



U.S. Department of the Interior • Bureau of Mines

MINERAL INDUSTRY SURVEYS

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Iron and Steel Scrap, Monthly

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IRON AND STEEL SCRAP IN MAY 1993

Returns from 54% of consumers that manufacture pig iron and raw steel and castings, representing 72% of total scrap consumption by that sector, indicated that consumption of iron and steel scrap on a daily average basis in May 1993 was down slightly compared with that in April 1993, according to the U.S. Bureau of Mines. Compared with April 1993 data, daily average production fell 4%, net receipts fell 2%, and stocks at the end of the month fell 4%.

Annual preliminary domestic and foreign trade data for 1992 are contained in this report as tables 14 through 30. The annual domestic tables contain data for all types of iron and steel scrap consumers. Annual 1992 preliminary data for selected countries on ferrous scrap consumption, exports and imports, and shredder capacity are not included in this report and will not be published in the 1992 Iron and Steel Scrap Annual Report.

On a daily average basis for manufacturers of pig iron and raw steel and castings, pig iron production rose 1% from April 1993, as did consumption. Stocks of pig iron at month's end rose 20%, compared with those at the end of April 1993.

Exports of ferrous scrap for the month of April 1993 fell 9%, compared with that in March 1993. The Republic of Korea was the principal country of destination, accounting for 37% of the total exports in April 1993, followed by Canada with 16%, and China 13%.

Table 8 shows that, based on quantity, Los Angeles, CA, was the leading customs district for exports in April 1993, accounting for 23% of total exports, followed by New York, NY, with 15% and Philadelphia, PA, with 10%. Seattle, WA, was the leading re-exporter, accounting for 64% of re-exporting activity, followed by Laredo, TX, with 29% and Portland, ME, with 7%.

Table 12 reveals that, on a quantity basis, Detroit, MI, was the leading customs district for imports in April 1993, accounting for 34% of the total imports, followed by Seattle, WA, with 27% and Buffalo, NY, with 12%.

Prepared by the Branch of Metals and Branch of Data
August 4, 1993.



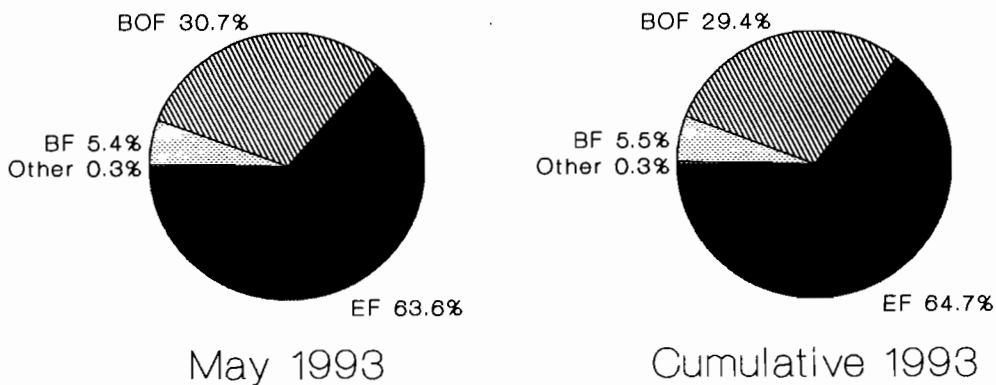
James Boyd
Memorial Library

Table 13 reveals that imports of pig iron during the first 4 months of 1993 totaled 332,000 metric tons, an increase of nearly 120% from the 151,000 metric tons imported during the first 4 months of 1992. Pig iron imports for all of 1992 totaled only 497,000 metric tons. Minimills and iron foundries are the primary consumers of imported pig iron.

According to the American Iron and Steel Institute, domestic raw steel production in May 1993 amounted to 7,510,000 metric tons, up 4% compared with 7,190,000 metric tons in April 1993 and up 4% from 7,228,000 metric tons in May 1992. Year-to-date production through May 1993 was 36,191,000 metric tons, up 2% compared with 35,447,000 metric tons for the same period 1 year ago. The electric furnace (EF) portion of raw steel production for May 1993 was 38%, down 1% from April 1993, remaining the same as in May 1992. The EF share through May 1993 was 38%, up 1% from May 1992. Raw steel capability utilization in May 1993 was 88%, up 1% from April 1993 and up 5% from May 1992. Capability utilization through May 1993 was 87% and 83% in 1992. Continuous cast steel production in the United States accounted for 86% of total raw steel production in May 1993, up 2% from April 1993 and was up from 78% in May 1992. Through May, continuous cast steel production represented 85% of total steel production in 1993, compared to 77% in 1992.

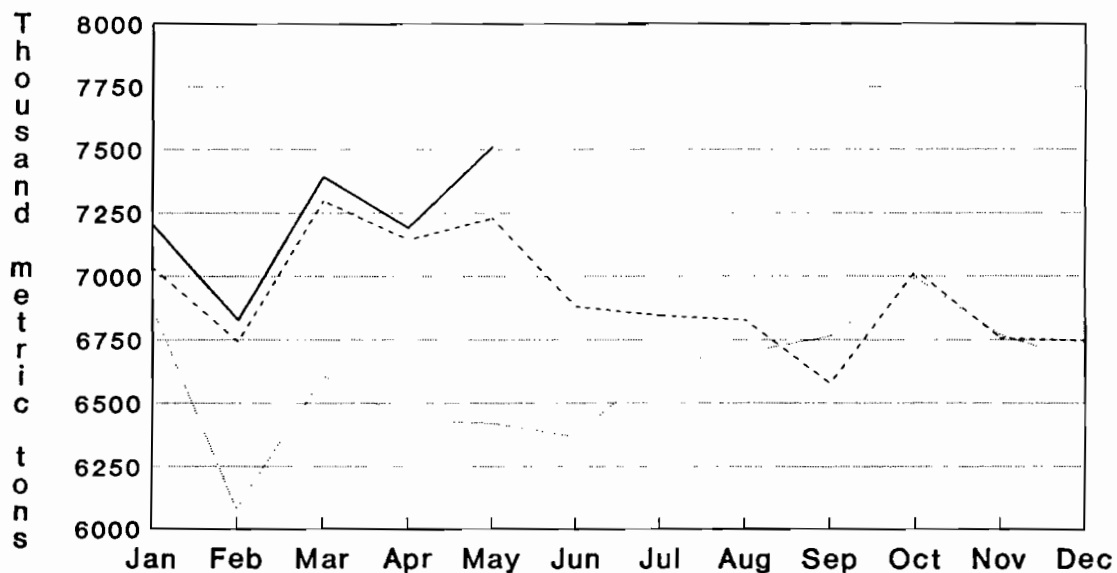
An internal evaluation indicates that ferrous scrap consumption by electric furnace manufacturers of raw steel through May 1993 was understated by 830,000 metric tons. The understated quantity for May equaled 280,000 metric tons (preliminary) compared with 240,000 metric tons in April (revised).

Iron and Steel Scrap Consumption Breakdown in %, by Furnace Type^{1/}

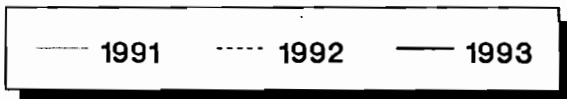


^{1/}Includes only manufacturers of raw steel.

U. S. Raw Steel Production



Source: American Iron and Steel Institute



Monthly and Cumulative totals for raw steel production in the United States are shown below, as reported by the American Iron and Steel Institute. All weights are presented in thousand metric tons¹.

Month	1991		1992		1993	
	Monthly	YTD	Monthly	YTD	Monthly	YTD
January	6,874	6,874	7,035	7,035	7,205	7,205
February	6,082	12,956	6,742	13,776	6,829	14,053
March	6,607	19,476	7,296	21,073	7,391	21,445
April	6,431	25,909	7,144	28,218	7,190	28,683
May	6,419	32,323	7,228	35,447	7,510	36,191
June	6,366	38,689	6,880	42,328	--	--
July	6,657	45,307	6,845	49,168	--	--
August	6,701	52,012	6,828	55,998	--	--
September	6,765	58,777	6,576	62,576	--	--
October	6,995	65,803	7,023	69,601	--	--
November	6,769	72,540	6,758	76,349	--	--
December	6,665	79,738	6,747	83,099	--	--

¹Monthly raw steel figures may not add to cumulative totals shown.

Monthly and Cumulative rates for both raw steel capability utilization and continuous cast steel production are listed below, by percentage, as reported by the American Iron and Steel Institute

Raw Steel Capability Utilization						
Month	1991		1992		1993	
	Month	YTD	Monthly	YTD	Month	YTD
January	74.6%	74.6%	80.5%	80.5%	84.8%	84.8%
February	73.1%	73.9%	82.4%	81.4%	89.0%	86.9%
March	71.7%	72.8%	83.5%	82.1%	87.0%	87.0%
April	72.5%	72.7%	85.3%	82.9%	87.4%	87.2%
May	70.0%	72.2%	83.5%	83.0%	88.3%	87.4%
June	71.7%	72.1%	82.1%	82.9%	--	--
July	74.8%	72.4%	78.9%	82.3%	--	--
August	75.2%	72.8%	78.7%	81.8%	--	--
September	78.5%	73.4%	78.3%	81.5%	--	--
October	78.0%	73.9%	80.9%	81.4%	--	--
November	78.0%	74.2%	80.4%	81.3%	--	--
December	74.4%	74.7%	77.7%	81.0%	--	--

Continuous Cast Steel Production						
Month	1991		1992		1993	
	Month	YTD	Month	YTD	Month	YTD
January	73.7%	73.7%	77.0%	77.0%	83.2%	83.2%
February	77.9%	75.7%	76.7%	76.8%	83.2%	83.2%
March	76.9%	76.0%	76.9%	76.8%	84.2%	84.6%
April	75.3%	75.8%	76.2%	76.7%	84.1%	84.5%
May	76.1%	75.8%	78.0%	76.9%	86.3%	84.9%
June	75.4%	75.8%	77.5%	77.0%	--	--
July	75.0%	75.6%	78.0%	77.2%	--	--
August	75.4%	75.5%	80.1%	77.5%	--	--
September	75.6%	75.5%	80.6%	77.8%	--	--
October	75.0%	75.4%	82.0%	78.2%	--	--
November	75.6%	75.5%	82.4%	78.6%	--	--
December	77.5%	75.6%	81.7%	78.9%	--	--

