

Mineral Industry Surveys

For information, contact:

Michael Fenton, Iron and Steel Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4972, Fax: (703) 648-7757

E-mail: mfenton@usgs.gov

Sirirat Harris (Data) Telephone: (703) 648-7972 Fax: (703) 648-7975 E-mail: syharris@usgs.gov

Internet: http://minerals.usgs.gov/minerals

IRON AND STEEL SCRAP IN APRIL 2003

On a daily average basis in April 2003, estimated consumption of iron and steel scrap was up 1% and net receipts of purchased and home scrap were up 2% compared with those of March 2003, according to the U.S. Geological Survey. Production of home scrap was down 5% and stocks of purchased and home scrap at the end of the month were about the same. These observations are based upon responses from 52% of the companies surveyed that manufacture pig iron and semifinished steel products, which represent 40% of the total scrap consumption in those sectors and estimates for non-respondents to this survey.

On a daily average basis, pig iron production was up 2% and consumption was up 3% compared with those of March 2003. Stocks of pig iron at month's end were down 11%.

Exports of iron and steel scrap for the month of March 2003 decreased 11% from those of February 2003. China and the Republic of Korea were the leading countries of destination, accounting for 23% and 20%, respectively, of the total tonnage of exports, followed by Mexico with 18% (table 6). Los Angeles, CA, was the leading U.S. Customs district for tonnage of exports, accounting for 22% of the total, followed by New York, NY, with 18% and Tampa, FL, with 9% (table 7).

Imports of iron and steel scrap for March 2003 increased 14% compared with those of February 2003. Canada was the leading country of origin, accounting for 58%, respectively, of the total tonnage of imports, followed by United Kingdom with 27% and Sweden with 11% (table 9). Charleston, SC, was the leading Customs district for tonnage of imports, accounting for 38% of the total, followed by Detroit, MI, with 30% and Seattle, WA, with 10% (table 10).

The daily average domestic raw steel production for April 2003, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, amounted to 263,000 metric tons, up 2% from 258,000 tons in March 2003 and up 6% from 248,000 in April 2002 (table 12). The electric furnace portion of raw steel production for April 2003 was 51.8%, up from 50.1% in March 2003 and down from 52% in April 2002.

Raw steel capability utilization (AISI data) in April 2003 was 87.8%, up from 85% of March 2003 and down from 90% in April 2002 (table 12). Continuous cast steel production in the United States accounted for 97.1% of total raw steel production in April 2003, up from 96.8% in March 2003 and 96.7% in April 2002.

 ${\it TABLE~1}$ IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS FOR STEEL PRODUCERS $^{1,\,2}$

		April 2003		Year to date ^p			
		Electric			Electric		
	Integrated steel producers ³	furnace steel producers ⁴	Total for steel producers	Integrated steel producers ³	furnace steel producers ⁴	Total for steel producers	
Scrap:	_						
Receipts from dealers and other sources	981	2,610	3,590	4,020	10,300	14,300	
Receipts from other own company plants	W	W	140	W	W	571	
Production recirculating scrap	673	367	1,040	2,720	1,530	4,250	
Production obsolete scrap	10	2	11	47	9	56	
Consumption (by type of furnace):	_						
Blast furnace	(5)		(5)	(5)		(5)	
Basic oxygen process	W	W	1,310	W	W	5,140	
Electric furnace	W	W	3,380	W	W	13,600	
Other (including air furnace) ⁶	(5)		(5)	(5)		(5)	
Total consumption	1,650	3,040	4,690	6,540	12,200	18,800	
Shipments	114	5	119	485	16	501	
Stocks end of month	2,100	2,120	4,210	XX	XX	XX	
Pig iron (includes hot metal):	_						
Receipts	643	66	708	2,670	411	3,080	
Production	W	W	2,760	W	W	11,000	
Consumption (by type of furnace):	_						
Basic oxygen process	W	W	3,430	W	W	13,700	
Direct castings ⁷	(5)	(5)	(5)	(5)	(5)	(5)	
Electric furnace	W	W	(5)	W	W	(5)	
Total consumption	3,360	74	3,430	13,300	319	13,700	
Shipments	(8)	(8)	(8)	(8)	(8)	(8)	
Stocks end of month	W	W	562	XX	XX	XX	
Direct-reduced iron: ⁹	_						
Receipts	106	32	138	445	220	664	
Total consumption	126	65	191	469	252	721	
Shipments	1		1	6		6	
Stocks end of month	233	84	317	XX	XX	XX	

Preliminary. W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and/or "Total consumption." XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manufacturers of raw steel that also produce steel castings. March 2003 data are based on returns from 51% of monthly respondents, representing 40% of scrap consumption during this month, and estimates for nonrespondents of this survey.

