S. Census Bureau.
[4]Defined as steel shipments + imports - exports + industry stock changes + imports excluding semifinished steel products.
[5]U.S. Department of Labor, Bureau of Labor Statistics.
[6]Metals Service Center Institute.
[7]U.S. Department of Labor, Bureau of Labor Statistics. Blast furnaces and steel mills: NAICS 33111; Iron and steel foundries: NAICS 33151.
[8]Defined as imports - exports + adjustments for Government and industry stock changes.