Comparative monthly composite prices in dollars per long ton (\$/lt) and dollars per metric ton (\$/mt) for No. 1 heavy melting steel scrap are shown as quoted by two sources:

American Metal Market						
Month	1991		1992		1993	
	\$/lt	\$/mt	\$/lt	\$/mt	\$/lt	\$/mt
January	105.04	103.38	85.67	84.32	98.47	96.91
February	102.36	100.74	86.51	85.14	106.48	104.80
March	98.79	97.23	88.00	86.61	106.66	104.98
April	97.78	96.24	88.64	87.24	103.39	101.76
May	94.78	93.28	87.28	85.90	104.13	102.49
June	88.97	87.56	85.06	83.72	111.30	109.54
July	87.19	85.81	85.00	83.66	--	--
August	90.21	88.79	85.30	83.95	--	--
September	91.67	90.22	85.67	84.32	--	--
October	90.55	89.12	84.33	83.00	--	--
November	86.16	84.80	84.00	82.67	--	--
December	85.67	84.32	86.86	85.49	--	--
Avg through May	99.75	98.17	87.22	85.84	103.83	102.19
Avg through Dec	93.26	91.79	86.03	84.67	--	--

Iron Age						
Month	1991		1992		1993	
	\$/lt	\$/mt	\$/lt	\$/mt	\$/lt	\$/mt
January	103.25	101.62	84.29	82.96	97.33	95.79
February	100.67	99.08	85.21	83.86	104.25	102.60
March	98.50	96.94	86.73	85.36	102.67	101.05
April	98.23	96.68	87.33	85.95	101.17	99.57
May	93.50	92.02	86.08	84.72	101.33	99.73
June	87.92	86.53	83.67	82.35	107.90	106.20
July	88.10	86.71	83.92	82.59	--	--
August	92.00	90.55	84.70	83.36	--	--
September	92.70	91.24	85.42	84.07	--	--
October	91.75	90.30	83.83	82.51	--	--
November	86.67	85.30	83.53	82.21	--	--
December	85.23	83.88	88.04	86.65	--	--
Avg through May	98.83	97.27	85.93	84.57	101.35	99.75
Avg through Dec	93.21	91.74	85.23	83.88	--	--

TABLE 1
SALIENT IRON AND STEEL SCRAP, PIG IRON, AND DIRECT REDUCED IRON STATISTICS FOR STEEL PRODUCERS1/
(Metric tons)

	May 1993 2/				
	Integrated steel producers3/	Electric furnace steel producers4/	Total for steel producers5/	Revised total for month of Apr 1993 6/	Total year through May 1993
Scrap:					
Receipts from dealers and other sources-	616,804	2,224,367	2,841,172	2,826,270	14,255,396
Receipts from other own company plants--	262,355	135,777	398,134	356,898	1,821,825
Production recirculating scrap-----	1,072,609	379,148	1,451,758	1,463,769	7,062,717
Production obsolete scrap-----	48,470	5,830	54,299	61,062	295,430
Consumption-----	1,727,057	2,735,517	4,462,572	4,350,153	21,666,982
Shipments-----	371,723	13,137	384,860	375,358	1,990,132
Stocks end of month-----	929,897	1,798,592	2,728,489	2,830,355	XX
Pig iron:					
Receipts-----	56,959	35,108	92,067	158,724	920,917
Production-----	4,088,523	--	4,088,523	3,932,394	19,899,595
Consumption-----	4,055,190	15,340	4,070,530	3,912,864	19,919,457
Shipments-----	81,429	--	81,429	184,915	857,318
Stocks end of month-----	127,606	45,005	172,612	143,465	XX
Direct-reduced or pre-reduced iron:					
Receipts7/-----	6,265	59,943	66,208	137,869	426,900
Production-----	--	W	W	W	W
Consumption-----	21,402	71,256	92,658	98,609	427,012
Shipments-----	W	W	W	W	W
Stocks end of month-----	57,158	66,960	124,118	148,951	XX

W Withheld to avoid disclosing company proprietary data. XX Not applicable.

1/Includes manufacturers of raw steel that also produce steel castings.

2/Based on returns from 54% of consumers, representing 72% of scrap consumption.

3/Includes data for electric furnaces operated by integrated steel producers.

4/Includes minimill and speciality steel producers; includes data for other types of furnaces operated by these steel producers.

5/Data may not add to totals shown because of independent rounding.

6/Based on returns from 65% of consumers, representing 79% of scrap consumption.

7/Includes production.

TABLE 2
 CONSUMPTION OF IRON AND STEEL SCRAP, PIG IRON, AND DIRECT REDUCED IRON, BY TYPE OF CONSUMER/
 AND TYPE OF FURNACE OR OTHER USE, MAY 1993

(Metric tons)

Type of furnace or other uses	Integrated steel producers			Electric furnace steel producers			Totals for steel producers		
	Scrap	Pig iron	Direct reduced iron	Scrap	Pig iron	Direct reduced iron	Scrap	Pig iron	Direct reduced iron
Blast furnace2/-----	242,102	--	--	--	--	--	242,102	--	--
Basic oxygen process3/---	1,370,694	4,041,070	21,402	(4/)	--	--	1,370,694	4,041,070	21,402
Electric furnace-----	(5/)	--	--	2,837,822	15,340	71,256	2,837,822	15,340	71,256
Cupola furnace-----	--	--	--	--	--	--	--	--	--
Other6/	--	--	--	--	--	--	--	--	--
(includes air furnace)-	11,955	2,442	--	(4/)	--	--	11,955	2,442	--
Direct Castings7/-----	--	11,678	--	--	--	--	--	11,678	--
Total-----	1,624,751	4,055,190	21,402	2,837,822	15,340	71,256	8/4,462,572	4,070,530	92,658

1/Includes only those manufacturers of steel castings that also produce raw steel.

2/Includes consumption in all blast furnaces producing pig iron.

3/Includes scrap and pig iron processed in metallurgical blast cupolas and used in oxygen converters.

4/Withheld to avoid disclosing company proprietary data; included in scrap consumption data by furnace type for "Integrated steel producers."

5/Withheld to avoid disclosing company proprietary data; included in scrap consumption data by furnace type for "Electric furnace steel producers."

6/Includes vacuum melting furnaces and miscellaneous uses.

7/Includes ingot molds and stools.

8/Data do not add to total shown because of independent rounding.

TABLE 3
 RECEIPTS, PRODUCTION, SHIPMENTS AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, OF STEEL PRODUCERS/ IN MAY 1993
 (Metric tons)

Item	Receipts of scrap			Production of home scrap			Consumption of purchased and home scrap ^{4/}	Shipments of scrap	Ending stocks
	Brokers dealers and other outside sources	Other own company plants	--	Recirculating scrap ^{2/}	Obsolete scrap ^{3/}	--			
Scrap:									
Carbon steel									
Low-phosphorus plate and punchings-	46,624	--	--	33,550	--	--	78,811	336	44,259
Cut structural and plate-----	206,644	6,104	--	42,696	5,828	--	246,778	7,487	153,524
No. 1 heavy melting steel-----	515,921	139,576	--	500,626	23,243	--	1,035,116	164,865	537,025
No. 2 heavy melting steel-----	337,016	11,343	--	35,369	492	--	385,497	1,029	320,383
No. 1 and electric furnace bundles-	396,145	39,137	--	74,532	61	--	498,116	40,615	348,984
No. 2 and all other bundles-----	111,930	1,511	--	6,144	--	--	118,568	7	72,925
Electric furnace 1 foot and under (not bundles)-----	943	12,310	--	11,096	--	--	23,057	1,416	1,737
Railroad rails-----	26,780	2,436	--	2,032	--	--	31,378	--	28,469
Turnings and borings-----	113,749	387	--	5,207	--	--	106,464	1,086	85,619
Slag scrap (Fe content 79%)-----	88,136	18,274	--	197,970	86	--	251,936	52,526	92,850
Shredded and fragmented-----	469,215	73,319	--	1,507	--	--	535,582	--	314,121
No. 1 busheling-----	164,480	9,445	--	12,295	5	--	184,477	4,521	121,836
All other carbon steel scrap-----	185,500	60,886	--	355,576	4,883	--	589,918	58,251	205,630
Stainless steel scrap-----	42,053	552	--	34,934	--	--	76,215	1,294	45,450
Alloy steel scrap-----	14,410	8,057	--	51,997	--	--	78,231	2,606	83,838
Ingot mold and stool scrap-----	7,299	3,877	--	14,591	19,494	--	34,903	30,788	80,455
Machinery and cupola cast iron-----	3,892	115	--	131	--	--	3,787	81	3,974
Cast iron borings-----	8,196	--	--	2	45	--	9,516	1	3,173
Other iron scrap-----	23,437	4,586	--	43,611	162	--	83,740	11,876	87,090
Other mixed scrap-----	78,802	6,219	--	27,892	--	--	90,482	6,075	97,147
Total scrap-----	2,841,172	398,134	--	1,451,758	54,299	--	4,462,572	384,860	2,728,489
Total scrap through May 1993-----	14,255,396	1,821,825	--	7,062,717	295,430	--	21,666,982	1,990,132	2,728,489

1/Includes only those manufacturers of steel castings that also produce raw steel.

2/Recirculating scrap resulting from current operations.

3/Obsolete scrap includes ingot molds, stools, and scrap from old equipment, buildings, etc.

4/Home scrap includes recirculating scrap.

