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 valued at about $71 billion. The steel industry consisted of 105 companies that produced raw steel at 144 locations, with combined raw steel production capability of about 125 million tons. Indiana accounted for about 24% of total raw steel production, followed by Ohio, 16%, and Pennsylvania, 8%. Pig iron was produced by 13 companies operating integrated steel mills, with about 35 blast furnaces in continuous operation. The distribution of steel shipments was estimated as follows: warehouses and steel service centers, 20%; transportation (predominantly for automotive production), 15%; construction, 14%; cans and containers, 4%; and others, 47%. Ferrous foundries, numbering about 1,100, continued to be importers of pig iron into the United States, mainly from Brazil, Russia, and Japan.

Salient Statistics—United States:[1]	1995	1996	1997	1998	1999[e]
Pig iron production[2]	50.9	49.4	49.6	48.2	44.9
Steel production:	95.2	95.5	98.5	98.6	93.0
Basic oxygen furnaces, percent	59.6	57.4	56.2	54.9	54.5
Electric arc furnaces, percent	40.4	42.6	43.8	45.1	45.5
Continuously cast steel, percent	91.0	93.2	94.7	95.5	95.5
Shipments:					
Steel mill products	88.4	91.5	96.0	92.9	91.4
Steel castings[3]	1.1	1.2	1.2	[e]1.2	1.1
Iron castings[3]	9.8	9.8	9.8	[e]9.8	9.7
Imports of steel mill products	22.1	26.5	28.3	37.7	31.3
Exports of steel mill products	6.4	4.6	5.5	5.0	5.0
Apparent steel consumption[4]	102	108	114	118	109
Producer price index for steel mill products (1982=100)[5]	120.1	115.6	116.4	113.8	105.3
Steel mill product stocks at service centers yearend[6]	5.9	6.3	6.6	8.5	10.9
Total employment, average, number[7]					
Blast furnaces and steel mills	171,000	168,000	169,000	168,000	167,000
Iron and steel foundries	130,000	129,000	128,000	130,000	129,000
Net import reliance[8] as a percent of apparent consumption	21	20	20	27	22

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

Import Sources (1995-98): European Union, 34%; Canada, 22%; Japan, 16%; Russia, 14%; and other, 14%.

Tariff:[9] Item	Number	Normal Trade Relations[10] 12/31/99	Canada 12/31/99	Mexico 12/31/99
Pig iron	7201.10.0000	Free	Free	Free.
Carbon steel:				
Semifinished	7207.12.0050	2.1%	Free	1.6%.
Structural shapes	7216.33.0090	0.4%	Free	0.3%.
Bars, hot-rolled	7213.20.0000	1.0%	Free	0.7%.
Sheets, hot-rolled	7208.39.0030	2.4%	Free	1.9%.
Hot-rolled, pickled	7208.27.0060	2.6%	Free	2.0%.
Cold-rolled	7209.18.2550	1.6%	Free	1.2%.
Galvanized	7210.49.0090	3.2%	Free	2.6%.
Stainless steel:				
Semifinished	7218.91.0015	2.6%	Free	2.0%.
	7218.99.0015	2.6%	Free	2.0%.
Bars, cold-finished	7222.20.0075	5.3%	Free	4.2%.
Pipe and tube	7304.41.3045	3.8%	Free	Free.
Cold-rolled sheets	7219.33.0035	5%	Free	4.0%.

Depletion Allowance: Not applicable.

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IRON AND STEEL

Government Stockpile: None.

Events, Trends, and Issues: During the first 8 months of 1999, monthly pig iron and raw steel production fluctuated closely about 4.1 million tons and 8.7 million tons, respectively. Total production during this period was down for pig iron, 10%, and steel, 7%, from that of the prior year. Shipments of steel mill products during the first 7 months of 1999 were down 7% compared with that of 1998. Pig iron and steel production and steel shipments increased slightly during the first half of year.

The Asian economic problems that began with the financial crisis of 1997 continued to adversely affect the U.S. steel industry during 1999. Alleged dumping of subsidized, low-priced steel products onto the U.S. market by foreign producers may have caused average domestic steel industry prices for all products in 1999 to decline about 7% from average 1998 prices—the greatest aggregate decline in about 20 years. Current industry market prices are down from those of 1998 for hot rolled steel, 10%; cold rolled steel, 9%; and plate, 15%. The industry appealed to the Government for vigorous enforcement of trade laws in response to this dumping. Five leading U.S. steel producers filed suits against the U.S. Department of Commerce in the Court of International Trade to overturn suspension or settlement agreements.

In 1998, the constitutionality of the North American Free Trade Agreement (NAFTA) was challenged through a lawsuit filed by the United Steelworkers of America (USWA) and the Made in the USA Foundation. NAFTA was characterized by these plaintiffs as an international treaty not approved by two-thirds vote of the Senate and, therefore, illegal. In July 1999, an Alabama Federal District Court ruled that NAFTA is an international agreement dealing with commercial matters that did not have to be submitted to the U.S. Senate for ratification. The USWA planned to appeal the decision to the U.S. Court of Appeals for the 11th Circuit.

World Production:

	Pig iron		Raw steel	
	1998	1999[e]	1998	1999[e]
United States	48.2	44.9	98.6	93.0
Brazil	[e]25.0	23.7	[e]25.1	24.9
China	119	120	[e]114	120
European Union	96.3	92.6	155	153
Japan	75.0	71.1	93.5	90.6
Korea, Republic of	23.1	23.2	39.9	40.1
Russia	34.8	38.5	43.8	48.2
Ukraine	[e]20.8	22.5	24.1	26.1
Other countries	[e]98.2	84.5	187	158
World total (may be rounded)	[e]541	521	781	754

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 having a property 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.
[1]Production and shipments data source is the American Iron and Steel Institute (AISI); see also Iron Ore and Iron and Steel Scrap.
[2]More than 95% of iron made is transported molten to steelmaking furnaces located at the same site.
[3]U.S. Department of Commerce, Bureau of the Census.
[4]Defined as steel shipments + imports - exports + adjustments for industry stock changes + adjustment for imports of semifinished steel products.
[5]Bureau of Labor Statistics.
[6]Steel Service Center Institute.
[7]Bureau of Labor Statistics. Blast furnaces and steel mills: SIC 3312; Iron and steel foundries: SIC 3320.
[8]Defined as imports - exports + adjustments for Government and industry stock changes.
[9]All tariff percentages are ad valorem.
[10]No tariff for Israel and certain Caribbean and Andean nations.