IRON AND STEEL[1]

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

Domestic Production and Use: The iron and steel industry and ferrous foundries produced goods valued at about $70 billion. The steel industry consisted of 79 companies that produced raw steel at 116 locations, with combined raw steel production capability of 102 million tons. Indiana accounted for about 22% of total raw steel production, followed by Ohio, 16%, and Pennsylvania, 9%. Pig iron was produced by 15 companies operating integrated steel mills, with approximately 58 blast furnaces, of which about 41 were in continuous operation. Integrated companies accounted for about 64% of total steel production, including output of their electric arc furnaces. The distribution of steel shipments was estimated as follows: warehouses and steel service centers, 25%; transportation (predominantly for automotive production), 16%; construction, 15%; cans and containers, 5%; and other, 39%. Ferrous foundries, numbering about 1,000, were importers of pig iron into the United States, mainly from Brazil and Russia.

Salient Statistics—United States:[1]	**1991**	**1992**	**1993**	**1994**	**1995**[e]
Pig iron production[2]	44.1	47.4	48.2	49.4	51.0
Steel production:	79.7	84.3	88.8	91.2	95.0
Basic oxygen furnaces, percent	60.0	62.0	60.6	60.7	61.0
Electric arc furnaces, percent	38.4	38.0	39.4	39.3	39.0
Open hearth furnaces, percent	1.6	—	—	—	—
Continuously cast steel, percent	75.8	79.3	85.7	89.5	91.0
Shipments:					
Steel mill products	71.5	74.6	80.8	86.3	89.0
Steel castings[3]	0.9	0.9	1.4	1.7	1.8
Iron castings[3]	6.9	7.4	11.9	13.5	14.0
Imports of steel mill products	14.4	15.5	17.7	27.3	28.0
Exports of steel mill products	5.8	3.9	3.6	3.5	4.5
Apparent steel consumption[4]	80.8	86.2	92.0	104.0	108.0
Producer price index for steel mill products (1982=100)[5]	109.5	106.4	108.2	113.4	121.0
Steel mill product stocks at service centers, yearend[6]	5.4	5.3	5.7	6.6	7.1
Total employment, average[7]					
Blast furnaces and steel mills	199,000	187,000	175,000	172,000	171,000
Iron and steel foundries	126,000	120,000	119,000	125,000	130,000
Net import reliance[8] as a percent of apparent consumption	12	13	15	22	21

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

Import Sources (1991-94): European Union (EU),[9] 33%; Canada, 20%; Japan, 13%; Brazil, 8%; South Korea, 7%; and other, 19%.

Tariff:[10] **Item**	**Number**	**Most favored nation (MFN)**[11] **12/31/95**	**Canada 12/31/95**	**Mexico 12/31/95**	**Non-MFN**[12] **12/31/95**
Pig iron	7201.10.0000	Free	Free	Free	$1.11/t.
Carbon steel:					
Semifinished	7207.12.0050	3.8%	1.2%	3.3%	20%.
Structural shapes	7216.33.0090	0.8%	0.2%	0.7%	2%.
Bars, hot-rolled	7213.20.0000	1.7%	0.5%	1.5%	5.5%.
Line pipe	7305.11.1060	1.7%	0.5%	1.5%	5.5%.
Tinplate	7210.12.0000	3.2%	1%	2.8%	6%.
Sheets, hot-rolled	7208.24.5030	4.4%	1.4%	3.9%	20%.
Hot-rolled, pickled	7208.24.1000	4.6%	1.5%	4%	0.4¢/kg+20%.
Cold-rolled	7209.22.0000	4.6%	1.5%	4%	0.4¢/kg+20%.
Galvanized	7210.49.0090	5.8%	1.9%	5.2%	21.5%.
Stainless steel:					
Semifinished	7218.90.0015	4.7%	1.5%	4.1%	29%.
Bars, cold-finished	7222.20.0075	9.5%	3.1%	8.4%	29%.
Pipe and tube	7304.41.0045	[13]6.8%	[13]2.2%	Free	36%.
Cold-rolled sheets	7219.33.0035	9.1%	3%	8%	29%.

Prepared by **Iron and Steel Specialist (703) 648-4972.**

IRON AND STEEL

Depletion Allowance: Not applicable.

Government Stockpile: None.

Events, Trends, and Issues: Steel production and shipments by U.S. companies continued at near effective capacity during 1995. With demand strong, steel prices continued the climb that began in 1993. As a result, the industry continued to be generally profitable.

Strong market conditions, combined with the success of new thin slab continuous casting technology, have led to a spate of new steel plant construction. Over 10 million tons of new steel plant capacity, almost all of it for flat-rolled products, was started up or under construction in the United States in 1995.

Imports of steel mill products continued at near-record levels. Steel companies themselves were responsible for importing an estimated 4 million tons of semifinished steel for finishing in the United States. This was in addition to about 2 million tons of semifinished steel imported by companies that do not have steelmaking capability.

Exports were primarily regular shipments to Canadian and Mexican customers. At midyear, domestic demand softened slightly. In response, domestic companies increased their export sales. In particular, exports of hot-rolled steel to the Far East reversed the usual trend of imports from that region.

World Production:

	Pig iron		Raw steel	
	1994	1995[e]	1994	1995[e]
United States	49.4	51.0	91.2	95.0
Brazil	25.2	25.0	25.7	25.0
China	96.4	100.0	91.5	90.0
European Union (EU)[9]	97.7	100.0	151.8	160.0
Japan	73.8	76.0	98.3	105.0
Korea, South	21.2	22.0	33.7	36.0
Russia	36.1	39.0	48.8	50.0
Ukraine	20.0	18.0	23.8	22.0
Other countries	92.2	99.0	161.1	177.0
World total (may be rounded)	512.0	530.0	726.0	760.0

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. Data for years prior to 1993 may not be comparable due to changes in survey panel.
[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]Data are for the expanded European Union, which, as of Jan. 1, 1995, was joined by Austria, Finland, and Sweden.
[10]All tariff percentages are ad valorem.
[11]No tariff for Israel and certain Caribbean and Andean nations.
[12]See Appendix B.
[13]No tariff for use in civil aircraft.