TABLE 4
IRON AND STEEL SCRAP SUPPLY1/ AVAILABLE FOR CONSUMPTION IN MAY 1993, BY REGION AND STATE
(Metric tons)

	Receipts of scrap		Production of home scrap			Shipments of scrap3/	New supply available for consumption
	From brokers, dealers, and other outside sources	From other own company plants	Recirculating scrap	Obsolete scrap2/			
New England and Middle Atlantic:							
New Jersey, New York, Rhode Island-----	129,938	W	6,724	--	W	137,373	
Pennsylvania-----	231,099	W	111,259	3,464	W	410,344	
Total-----	361,037	73,311	117,983	3,464	8,078	547,717	
North Central:							
Illinois-----	330,816	24,448	84,643	W	W	432,096	
Indiana-----	201,024	48,057	665,802	W	W	671,153	
Iowa, Minnesota, Missouri, Wisconsin-----	152,794	W	10,843	--	W	176,008	
Michigan-----	163,668	W	62,336	W	9,211	219,522	
Ohio-----	337,700	85,885	166,579	35,861	64,372	561,653	
Total-----	1,186,002	173,383	990,203	44,464	333,619	2,060,432	
South Atlantic:							
Delaware, Florida, Georgia, Maryland, South Carolina, Virginia, West Virginia-----	288,302	89,303	119,719	W	W	481,686	
South Central:							
Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas-----	736,679	62,135	145,476	W	W	919,681	
Mountain Pacific:							
California, Colorado, Oregon, Utah, Washington-----	269,152	--	78,375	W	W	350,983	
Grand total4/-----	2,841,172	398,134	1,451,758	54,299	384,860	4,360,501	

W Withheld to avoid disclosing company proprietary data, included in "Total."

1/New supply available for consumption is a net figure computed by adding production to receipts and deducting scrap shipped during the month. The plus or minus difference in stock levels at the beginning and end of the month is not taken into consideration.

2/Obsolete scrap includes ingot molds, stools, and scraps from old equipment, buildings, etc.

3/Includes scrap shipped, transferred, or otherwise disposed of during the year.

4/Data may not add to totals shown because of independent rounding.

TABLE 5
 RECEIPTS OF SCRAP1/ IN MAY 1993 BY REGION2/ AND GRADE
 (Metric tons)

Item	New England and Mid-Atlantic	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings-	16,281	28,501	1,732	W	W
Cut structural and plate-----	38,006	55,553	27,578	55,311	30,197
No. 1 heavy melting steel-----	30,949	190,841	58,878	184,675	50,578
No. 2 heavy melting steel-----	14,798	130,329	33,565	143,390	14,934
No. 1 and electric furnace bundles-	26,304	303,281	27,332	33,763	5,466
No. 2 and all other bundles-----	33,461	29,293	12,363	29,895	6,918
Electric furnace 1 foot and under (not bundles)-----	W	W	--	--	--
Railroad rails-----	W	W	548	W	W
Turnings and borings-----	30,542	22,975	11,550	38,966	9,715
Slag scrap (Fe content 79 percent)-	8,059	32,257	31,356	11,015	5,449
Shredded and fragmented-----	52,153	175,840	39,089	159,313	42,821
No. 1 busheling-----	40,398	71,910	24,461	24,744	3,687
All other carbon steel scrap-----	15,441	96,530	6,352	34,366	32,811
Stainless steel scrap-----	37,486	1,173	W	--	W
Alloy steel scrap-----	7,645	W	W	W	W
Ingot mold and stool scrap-----	4,306	W	--	--	W
Machinery and cupola cast iron-----	--	3,003	--	531	358
Cast iron borings-----	W	W	--	714	601
Other iron scrap-----	W	10,180	9,772	3,307	--
Other mixed scrap-----	3,024	18,098	W	W	56,544
Total scrap-----	361,037	1,186,002	288,302	736,679	269,152

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/Scrap supplied from brokers, dealers and other outside sources.

2/A breakout of the states within each region is provided in Table 4.

TABLE 6
IRON AND STEEL CONSUMED IN MAY 1993, BY REGION AND STATE1/

(Metric tons)

Item	New England and Mid-Atlantic	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings-	16,041	28,103	1,585	W	W
Cut structural and plate-----	55,405	71,587	28,796	60,409	30,581
No. 1 heavy melting steel-----	101,453	405,354	187,692	273,075	67,542
No. 2 heavy melting steel-----	26,644	152,997	40,510	150,101	15,245
No. 1 and electric furnace bundles-	32,119	393,018	36,221	30,923	5,835
No. 2 and all other bundles-----	35,538	35,798	12,511	27,646	7,075
Electric furnace 1 foot and under (not bundles)-----	W	W	--	W	--
Railroad rails-----	W	W	W	W	W
Turnings and borings-----	29,071	23,430	12,902	31,388	9,673
Slag scrap (Fe content 7%)-----	11,394	165,118	39,384	21,894	14,147
Shredded and fragmented-----	54,552	183,450	64,043	188,878	44,660
No. 1 busheling-----	39,174	85,220	30,116	26,042	3,925
All other carbon steel scrap-----	55,297	397,044	32,911	57,135	47,532
Stainless steel scrap-----	66,547	W	W	--	W
Alloy steel scrap-----	20,540	52,308	W	W	W
Ingot mold and stool scrap-----	6,882	18,407	W	W	W
Machinery and cupola cast iron-----	--	2,857	--	494	436
Cast iron borings-----	W	W	--	1,978	733
Other iron scrap-----	6,197	37,690	34,301	2,231	3,322
Other mixed scrap-----	4,585	29,144	967	8,948	46,837
Total scrap-----	567,197	2,108,096	527,027	915,906	344,347

W Withheld to avoid disclosing company proprietary data; included in "Total."
1/A breakout of the states within each region is provided in Table 4.

TABLE 7
U.S. EXPORTS OF IRON AND STEEL SCRAP^{1/}, BY COUNTRY
(Metric tons and U.S. dollars)

	April 1993		Year to date	
	Quantity	Value	Quantity	Value
Argentina-----	--	--	55	37,849
Australia-----	--	--	931	550,582
Austria-----	34	15,633	34	15,633
Belgium-----	2,003	1,400,000	3,491	1,606,135
Brazil-----	63	10,060	63	10,060
Canada-----	109,107	13,462,864	456,097	53,874,106
Chile-----	--	--	79	51,500
China-----	85,032	13,799,984	153,687	25,799,838
Colombia-----	72	12,011	2,728	171,223
Costa Rica-----	209	131,446	472	262,667
Dominican Republic---	--	--	64	15,087
Ecuador-----	--	--	13	4,423
France-----	--	--	243	71,786
Germany-----	1,603	229,336	9,727	1,341,963
Guatemala-----	485	294,125	1,965	587,321
Haiti-----	--	--	42	19,447
Hong Kong-----	8,628	1,769,893	54,190	9,334,235
India-----	29,116	3,402,760	63,283	6,976,217
Indonesia-----	273	27,174	1,756	402,195
Ireland-----	172	17,766	549	56,463
Italy-----	32	3,143	2,703	2,003,493
Jamaica-----	--	--	118	83,906
Japan-----	7,313	3,600,795	157,685	26,564,642
Korea, Republic of---	250,267	31,584,009	1,188,958	137,907,185
Malaysia-----	33	9,864	36,239	3,937,417
Mexico-----	45,878	5,815,310	112,170	15,101,334
Netherlands-----	4,067	2,458,030	5,769	2,688,607
New Zealand-----	--	--	700	637,910
Pakistan-----	23,984	2,505,217	41,580	5,161,542
Panama-----	--	--	40	5,430
Peru-----	60	37,470	2,451	495,894
Philippines-----	1,268	260,814	2,851	1,004,909
Portugal-----	--	--	84	8,246
Saudi Arabia-----	--	--	28	22,117
Singapore-----	213	293,357	579	397,733
South Africa, Republic of-----	3,707	425,406	8,301	953,326
Sweden-----	157	90,000	1,107	727,000
Switzerland-----	34	3,356	108	10,627
Taiwan-----	29,097	4,018,527	168,681	18,980,957
Thailand-----	36	44,817	16,727	2,857,749
Turkey-----	69,905	7,307,180	315,619	32,673,020
United Arab Emirates-	23	31,738	146	135,416
United Kingdom-----	380	145,042	3,234	598,413
Uruguay-----	--	--	60	25,566
Venezuela-----	20	2,700	21,480	2,437,859
Grand total-----	673,271	93,209,827	2,836,887	356,609,028

^{1/}Excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping.

Source: Bureau of the Census.

TABLE 8
U.S. EXPORTS AND RE-EXPORTS OF IRON AND STEEL SCRAP^{1/} IN APRIL 1993, BY CUSTOMS DISTRICT

(Metric tons and U.S. dollars)

Customs District	Code	Exports		Re-exports		Exports plus re-exports	
		Quantity	Value	Quantity	Value	Quantity	Value
Baltimore, MD-----	13	172	99,636	--	--	172	99,636
Boston, MA-----	04	36,297	4,065,354	--	--	36,297	4,065,354
Buffalo, NY-----	09	7,732	1,849,178	--	--	7,732	1,849,178
Charleston, SC-----	16	3,307	1,741,268	--	--	3,307	1,741,268
Chicago, IL-----	39	56	5,552	--	--	56	5,552
Columbia - Snake-----	29	684	184,127	--	--	684	184,127
Detroit, MI-----	38	23,761	3,421,600	--	--	23,761	3,421,600
Duluth, MN-----	36	1,027	95,602	--	--	1,027	95,602
El Paso, TX-----	24	198	36,295	--	--	198	36,295
Great Falls, MT-----	33	523	69,979	--	--	523	69,979
Honolulu, HI-----	32	56	20,253	--	--	56	20,253
Houston-Galveston, TX-	53	1,202	474,453	--	--	1,202	474,453
Laredo, TX-----	23	24,400	3,329,307	82	9,412	24,482	3,338,719
Los Angeles, CA-----	27	151,488	20,933,561	--	--	151,488	20,933,561
Miami, FL-----	52	164	38,248	--	--	164	38,248
New Orleans, LA-----	20	8,076	4,383,097	--	--	8,076	4,383,097
New York, NY-----	10	103,550	13,203,335	--	--	103,550	13,203,335
Nogales, AZ-----	26	144	13,667	--	--	144	13,667
Norfolk, VA-----	14	32,255	5,135,499	--	--	32,255	5,135,499
Ogdensburg, NY-----	07	3,424	1,014,013	--	--	3,424	1,014,013
Pembina, ND-----	34	35,392	3,849,211	--	--	35,392	3,849,211
Philadelphia, PA-----	11	65,759	7,160,071	--	--	65,759	7,160,071
Portland, ME-----	01	13,281	1,484,270	21	3,826	13,302	1,488,096
San Diego, CA-----	25	109	10,373	--	--	109	10,373
San Francisco, CA-----	28	54,017	7,831,315	--	--	54,017	7,831,315
Savannah, GA-----	17	366	116,461	--	--	366	116,461
Seattle, WA-----	30	28,424	4,091,748	184	21,113	28,608	4,112,861
St. Albans, VT-----	02	335	208,238	--	--	335	208,238
Tampa, FL-----	18	39,053	5,331,369	--	--	39,053	5,331,369
Wilmington, NC-----	15	34	5,199	--	--	34	5,199
Other ^{2/} -----	70,80	37,985	3,007,548	--	--	37,985	3,007,548
Grand total-----		673,271	93,209,827	287	34,351	673,558	93,244,178

^{1/}Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

^{2/}"Other" includes Code 70, which is for low-valued exports and imports between the U.S. and Canada, and Code 80, which is for items that leave the U.S. by mail.