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

⁴Includes minimill and specialty steel producers; includes data for other furnaces operated by these steel producers.

⁵Withheld to avoid disclosing company proprietary data; included in "Consumption: Basic oxygen process."

⁶Includes vacuum melting furnaces and miscellaneous uses.

⁷Includes ingot molds and stools.

⁸Withheld to avoid disclosing company proprietary data.

⁹Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

 ${\it TABLE~2}$ RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, FOR STEEL PRODUCERS 1,2

		April 2003				Year to date ^p	
	Receipts of scrap	Production of home			Receipts of scrap	Production of home	
	from brokers,	scrap (recirculating	Consumption of		from brokers,	scrap (recirculating	Consumption of
	dealers, and other	scrap resulting from	purchased and	Ending	dealers, and other	scrap resulting from	purchased and
Item	outside sources	current operations)	home scrap ³	stocks	outside sources	current operations)	home scrap ³
Carbon steel:			•				<u> </u>
Low-phosphorus plate and							
punchings	27	W	30	15	101	W	104
Cut structural and plate	338	66	400	264	1,400	297	1,630
No. 1 heavy melting steel	410	268	718	528	1,590	1,080	2,850
No. 2 heavy melting steel	455	46	489	436	1,850	183	1,990
No. 1 and electric furnace							
bundles	402	W	518	299	1,580	W	2,070
No. 2 and all other bundles	72	W	78	40	284	W	297
Electric furnace 1 foot and							
under (not bundles)		W	W	W		W	W
Railroad rails	18	W	20	14	67	W	87
Turnings and borings	179	5	192	146	730	19	744
Slag scrap	67	139	170	150	286	546	694
Shredded and fragmentized	770	W	886	486	3,070	W	3,570
No. 1 busheling	417	10	418	282	1,670	41	1,720
Steel cans (post consumer)	18	W	24	W	75	W	93
All other carbon steel scrap	184	187	374	370	724	802	1,470
Stainless steel scrap	75	25	102	41	273	93	385
Alloy steel scrap	12	40	52	42	50	164	215
Ingot mold and stool scrap	W	10	6	18	W	39	23
Machinery and cupola cast iron	W	W	W	W	W	W	W
Cast iron borings	26	W	22	27	106	W	92
Motor blocks	W		W	W	W		W
Other iron scrap	27	29	51	W	107	121	204
Other mixed scrap	89	27	118	569	322	112	451
Total	3,590	1,040	4,690	4,210	14,300	4,250	18,800

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

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manufacturers of raw steel that also produce steel castings.

³Includes recirculating scrap and home-generated obsolete scrap.

TABLE 3 RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, AND CONSUMPTION OF IRON AND STEEL SCRAP, BY REGION AND STATE, FOR STEEL PRODUCERS^{1, 2}

		April 2003			Year to date ^p	
	Receipts of scrap	Production of home		Receipts of scrap	Production of home	
	from brokers,	scrap (recirculating	Consumption of	from brokers,	scrap (recirculating	Consumption of
	dealers, and other	scrap resulting from	purchased and	dealers, and other	scrap resulting from	purchased and
Region and State	outside sources	current operations)	home scrap ³	outside sources	current operations)	home scrap ³
Mid-Atlantic and New England:		•			•	
New Jersey, New York,	_					
Pennsylvania	419	177	636	1,630	701	2,490
North Central:						
Illinois and Indiana	456	373	820	1,840	1,500	3,310
Iowa, Minnesota, Missouri,	=					
Nebraska, Wisconsin	175	13	180	828	67	869
Michigan	175	95	231	699	344	862
Ohio	475	114	601	1,910	486	2,380
Total	1,280	593	1,830	5,280	2,390	7,420
South Atlantic:						
Delaware, Maryland, Virginia,	=					
West Virginia	174	70	243	682	281	972
Florida, Georgia, North	=					
Carolina, South Carolina	294	25	320	1,210	123	1,300
Total	468	95	563	1,890	403	2,270
South Central:	=					
Alabama, Kentucky,	_					
Mississippi, Tennessee	429	51	508	1,710	203	2,010
Arkansas, Louisiana,	=					
Oklahoma, Texas	630	65	733	2,500	323	2,990
Total	1,060	116	1,240	4,200	526	5,000
Mountain and Pacific:						
Arizona, California, Colorado,	_					
Oregon, Utah, Washington	365	59	415	1,320	229	1,590
Grand total	3,590	1,040	4,690	14,300	4,250	18,800
pPreliminary.						

^pPreliminary.

¹Data are rounded to no more than three significant digits; may not add to totals shown. ²Includes manufacturers of raw steel that also produce steel castings.