Source: Bureau of the Census.

TABLE 9
U.S. EXPORTS AND RE-EXPORTS OF IRON AND STEEL SCRAP^{1/} IN JANUARY - APRIL 1993, BY CUSTOMS DISTRICT

(Metric tons and U.S. dollars)

Customs District	Code	Exports		Re-exports		Exports plus re-exports	
		Quantity	Value	Quantity	Value	Quantity	Value
Baltimore, MD-----	13	17,139	2,601,096	--	--	17,139	2,601,096
Boston, MA-----	04	334,390	32,563,553	--	--	334,390	32,563,553
Buffalo, NY-----	09	27,679	7,331,919	--	--	27,679	7,331,919
Charleston, SC-----	16	26,975	4,707,311	--	--	26,975	4,707,311
Chicago, IL-----	39	387	42,820	35	19,950	422	62,770
Columbia - Snake-----	29	41,716	5,462,630	--	--	41,716	5,462,630
Detroit, MI-----	38	93,183	13,565,386	--	--	93,183	13,565,386
Duluth, MN-----	36	2,881	260,223	--	--	2,881	260,223
El Paso, TX-----	24	359	60,547	--	--	359	60,547
Great Falls, MT-----	33	1,166	181,242	--	--	1,166	181,242
Honolulu, HI-----	32	25,817	3,061,387	--	--	25,817	3,061,387
Houston-Galveston, TX-	53	14,707	8,994,690	--	--	14,707	8,994,690
Laredo, TX-----	23	86,916	12,166,538	202	18,992	87,118	12,185,530
Los Angeles, CA-----	27	504,717	66,840,316	--	--	504,717	66,840,316
Miami, FL-----	52	17,114	2,016,636	--	--	17,114	2,016,636
New Orleans, LA-----	20	56,573	13,374,321	--	--	56,573	13,374,321
New York, NY-----	10	309,459	35,693,021	--	--	309,459	35,693,021
Nogales, AZ-----	26	557	61,165	--	--	557	61,165
Norfolk, VA-----	14	55,198	8,117,506	--	--	55,198	8,117,506
Ogdensburg, NY-----	07	7,096	3,013,748	--	--	7,096	3,013,748
Pembina, ND-----	34	144,854	15,054,582	92	7,526	144,946	15,062,108
Philadelphia, PA-----	11	213,689	22,529,775	--	--	213,689	22,529,775
Portland, ME-----	01	103,893	10,256,170	21	3,826	103,914	10,259,996
Providence, RI-----	05	159,997	17,040,190	--	--	159,997	17,040,190
San Diego, CA-----	25	325	24,543	--	--	325	24,543
San Francisco, CA-----	28	198,447	30,389,638	--	--	198,447	30,389,638
San Juan, PR-----	49	275	92,012	--	--	275	92,012
Savannah, GA-----	17	1,164	382,101	--	--	1,164	382,101
Seattle, WA-----	30	140,838	18,042,166	184	21,113	141,022	18,063,279
St. Albans, VT-----	02	770	426,531	--	--	770	426,531
Tampa, FL-----	18	99,165	10,871,777	--	--	99,165	10,871,777
Virgin Islands-----	51	2,298	110,000	--	--	2,298	110,000
Washington, DC-----	54	92	9,210	--	--	92	9,210
Wilmington, NC-----	15	172	67,204	--	--	172	67,204
Other2/-----	70,80	146,879	11,197,074	--	--	146,879	11,197,074
Grand total-----		2,836,887	356,609,028	534	71,407	2,837,421	356,680,435

1/Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

2/"Other" includes Code 70, which is for low-valued exports and imports between the U.S. and Canada, and Code 80, which is for items that leave the U.S. by mail.

Source: Bureau of the Census.

TABLE 10
U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS, BY GRADE
(Metric tons and U.S. dollars)

Grade of scrap	April 1993		Year to date	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel scrap-----	114,882	12,926,672	614,966	64,231,618
No. 2 heavy melting steel scrap-----	41,710	4,621,476	228,618	22,415,134
No. 1 bundles-----	26,698	3,884,805	45,375	6,012,320
No. 2 bundles-----	11,778	1,093,446	81,588	6,640,318
Shredded steel scrap-----	163,992	18,655,771	749,424	81,457,989
Borings, shoveling and turnings-----	12,898	1,110,395	53,992	4,579,097
Cut plate and structural-----	70,931	8,172,134	202,048	23,623,145
Tinned iron or steel-----	5,737	1,472,001	42,107	8,816,611
Remelting scrap ingots-----	39	28,263	126	93,923
Cast iron-----	106,051	10,889,494	375,401	39,063,696
Other iron and steel-----	59,219	8,171,601	263,435	32,153,525
Total carbon steel & cast iron---	613,935	71,026,058	2,657,080	289,087,376
Stainless steel-----	21,625	14,506,750	65,038	44,099,543
Other alloy steel-----	37,711	7,677,019	114,769	23,422,109
Total stainless & alloy steel----	59,336	22,183,769	179,807	67,521,652
Total carbon, stainless, alloy steel & cast iron -----	673,271	93,209,827	2,836,887	356,609,028
Ships, boats, and other vessels for breaking up (for scrapping)-----	9,837	1,008,644	28,991	2,594,537
Used rails for rerolling and other uses ^{1/} -----	2,390	707,359	11,154	3,394,004
Total scrap exports-----	685,498	94,925,830	2,877,032	362,597,569
EXPORTS OF MANUFACTURED FERROUS PRODUCTS:				
Pig iron < or = 0.5% phosphorus-----	840	124,495	9,480	959,740
Pig iron > 0.5% phosphorus-----	29	8,227	1,751	177,320
Alloy pig iron-----	198	17,441	2,261	220,592
Total pig iron-----	1,067	150,163	13,492	1,357,652
Direct reduced iron (DRI) > 80% iron--	2,280	252,357	8,261	891,693
DRI minimum of 99.94% metallic iron--	940	693,142	2,391	1,440,343
Ferrous granules-----	2,271	1,446,239	9,042	6,211,989
Powders of alloy steel-----	216	405,026	1,139	1,915,276
Other ferrous powders-----	1,419	1,951,766	5,102	7,772,949
Total DRI, granules & powders----	7,126	4,748,530	25,935	18,232,250
Grand total-----	692,272	97,872,757	2,911,357	374,414,522

^{1/}Total includes mixed (used plus new) rails. For month of April: 295 metric tons valued at \$283,645; for year to date: 3,018 metric tons valued at \$1,578,800.

Source: Bureau of the Census.

TABLE 11
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP^{1/}, BY COUNTRY
(Metric tons and U.S. dollars)

Country	April 1993		Year to date	
	Quantity	Value	Quantity	Value
Aruba-----	20	8,052	38	17,176
Bahamas, The-----	--	--	15	1,500
Belguim-----	--	--	17	10,059
Brazil-----	20	10,900	248	52,150
Canada-----	77,174	8,162,855	320,198	34,646,096
China-----	--	--	3,326	362,240
Colombia-----	--	--	128	70,352
Finland-----	39	17,397	124	66,242
Germany-----	69	23,821	184	71,262
Israel-----	--	--	5	2,270
Jamaica-----	2,184	219,768	3,664	367,800
Japan-----	4,439	494,075	17,391	1,913,802
Mexico-----	8,479	1,346,747	33,811	6,102,021
Netherlands Antilles--	16	6,221	16	6,221
Panama-----	--	--	7	2,505
Switzerland-----	6	6,370	23	24,689
Trinidad and Tobago--	55	28,517	88	48,517
United Kingdom-----	176	31,418	520	75,554
Venezuela-----	4,465	498,128	49,616	4,861,453
Grand total -----	97,142	10,854,269	429,419	48,701,909

1/Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping.

Source: Bureau of the Census.

TABLE 12
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP^{1/} IN APRIL 1993, BY CUSTOMS DISTRICT
(Metric tons and U.S. dollars)

Customs District	Code	Exports		Re-exports	
		Quantity	Value	Quantity	Value
Anchorage, AK-----	31	--	--	5	14,166
Baltimore, MD-----	13	39	17,397	124	66,242
Buffalo, NY-----	09	11,215	1,333,103	58,415	6,689,507
Chicago, IL-----	39	--	--	7	7,219
Cleveland, OH-----	41	7,952	552,440	21,279	1,704,652
Dallas-Fort Worth, TX-	55	--	--	95	15,253
Detroit, MI-----	38	32,563	3,526,950	144,323	16,041,258
Duluth, MN-----	36	--	--	234	230,390
El Paso, TX-----	24	1,924	226,508	8,174	1,080,721
Great Falls, MT-----	33	146	27,160	363	62,588
Honolulu, HI-----	32	92	3,224	167	5,859
Houston-Galveston, TX-	53	298	136,390	1,392	561,124
Laredo, TX-----	23	5,696	895,556	22,306	4,113,041
Los Angeles, CA-----	27	206	7,800	905	34,200
Miami, FL-----	52	99	50,407	408	165,824
New Orleans, LA-----	20	7,488	701,386	54,727	4,921,291
New York, NY-----	10	42	22,341	117	65,861
Nogales, AZ-----	26	11	17,039	282	144,861
Norfolk, VA-----	14	19	13,997	135	46,292
Ogdensburg, NY-----	07	2,244	603,228	5,496	1,954,841
Pembina, ND-----	34	48	39,112	714	423,460
Philadelphia, PA-----	11	--	--	3,326	362,240
Portland, ME-----	01	276	21,177	623	72,236
San Diego, CA-----	25	884	223,708	4,553	1,019,541
Seattle, WA-----	30	25,738	2,407,665	100,450	8,716,590
St. Albans, VT-----	02	142	16,781	602	97,711
Tampa, FL-----	18	20	10,900	197	84,941
Grand total-----		97,142	10,854,269	429,419	48,701,909

1/Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

Source: Bureau of the Census.

TABLE 13
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS, BY GRADE

(Metric tons and U.S. dollars)

Grade of scrap	April 1993		Year to date	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel scrap-----	6,050	641,264	16,240	1,776,709
No. 2 heavy melting steel scrap-----	589	52,169	1,652	139,577
No. 1 bundles-----	7,322	745,245	36,217	3,683,838
No. 2 bundles-----	388	25,285	3,888	365,412
Shredded steel scrap-----	4,655	568,217	19,048	2,323,161
Borings, shovelings and turnings-----	4,887	398,505	24,025	2,009,862
Cut plate and structural-----	779	84,061	4,698	520,220
Tinned iron or steel-----	845	47,542	3,394	425,560
Remelting scrap ingots-----	4,203	364,471	48,559	4,349,933
Cast iron-----	5,765	692,454	18,816	2,261,588
Other iron and steel-----	43,500	4,086,629	174,853	16,583,204
Total carbon steel & cast iron---	78,983	7,705,842	351,390	34,439,064
Stainless steel-----	3,426	1,603,320	14,169	6,981,473
Other alloy steel-----	14,733	1,545,107	63,860	7,281,372
Total stainless & alloy steel----	18,159	3,148,427	78,029	14,262,845
Total carbon, stainless, alloy steel & cast iron -----	97,142	10,854,269	429,419	48,701,909
Ships, boats, and other vessels for breaking up (for scrapping)-----	5	25,242	13	65,979
Used rails for rerolling and other uses-----	2,888	380,125	19,044	3,652,485
Total scrap imports-----	100,035	11,259,636	448,476	52,420,373
IMPORTS OF MANUFACTURED FERROUS PRODUCTS:				
Pig iron < or = 0.5% phosphorus-----	103,566	15,221,620	312,078	38,823,256
Pig iron > 0.5% phosphorus-----	--	--	43	8,016
Alloy pig iron-----	11,613	1,637,742	20,288	2,888,475
Total pig iron-----	115,179	16,859,362	332,409	41,719,747
Direct reduced iron (DRI) > 80% iron- DRI minimum of 99.94% metallic iron--	130,878	12,299,075	323,329	30,199,575
Ferrous granules-----	370	151,457	1,305	652,593
Powders of alloy steel-----	2,636	1,353,981	7,981	4,406,777
Other ferrous powders-----	730	892,090	2,240	3,205,866
Other ferrous powders-----	4,210	4,247,989	22,712	17,907,433
Total DRI, granules & powders----	138,824	18,944,592	357,567	56,372,244
Grand total-----	354,038	47,063,590	1,138,452	150,512,364

Source: Bureau of the Census.

TABLE 14
SALIENT U.S. IRON AND STEEL SCRAP AND PIG IRON STATISTICS
(Thousand metric tons and thousand U.S. dollars)

	1988	1989	1990	1991	1992p/
Stocks, Dec. 31:					
Scrap at consumer plants-----	4,131	4,213	4,433	r/4,106	3,726
Pig iron at consumer and supplier plants-----	188	276	169	r/194	184
Total-----	4,319	4,489	4,602	r/4,300	3,910
Consumption:					
Scrap1/-----	69,692	65,507	70,451	r/62,884	65,261
Pig iron2/-----	53,567	52,968	51,100	r/44,911	48,098
Exports:					
Scrap3/-----	9,161	11,149	11,580	9,345	9,262
Value-----	1,351,955	1,748,643	1,635,218	1,232,845	1,099,802
Imports for consumption:					
Scrap (includes tinplate and terneplate)3/-----	942	1,016	1,309	1,073	1,316
Value-----	133,577	149,109	171,510	142,552	147,616

p/Preliminary. r/Revised.

1/Internal evaluation indicates that scrap consumption by manufacturers of pig iron and raw steel and castings is understated by the following approximated quantities: 4.7 million metric tons in electric furnaces and 0.2 million metric tons in open-hearth furnaces in 1988; 6.6 million metric tons in electric furnaces and 0.9 million metric tons in open-hearth furnaces in 1989; 2.9 million metric tons in electric furnaces in 1990; 2.8 million metric tons in electric furnaces in 1991; and 3.5 million metric tons in electric furnaces in 1992.

2/Internal evaluation indicates that pig iron consumption (for open-hearth furnaces) is understated by approximately 1.5 million metric tons in 1988 and 0.8 million metric tons in 1989.

3/Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping.

PRELIMINARY

TABLE 15
U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS
OF IRON AND STEEL SCRAP IN 1992, BY GRADE P/
(Thousand metric tons)

Grade	Receipts of scrap		Production of home scrap			Consumption of both purchased and home scrap (includes recirculating scrap)	Shipments of scrap	Ending stocks Dec. 31
	From brokers, dealers and other outside sources	From other own-company plants	Recirculating scrap from current operations	Obsolete scrap (includes ingot molds, stools, and other scrap from old equipment, buildings, etc.)				
MANUFACTURERS OF PIG IRON AND RAW STEEL AND CASTINGS								
Carbon steel:								
Low-phosphorus plate and punchings-----	361	2	390	--	797	4	44	
Cut structural and plate-----	1,961	87	523	60	2,598	83	155	
No. 1 heavy melting steel-----	5,747	1,182	5,835	369	11,318	1,967	610	
No. 2 heavy melting steel-----	3,678	111	645	9	4,564	10	333	
No. 1 and electric-furnace bundles-----	4,444	427	850	2	5,406	470	327	
No. 2 and all other bundles--	1,192	17	83	--	1,335	(1/)	75	
Electric furnace, 1 foot and under (not bundles)-----	13	217	163	--	362	36	4	
Railroad rails-----	339	20	18	--	379	(1/)	27	
Turnings and borings-----	1,241	3	89	--	1,325	13	71	
Slag scrap (Fe content 70%)--	1,059	201	2,090	1	2,818	560	114	
Shredded or fragmented-----	5,119	840	18	--	6,064	5	364	
No. 1 busheling-----	2,018	125	100	(1/)	2,180	66	154	
All other carbon steel scrap--	2,993	323	3,695	92	6,381	785	220	
Stainless steel scrap-----	531	18	406	--	950	11	51	
Alloy steel (except stainless)--	115	104	505	--	691	27	85	
Ingot mold and stool scrap-----	54	91	239	245	429	196	112	
Machinery and cupola cast iron--	41	(1/)	5	--	43	3	3	
Cast-iron borings-----	96	--	(1/)	(1/)	104	1	4	
Motor blocks-----	--	--	--	--	--	--	--	
Other iron scrap-----	306	31	521	3	651	237	84	
Other mixed scrap-----	563	68	431	1	905	147	104	
Total/-----	31,873	3,866	16,607	783	3/49,300	4,622	2,941	
MANUFACTURERS OF STEEL CASTINGS								
Carbon steel:								
Low-phosphorus plate and punchings-----	566	--	153	1	715	(1/)	36	
Cut structural and plate-----	223	12	38	(1/)	268	--	33	
No. 1 heavy melting steel-----	114	1	77	(1/)	181	1	14	
No. 2 heavy melting steel-----	147	1	3	--	157	(1/)	10	
No. 1 and electric-furnace bundles-----	7	--	--	--	7	--	(1/)	
No. 2 and all other bundles--	6	(1/)	--	--	6	--	(1/)	

See footnotes at end of table.

TABLE 15.-Continued
 U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS
 OF IRON AND STEEL SCRAP IN 1992, BY GRADE P/
 (Thousand metric tons)

	Receipts of scrap		Production of home scrap			Consumption of both purchased and home scrap (includes recycling scrap)	Shipments of scrap	Ending stocks Dec. 31
	From brokers, dealers and other outside sources	From other own-company plants	Recycling scrap from current operations	Obsolete scrap (includes ingot molds, stools, and other scrap from old equipment, buildings, etc.)				
MANUFACTURERS OF STEEL CASTINGS-Continued								
Electric furnace, 1 foot and under (not bundles)-----	57	9	--	--	65	--	--	4
Railroad rails-----	86	--	12	--	85	4	--	2
Turnings and borings-----	22	--	2	--	30	--	--	4
Slag scrap (Fe content 70%)--	1	--	(1/)	--	4	--	--	2
Shredded or fragmented-----	81	7	--	--	86	--	--	2
No. 1 busheling-----	95	--	--	--	96	--	--	6
All other carbon steel scrap--	312	2	291	(1/)	577	(1/)	(1/)	40
Stainless steel scrap-----	27	(1/)	18	--	54	(1/)	(1/)	8
Alloy steel (except stainless)-	77	--	136	--	200	5	--	56
Ingot mold and stool scrap--	--	--	--	(1/)	(1/)	--	(1/)	(1/)
Machinery and cupola cast iron-	43	--	8	--	51	--	--	3
Cast-iron borings-----	66	1	13	--	55	--	--	4
Motor blocks-----	--	--	--	--	0	--	--	--
Other iron scrap-----	23	--	45	--	58	4	--	13
Other mixed scrap-----	1	--	11	--	11	--	--	(1/)
Total2/-	1,933	32	806	2	2,707	13	--	238
IRON FOUNDRIES AND MISCELLANEOUS USERS								
Carbon steel:								
Low-phosphorus plate and punchings-----	1,058	32	126	(1/)	1,226	1	--	44
Cut structural and plate-----	1,097	11	26	(1/)	1,159	(1/)	--	47
No. 1 heavy melting steel-----	158	22	89	--	202	69	--	29
No. 2 heavy melting steel-----	153	(1/)	169	--	219	104	--	3
No. 1 and electric-furnace bundles-----	104	175	16	--	296	--	--	4
No. 2 and all other bundles--	158	(1/)	--	--	161	--	--	8
Electric furnace, 1 foot and under (not bundles)-----	52	4	1	--	57	--	--	1
Railroad rails-----	172	--	2	--	174	2	--	12
Turnings and borings-----	263	23	2	--	295	2	--	27
Slag scrap (Fe content 70%)--	40	--	3	--	40	3	--	1
Shredded or fragmented-----	969	69	--	--	1,680	(1/)	(1/)	36
No. 1 busheling-----	415	114	24	--	605	(1/)	--	17
All other carbon steel scrap--	403	(1/)	15	--	425	--	--	29
Stainless steel scrap-----	10	--	8	--	17	--	--	5
Alloy steel (except stainless)-	26	--	3	--	30	(1/)	(1/)	10
Ingot mold and stool scrap-----	136	10	85	2	256	(1/)	(1/)	7

See footnotes at end of table.

U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS
OF IRON AND STEEL SCRAP IN 1992, BY GRADE P/
(Thousand metric tons)

	Receipts of scrap		Production of home scrap		Consumption of both purchased and home scrap (includes recirculating scrap)	Shipments of scrap	Ending stocks ¹ Dec. 31
	From brokers, dealers and other outside sources	From other own-company plants	Recirculating scrap from current operations	Obsolete scrap (includes ingot molds, stools, and other scrap from old equipment, buildings, etc.)			
IRON FOUNDRIES AND MISCELLANEOUS USERS-Continued							
Machinery and cupola cast iron--	953	205	219	26	1,424	3	97
Cast-iron borings--	471	110	65	--	647	3	38
Motor blocks--	393	40	518	--	958	11	29
Other iron scrap--	489	31	2,021	28	2,568	12	55
Other mixed scrap--	438	1	375	1	819	18	46
Total2/-----	7,957	849	3,767	57	13,255	229	547
TOTAL--ALL TYPES OF MANUFACTURERS							
Carbon steel:							
Low-phosphorus plate and punches--	1,965	34	669	1	2,738	5	124
Cut structural and plate--	3,281	110	587	60	4,025	83	235
No. 1 heavy melting steel--	6,019	1,205	6,001	369	11,701	2,037	653
No. 2 heavy melting steel--	3,978	112	817	9	4,940	114	346
No. 1 and electric-furnace bundles--	4,555	602	866	2	5,709	470	333
No. 2 and all other bundles--	1,556	17	83	--	1,502	(1/)	83
Electric furnace 1 foot and under (not bundles)--	122	230	164	--	484	36	9
Railroad rails--	597	20	20	--	638	2	41
Turnings and borings--	1,526	26	103	--	1,650	19	100
Slag scrap (Fe content 70%)--	1,100	201	2,095	1	2,862	563	119
Shredded or fragmented--	6,169	916	18	--	7,830	5	402
No. 1 busheling--	2,528	239	124	(1/)	2,881	66	178
All other carbon steel scrap--	3,708	325	4,001	92	7,383	785	289
Stainless steel scrap--	568	18	432	--	1,021	11	63
Alloy steel (except stainless)--	218	104	644	--	1,921	32	151
Ingot mold and stool scrap--	190	101	324	247	685	196	119
Machinery and cupola cast iron--	1,037	205	232	26	1,518	6	103
Cast-iron borings--	633	111	78	(1/)	806	4	46
Motor blocks--	393	40	518	--	938	11	29
Other iron scrap--	818	62	2,587	31	3,277	253	151
Other mixed scrap--	1,002	69	817	2	1,735	165	150
Total2/-----	41,764	4,747	21,180	841	65,261	4,865	3,726

p/Preliminary.

1/Less than 1/2 unit.

2/Data may not add to totals shown because of independent rounding.

3/Internal evaluation reveals that scrap consumption in electric furnaces operated by manufacturers of pig iron and raw steel and castings is understated by approximately 3.5 million metric tons.

PRELIMINARY

TABLE 16
U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS
OF PIG IRON AND DIRECT REDUCED IRON IN 1992p/

(Thousand metric tons)

	Receipts	Production	Consumption	Shipments	Stocks, Dec 31
MANUFACTURERS OF PIG IRON AND RAW STEEL AND CASTINGS					
Pig iron-----	2,106	47,531	47,359	2,277	124
MANUFACTURERS OF STEEL CASTINGS					
Pig iron-----	22	--	22	1	5
IRON FOUNDRIES AND MISCELLANEOUS USERS					
Pig iron-----	748	--	717	28	56
TOTAL--ALL TYPES OF MANUFACTURERS					
Pig iron-----	2,876	47,531	48,098	2,306	1/184
Direct reduced or prerduced iron---	917	W	898	5	120

p/Preliminary. W Withheld to avoid disclosing company proprietary data; included in "Receipts."
1/Data do not add to total shown because of independent rounding.

PRELIMINARY

TABLE 17
CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN 1992 BY TYPE OF FURNACE OR OTHER USE p/

(Thousand metric tons)

	Manufacturers of pig iron and raw steel and castings		Manufacturers of steel castings		Iron foundries and miscellaneous users		Total all types1/	
	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron
Blast furnace2/-----	2,354	--	--	--	--	--	2,354	--
Basic oxygen process3/-	15,382	47,290	--	--	--	--	15,382	47,290
Electric furnace4/-----	31,422	16	2,493	22	5,741	485	39,656	523
Cupola furnace-----	22	4	209	(5/)	7,476	225	7,707	229
Other (including air furnace)6/-----	119	--	5	--	38	8	162	8
Direct castings7/-----	--	49	--	--	--	--	--	49
Total1/-----	49,300	47,359	2,707	22	13,255	717	65,261	48,098

p/Preliminary.

1/Data may not add to totals shown because of independent rounding.

2/Includes consumption in blast furnaces producing pig iron.

3/Includes scrap and pig iron processed in metallurgical blast cupolas and used in oxygen converters.

4/Internal evaluation indicates that scrap consumption in electric furnaces operated by manufacturers of pig iron and raw steel and castings is understated by approximately 3.5 million metric tons.

5/Less than 1/2 unit.

6/Includes vacuum melting furnaces and miscellaneous uses.

7/Includes ingot molds and stools.

PRELIMINARY

TABLE 18
PROPORTION OF IRON AND STEEL SCRAP AND PIG IRON USED IN FURNACES
IN THE UNITED STATES IN 1992p/

(Percent)

Type of furnace	Scrap	Pig iron
Basic oxygen process-----	24.5	75.5
Electric furnace-----	98.7	1.3
Cupola furnace-----	97.1	2.9
Other (including air furnace)-----	95.6	4.4

p/Preliminary.

PRELIMINARY

TABLE 19
IRON AND STEEL SCRAP SUPPLY/ AVAILABLE FOR CONSUMPTION IN 1992, BY REGION AND STATE p/
(Thousand metric tons)

Region and State	Receipts of scrap		Production of home scrap			Shipments of scrap ^{4/}	New supply available for consumption ^{3/}
	From brokers, dealers, and other outside sources	From other company plants	Recirculating scrap resulting from current operations	Obsolete scrap ^{2/}	Total new supply ^{3/}		
New England and Middle Atlantic:							
Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island-----	1,967	26	218	1	2,210	37	2,173
Pennsylvania-----	3,753	812	2,193	55	6,814	429	6,385
Total-----	5,720	838	2,411	56	9,024	466	8,558
North Central:							
Illinois-----	4,524	411	1,586	4	6,525	133	6,392
Indiana-----	4,050	458	6,879	90	11,476	2,889	8,588
Iowa, Kansas, Minnesota, Missouri, Nebraska, Wisconsin-----	3,228	193	1,309	5	4,734	10	4,723
Michigan-----	2,857	512	1,740	48	5,157	221	4,936
Ohio-----	5,184	952	2,539	562	9,239	868	8,371
Total-----	19,843	2,526	14,053	709	37,131	4,121	33,010
South Atlantic:							
Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia-----	3,927	678	1,614	7	6,226	159	6,068
South Central:							
Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas-----	9,280	695	2,116	22	12,113	100	12,013
Mountain and Pacific:							
Arizona, California, Colorado, Hawaii, Oregon, Utah, Washington-----	2,994	10	984	47	4,036	18	4,018
Grand total ^{3/} -----	41,764	4,747	21,180	841	68,531	4,865	63,666

p/Preliminary.
1/New supply available for consumption is a net figure computed by adding production to receipts and deducting scrap shipped during the year. The plus or minus difference in stock levels at the beginning and end of the year is not taken into consideration.
2/Obsolete scrap includes ingot molds, stools and scrap from old equipment, buildings, etc.
3/Data may not add to totals shown because of independent rounding.
4/Includes scrap shipped, transferred, or otherwise disposed of during the year.

PRELIMINARY

TABLE 20
 U.S. CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON^{1/} IN 1992, BY REGION AND STATE ^{p/}
 (Thousand metric tons)

Region and State	Pig iron and steel ingots and castings		Steel castings		Iron foundries and miscellaneous users		Total ^{2/}	
	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron
New England and Middle Atlantic:								
Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island-----	1,625	2	44	(3/)	564	22	2,233	24
Pennsylvania-----	5,539	3,086	202	8	863	247	6,604	3,340
Total ^{2/} -----	7,164	3,088	247	8	1,427	268	8,838	3,364
North Central:								
Illinois-----	4,942	2,331	189	--	1,226	38	6,356	2,370
Indiana-----	7,355	16,866	314	4	1,014	95	8,682	16,965
Iowa, Kansas, Minnesota, Missouri, Nebraska, Wisconsin-----	1,897	(3/)	422	3	2,433	130	4,753	133
Michigan-----	2,513	5,694	6	(3/)	2,514	70	5,033	5,765
Ohio-----	6,997	10,733	386	5	1,111	35	8,494	10,774
Total ^{2/} -----	23,703	35,625	1,317	12	8,298	369	33,318	36,007
South Atlantic:								
Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia-----	5,141	4,580	16	(3/)	929	33	6,087	4,614
South Central:								
Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas-----	9,884	2,635	615	(3/)	1,786	40	12,284	2,675
Mountain and Pacific:								
Arizona, California, Colorado, Hawaii, Oregon, Utah, Washington-----	3,407	1,430	512	1	816	7	4,734	1,438
Grand total ^{2/} -----	4,49,300	47,359	2,707	22	13,255	717	65,261	48,098

^{p/}Preliminary.
^{1/}Includes molten pig iron used for ingot molds and direct castings.
^{2/}Data may not add to totals shown because of independent rounding.
^{3/}Less than 1/2 unit.
^{4/}Internal evaluation indicates that scrap consumption in electric furnaces operated by manufacturers of pig iron and raw steel and castings is understated by approximately 3.5 million metric tons.

TABLE 21
U.S. CONSUMER STOCKS OF IRON AND STEEL SCRAP AND PIG IRON, DECEMBER 31, 1992, BY REGION AND STATE p/
(Thousand metric tons)

Region and State	Carbon steel ^{1/}	Stainless steel	Alloy steel ^{2/}	Cast iron ^{3/}	Other grades of scrap	Total scrap stocks ^{4/}	Pig iron stocks
New England and Middle Atlantic:							
Connecticut, Maine, Massachusetts,							
New Hampshire, New Jersey,	97	4	50	20	1	172	4
New York, Rhode Island-----	240	44	36	41	2	363	9
Pennsylvania-----							
Total-----	337	48	86	61	3	535	13
North Central:							
Illinois-----	330	--	6	30	10	377	12
Indiana-----	475	2	2	79	18	576	80
Iowa, Kansas, Minnesota, Missouri,							
Nebraska, Wisconsin-----	181	2	5	27	26	241	23
Michigan-----	116	1	1	39	31	186	9
Ohio-----	348	8	41	73	2	471	24
Total ^{4/} -----	1,450	12	54	248	87	1,851	147
South Atlantic:							
Delaware, Florida, Georgia, Maryland,							
North Carolina, South Carolina,							
Virginia, West Virginia-----	257	3	1	82	3	345	11
South Central:							
Alabama, Arkansas, Kentucky,							
Louisiana, Mississippi, Oklahoma,							
Tennessee, Texas-----	709	(5/)	4	41	10	764	9
Mountain and Pacific:							
Arizona, California, Colorado, Hawaii,							
Oregon, Utah, Washington-----	160	1	6	17	47	231	4
Grand total ^{4/} -----	2,913	63	151	448	150	3,726	184

p/Preliminary.

1/Excludes rerolling rails.

2/Excludes stainless steel.

3/Includes borings.

4/Data may not add to totals shown because of independent rounding.

5/Less than 1/2 unit.

PRELIMINARY

TABLE 22
U.S. AVERAGE MONTHLY PRICE AND COMPOSITE PRICE FOR NO. 1 HEAVY MELTING STEEL
SCRAP IN 1992, WITH ANNUAL AVERAGES FOR 1991 AND 1992
(U.S. dollars per metric ton)

Month	Chicago	Philadelphia	Pittsburgh	Composite Price
January	89.07	77.75	86.12	84.32
February	89.07	78.58	87.77	85.14
March	89.07	80.70	90.05	86.61
April	89.07	80.70	91.93	87.24
May	88.28	79.13	90.30	85.90
June	86.30	78.74	86.12	83.72
July	86.12	78.74	86.12	83.66
August	86.17	79.58	86.12	83.95
September	87.10	79.72	86.12	84.32
October	84.15	79.72	85.13	83.00
November	84.15	79.72	84.15	82.67
December	86.96	81.60	87.91	85.49
Annual average:				
1992	87.13	79.56	87.32	84.67
1991	93.69	88.00	93.68	91.79

Source: American Metal Market.

PRELIMINARY

TABLE 23
U.S. EXPORTS OF IRON AND STEEL SCRAP^{1/}, BY COUNTRY^{2/}
(Thousand metric tons and thousand U.S. dollars)

Country	1988			1989			1990			1991			1992p/		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Canada	570	62,367	937	106,296	939	109,220	806	98,636	1,163	130,845					
China	28	5,010	44	11,129	65	11,372	37	9,930	215	39,523					
Italy	81	12,926	147	27,446	170	26,297	44	8,224	75	9,606					
Japan	589	148,362	434	139,245	481	119,866	340	92,386	161	53,889					
Korea, Republic of	2,139	271,155	2,710	404,815	2,931	409,677	2,784	381,691	2,067	240,077					
Mexico	831	101,785	521	63,585	568	72,186	516	56,868	566	63,465					
Spain	367	108,067	597	119,784	236	35,685	118	18,640	119	34,451					
Taiwan	607	89,021	369	64,386	481	71,761	800	100,990	473	55,513					
Turkey	1,801	230,853	2,926	393,503	2,748	335,781	1,776	196,626	2,019	192,034					
Venezuela	234	26,109	74	8,166	45	5,243	6	1,108	75	8,366					
Other	1,916	296,298	2,391	410,288	2,917	438,130	2,118	267,746	2,329	272,033					
Total ^{3/}	9,161	1,351,955	11,149	1,748,643	11,580	1,635,218	9,345	1,232,845	9,262	1,099,802					

p/Preliminary.

^{1/}Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping.

^{2/}U.S. exports were shipped to 59 countries in 1992 compared with 57 in 1991.

^{3/}Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

PRELIMINARY

TABLE 24
 U.S. EXPORTS AND IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP, BY CLASS
 (Thousand metric tons and thousand U.S. dollars)

Class	1988		1989		1990		1991		1992p/	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Export:										
No. 1 heavy melting scrap-----	2,177	255,370	2,530	308,485	2,479	297,504	2,263	243,849	2,118	205,378
No. 2 heavy melting scrap-----	627	68,102	953	109,101	804	91,587	766	79,869	742	67,853
No. 1 bundles-----	67	8,852	93	12,990	157	19,596	85	8,609	121	11,332
No. 2 bundles-----	337	31,567	419	41,505	340	32,489	401	34,717	186	13,780
Stainless steel scrap-----	220	239,807	265	320,683	233	212,368	232	196,380	223	153,702
Shredded steel scrap-----	2,640	343,188	3,496	486,999	3,674	482,465	2,161	247,519	2,853	290,736
Borings, shovels & turnings-----	467	36,230	674	55,765	247	20,442	173	13,191	226	16,221
Other steel scrap1/-----	1,852	277,281	1,609	276,420	2,428	322,550	1,670	224,031	1,708	230,949
Iron scrap-----	773	91,557	1,110	136,694	1,218	156,217	1,593	184,681	1,085	109,851
Total2/-----	9,161	1,351,955	11,149	1,748,643	11,580	1,635,218	9,345	1,232,845	9,262	1,099,802
Ships, boats, and other vessels for scrapping-----	299	43,548	114	16,698	23	3,842	114	8,158	92	7,622
Used rails for rerolling and other uses3/-----	38	7,330	55	20,062	48	14,385	48	12,422	22	5,998
Total exports-----	9,498	1,402,833	11,319	1,785,403	11,651	1,653,445	9,507	1,253,425	9,376	1,113,422
Imports for consumption:										
Iron and steel scrap-----	942	133,577	1,016	149,109	1,309	171,510	1,073	142,552	1,316	147,616
Ships, boats and other vessels for breaking up (for scrapping)4/-	--	--	(5/)	4	--	--	2	60	(5/)	31
Used rails for rerolling and other uses3/-----	--	--	89	14,844	154	25,148	93	16,173	78	15,583
Total imports2/------	942	133,577	1,105	163,957	1,464	196,658	1,169	168,784	1,393	163,231

p/Preliminary. r/Revised.
 1/Includes tinplate and terneplate.
 2/Data may not add to totals shown because of independent rounding.
 3/Totals in 1989 through 1992 contain mixed (used plus new) rails: exports contained 1,191 metric tons valued at \$8,664,660 in 1989; 5,979 metric tons valued at \$4,439,351 in 1990; 6,828 metric tons valued at \$3,963,245 in 1991; and 2,376 metric tons valued at \$1,783,731 in 1992. Imports contain 3,674 metric tons valued at \$1,065,953 in 1989, and no mixed rails for all following years.
 4/Not included in previous Iron and Steel Scrap Annual Reports.
 5/Less than 1/2 unit.

Source: Bureau of the Census.

PRELIMINARY

TABLE 25
U.S. EXPORTS OF USED RAILS/ FOR REROLLING AND OTHER USES, BY COUNTRY/
(Thousand metric tons and thousand dollars)

Country	1988		1989		1990		1991		1992p/	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Canada-----	1	134	4	774	6	3,966	5	2,762	2	467
Korea, Republic of-----	--	--	--	--	(3/)	49	--	--	--	--
Mexico-----	36	6,794	48	14,569	35	8,810	41	8,599	19	4,649
Turkey-----	--	--	--	--	(3/)	6	--	--	--	--
Other-----	1	401	4	4,719	6	1,553	2	1,061	1	882
Total4/-----	38	7,330	55	20,062	48	14,385	48	12,422	22	5,998

p/Preliminary.
1/Exports for 1989 through 1992 contain mixed (used plus new) rails: 1,191 metric tons valued at \$8,664,660 in 1989; 5,979 metric tons valued at \$4,439,351 in 1990; 6,828 metric tons valued at \$3,963,245 in 1991; and 2,376 metric tons valued at \$1,783,731 in 1992.
2/U.S. exports of mixed rails were shipped to 20 countries in 1992.
3/Less than 1/2 unit.
4/Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

PRELIMINARY

TABLE 26
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP,1/ BY COUNTRY
(Metric tons and U.S. dollars)

Country	1989		1990		1991		1992p/	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Austria-----	16	26,919	--	--	--	--	--	--
Canada-----	862,790	121,453,758	1,083,779	134,150,277	892,941	104,016,351	912,742	92,743,795
France-----	26,769	206,662	118	258,338	15	85,617	98	162,640
Germany-----	3,399	1,215,127	931	790,684	2,229	2,609,394	170	532,999
Japan-----	59,687	5,884,543	67,113	7,170,079	52,417	6,330,555	88,315	12,313,331
Mexico-----	51,585	13,216,965	63,605	18,731,528	64,476	18,552,101	66,847	18,309,030
Netherlands-----	3,241	1,512,094	812	96,614	--	--	351	281,947
Russia2/-----	--	--	--	--	--	--	140	109,944
Sweden-----	82	210,689	8,828	42,536	--	--	--	--
U.S.S.R.3/-----	--	--	262	2,740,648	295	412,301	--	--
United Kingdom--	324	904,630	28,350	1,347,463	9,400	949,789	4,344	920,133
Other-----	7,718	4,477,282	55,669	6,181,966	51,593	9,595,615	242,642	22,242,394
Total-----	1,015,612	149,108,669	1,309,466	171,510,133	1,073,366	142,551,723	1,315,649	147,616,213

p/Preliminary.
1/Includes tinplate and terneplate, excludes used rails for rerolling and other uses, and ships, boats, and other vessels for scrapping.
2/Formerly part of the U.S.S.R.
3/Dissolved in Dec. 1991.

Source: Bureau of the Census.

PRELIMINARY

TABLE 27
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP^{1/}, BY CLASS
(Metric tons and U.S. dollars)

Class	1989		1990		1991		1992p/	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
No. 1 heavy melting scrap-----	36,352	4,090,945	51,200	5,411,578	52,573	5,248,608	43,029	3,973,893
No. 2 heavy melting scrap-----	10,540	1,162,945	10,651	1,093,062	9,402	898,752	5,842	505,322
No. 1 bundles-----	64,567	8,130,056	140,584	16,207,757	94,238	10,463,921	79,518	8,481,802
No. 2 bundles-----	5,544	725,792	12,923	1,450,614	4,938	530,448	10,079	1,104,214
Stainless steel scrap-----	53,290	29,826,184	102,144	31,284,356	33,046	23,138,547	76,007	21,807,038
Shredded steel scrap-----	56,069	12,361,167	46,125	6,296,970	30,992	3,301,902	44,615	4,630,690
Borings, shovelings, turnings---	15,214	1,388,505	28,794	2,959,970	31,218	2,888,257	36,570	3,382,611
Other iron and steel scrap-----	677,398	77,711,456	762,191	87,700,496	718,617	83,580,530	953,774	95,430,922
Cast iron scrap-----	96,639	13,711,619	154,854	19,106,205	98,342	12,500,758	66,215	8,299,721
Total-----	1,015,612	149,108,669	r/1,309,466	171,510,133	r/1,073,366	142,551,723	1,315,649	147,616,213

p/Preliminary. r/Revised.

1/Excludes used rails for rolling and other uses and ships, boats, and other vessels for scrapping.

Source: Bureau of the Census.

PRELIMINARY

TABLE 28
U.S. IMPORTS FOR CONSUMPTION OF USED RAILS FOR REROLLING^{1/} AND OTHER USES, BY COUNTRY
(Metric tons and U.S. dollars)

Country	1989		1990		1991		1992p/	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Australia-----	--	--	6	7,234	--	--	--	--
Canada-----	80,121	13,521,929	151,879	23,421,711	93,011	16,152,456	77,030	15,215,964
Finland-----	--	--	--	--	--	--	10	13,247
France-----	--	1,599	--	--	(2/)	2,460	(2/)	1,416
Germany-----	5	4,881	2,439	1,641,592	--	--	5	10,194
Israel-----	--	--	--	--	2	5,650	--	--
Japan-----	25	15,202	158	77,265	--	--	(2/)	1,632
Korea, Republic of-----	--	--	--	--	--	--	473	238,804
Luxembourg-----	--	--	--	--	--	--	9	5,250
Mexico-----	--	--	--	--	20	12,000	30	96,900
U.S.S.R. ^{3/} -----	8,958	1,290,199	--	--	--	--	--	--
United Kingdom-----	5	10,674	--	--	--	--	--	--
Total/4-----	89,115	14,844,484	154,483	25,147,802	93,033	16,172,566	77,558	15,583,407

p/Preliminary.

1/Imports contain 3,674 metric tons of mixed (used plus new) rails valued at \$1,065,953 for 1989, and no mixed rails for all following years.

2/Less than 1/2 unit.

3/Dissolved in Dec. 1991.

4/Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census.

PRELIMINARY

TABLE 29
U.S. EXPORTS OF DIRECT REDUCED IRON (DRI), BY COUNTRY
(Metric tons and U.S. dollars)

Country	1990						1991						1992p/							
	Metallic iron content of DRI product, weight percent			Metallic iron content of DRI product, weight percent			Metallic iron content of DRI product, weight percent			Metallic iron content of DRI product, weight percent			Metallic iron content of DRI product, weight percent			Metallic iron content of DRI product, weight percent				
	More than 80%	Minimum of 99.94%		More than 80%	Minimum of 99.94%		More than 80%	Minimum of 99.94%		More than 80%	Minimum of 99.94%		More than 80%	Minimum of 99.94%		More than 80%	Minimum of 99.94%			
Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Argentina-----	360	264,877	40	23,200	333	239,803	214	136,820	300	212,233	179	105,178	300	212,233	179	105,178	300	212,233	179	105,178
Brazil-----	1,191	796,936	--	--	660	459,347	62	38,475	1,682	359,847	7	5,000	1,682	359,847	7	5,000	1,682	359,847	7	5,000
Canada-----	747	510,523	21	13,883	394	273,549	25	10,550	579	220,638	25	19,530	579	220,638	25	19,530	579	220,638	25	19,530
Colombia-----	10	4,250	--	--	6	4,791	4	17,408	36	6,837	--	--	36	6,837	--	--	36	6,837	--	--
Germany-----	223	469,872	28	34,944	184	156,900	85	200,990	121	23,437	164	127,515	121	23,437	164	127,515	121	23,437	164	127,515
Hong Kong-----	262	223,012	--	--	260	140,997	--	--	479	54,182	412	210,393	479	54,182	412	210,393	479	54,182	412	210,393
Japan-----	253	119,855	500	1,015,653	31	89,793	731	1,338,187	247	26,102	1,343	743,427	247	26,102	1,343	743,427	247	26,102	1,343	743,427
Korea, Republic of-	4	9,532	(1/)	3,200	38	35,132	4	36,269	520	68,024	510	1,509,363	520	68,024	510	1,509,363	520	68,024	510	1,509,363
Mexico-----	513	413,586	341	356,180	534	476,416	267	260,939	1,506	333,222	252	106,578	1,506	333,222	252	106,578	1,506	333,222	252	106,578
Netherlands-----	--	--	347	451,226	10	9,043	182	233,354	--	--	250	200,815	--	--	250	200,815	--	--	250	200,815
Peru-----	--	--	1	3,725	177	116,878	1	3,045	--	--	--	--	--	--	--	--	--	--	--	--
Saudi Arabia-----	111	52,539	--	--	145	170,577	19	35,475	778	82,481	--	--	778	82,481	--	--	778	82,481	--	--
Singapore-----	--	--	12	14,314	232	119,879	8	11,580	--	--	18	24,043	--	--	18	24,043	--	--	18	24,043
Taiwan-----	73	47,440	396	207,383	--	--	29	27,598	32	3,000	4	3,000	32	3,000	4	3,000	32	3,000	4	3,000
United Kingdom-----	--	--	42	74,759	5	24,603	223	138,424	1,225	182,212	134	104,661	1,225	182,212	134	104,661	1,225	182,212	134	104,661
Venezuela-----	74	51,521	73	44,548	168	104,481	356	208,035	812	198,132	401	246,348	812	198,132	401	246,348	812	198,132	401	246,348
Other countries-----	126	343,424	220	343,586	340	444,572	204	201,752	1,053	251,100	979	633,595	1,053	251,100	979	633,595	1,053	251,100	979	633,595
Total-----	3,947	3,307,367	2,021	2,586,601	3,517	2,866,761	2,414	2,898,901	9,370	2,021,447	4,678	4,039,446	9,370	2,021,447	4,678	4,039,446	9,370	2,021,447	4,678	4,039,446

p/Preliminary.
1/Less than 1/2 unit.

Source: Bureau of the Census.

PRELIMINARY

TABLE 30
U.S. IMPORTS FOR CONSUMPTION OF DIRECT REDUCED IRON (DRI), BY COUNTRY
(Metric tons and U.S. dollars)

Country	1990				1991				1992p/			
	Metallic iron content of DRI product, weight percent		Metallic iron content of DRI product, weight percent		Metallic iron content of DRI product, weight percent		Metallic iron content of DRI product, weight percent		Metallic iron content of DRI product, weight percent		Metallic iron content of DRI product, weight percent	
	More than 80%	Minimum of 99.94%	More than 80%	Minimum of 99.94%	More than 80%	Minimum of 99.94%	More than 80%	Minimum of 99.94%	More than 80%	Minimum of 99.94%	More than 80%	Minimum of 99.94%
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Australia	--	--	--	--	--	--	1	1,678	--	--	1	2,097
Belgium	--	--	--	--	100	11,940	38	48,478	--	--	--	--
Brazil	354	728,769	--	--	--	--	4,301	5,550,936	18	2,068	--	--
Canada	458	360,927	--	--	--	--	207	101,963	151	16,288	91	68,101
China	--	--	--	--	--	--	9	11,400	--	--	7	9,103
Germany	17,183	1,666,770	1	1,295	--	--	7	8,622	--	--	3	14,041
Hong Kong	(1/)	1,800	--	--	--	--	--	--	--	--	--	--
Italy	20	20,860	--	--	--	--	--	--	--	--	--	--
Jamaica	820	278,749	--	--	--	--	7	2,155	--	--	--	--
Japan	--	--	516	596,015	40	4,270	711	717,235	23,725	2,217,025	200	311,771
Korea, Republic of	--	--	--	--	--	--	1	1,318	--	--	--	--
Mexico	--	--	5	5,359	20	1,986	16	6,694	--	--	2	2,540
Netherlands	--	--	--	--	--	--	--	--	--	--	2	2,870
Peru	--	--	--	--	--	--	7	19,203	--	--	5	24,528
Russia2/	--	--	--	--	--	--	273	91,990	22,510	1,800,519	1,238	1,596,650
Spain	--	--	--	--	21	24,360	15	18,017	--	--	927	299,568
Sweden	--	--	--	--	--	--	--	--	--	--	--	--
Switzerland	--	--	--	--	--	--	--	--	--	--	1	2,050
Taiwan	--	--	--	--	--	--	--	--	--	--	2	3,170
U.S.S.R.3/	38,406	6,548,901	24,219	2,536,940	19,345	2,050,634	1,677	2,165,334	--	--	--	--
United Kingdom	--	--	9	45,476	--	--	14	13,803	--	--	--	--
Venezuela	212,353	23,730,826	39,303	4,451,445	345,148	38,507,445	7,961	4,264,618	495,685	49,963,448	147	109,066
Total	269,594	33,337,602	64,053	7,636,530	364,674	40,600,635	15,245	13,023,444	542,089	53,999,348	2,626	2,445,555

p/Preliminary.
1/Less than 1/2 unit.
2/Formerly part of the U.S.S.R.
3/Dissolved in Dec. 1991.

Source: Bureau of the Census.

PRELIMINARY