³Includes recirculating scrap and home-generated obsolete scrap.

 ${\it TABLE~4}$ RECEIPTS OF IRON AND STEEL SCRAP, BY REGION AND GRADE, FOR STEEL PRODUCERS $^{1,\,2,\,3,\,4}$

			April 2003				Year to date ^p			
	Mid-Atlantic				Mountain	Mid-Atlantic				Mountain
	and	North	South	South	and	and	North	South	South	and
Item	New England	Central	Atlantic	Central	Pacific	New England	Central	Atlantic	Central	Pacific
Carbon steel:										
Low-phosphorus plate and	_									
punchings	11	4	W	7	4	46	17	W	26	9
Cut structural and plate	49	113	87	65	24	190	498	354	264	94
No. 1 heavy melting steel	43	97	45	156	69	171	411	170	613	223
No. 2 heavy melting steel	8	159	58	166	63	33	667	242	673	239
No. 1 and electric furnace	-									
bundles	28	290	23	54	8	109	1,140	93	200	33
No. 2 and all other bundles	9	32	3	18	10	36	126	12	72	38
Electric furnace 1 foot and	_									
under (not bundles)										
Railroad rails	W	W	2	14	W	W	W	7	49	W
Turnings and borings	27	39	28	79	6	105	153	104	345	23
Slag scrap	18	10	6	32	W	71	57	26	130	W
Shredded and fragmentized	42	199	171	257	100	169	834	705	1,000	358
No. 1 busheling	56	170	27	156	8	218	697	114	607	38
Steel cans (post consumer)	4	W	W	W	W	17	W	W	W	W
All other carbon steel scrap	40	102	7	25	W	143	432	25	96	W
Stainless steel scrap	62	12				230	43			
Alloy steel scrap	8	W		W		34	W		W	
Ingot mold and stool scrap	(5)	W				2	W			
Machinery and cupola cast iron	(5)	6	1	W		6	22	2	W	
Cast iron borings	W	W	W	9		W	W	W	41	
Motor blocks	(5)		W		(5)	(5)		W		(5)
Other iron scrap	W	9	W	2	W	W	36	W	10	W
Other mixed scrap	W	W	1	15	W	W	W	1	61	W
Total	419	1,280	468	1,060	365	1,630	5,280	1,890	4,200	1,320

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

¹Scrap received from brokers, dealers, and other outside sources.

²A breakout of the States within each region is provided in Table 3.

³Includes manufacturers of raw steel that also produce steel castings.

⁴Data are rounded to no more than three significant digits; may not add to totals shown.

⁵Less than 1/2 unit.

 ${\it TABLE 5}$ CONSUMPTION OF IRON AND STEEL SCRAP BY REGION AND GRADE, FOR STEEL PRODUCERS 1,2,3

			April 2003				Year to date ^p			
	Mid-Atlantic				Mountain	Mid-Atlantic				Mountain
	and	North	South	South	and	and	North	South	South	and
Item	New England	Central	Atlantic	Central	Pacific	New England	Central	Atlantic	Central	Pacific
Carbon steel:										
Low-phosphorus plate and	_									
punchings	11	5	W	W	6	46	20	W	W	9
Cut structural and plate	68	115	125	67	25	272	514	469	277	99
No. 1 heavy melting steel	87	243	72	216	99	349	970	286	854	392
No. 2 heavy melting steel	15	163	59	185	67	60	687	257	732	253
No. 1 and electric furnace	_									
bundles	37	399	27	46	8	146	1,580	108	211	32
No. 2 and all other bundles	10	35	3	20	10	39	128	13	79	40
Electric furnace 1 foot and	_									
under (not bundles)		11					39			
Railroad rails	W	W	1	13	W	W	W	5	56	W
Turnings and borings	31	43	29	83	6	122	170	107	320	25
Slag scrap	30	77	11	51	W	116	314	49	213	W
Shredded and fragmentized	76	215	179	310	105	306	907	755	1,220	377
No. 1 busheling	63	175	29	142	9	241	718	114	596	52
Steel cans (post consumer)	6	W	W	W	W	24	W	W	W	W
All other carbon steel scrap	68	212	18	64	W	256	842	71	265	W
Stainless steel scrap	86	16				317	68			
Alloy steel scrap	18	32		W		75	129		\mathbf{W}	
Ingot mold and stool scrap	4	1		1		16	5		3	
Machinery and cupola cast iron	(4)	5	1	W		3	21	2	W	
Cast iron borings	W	W	W	8		W	W	W	33	
Motor blocks	(4)		W			(4)		W		(4)
Other iron scrap	W	25	W	4	W	W	96	W	16	W
Other mixed scrap	W	36	2	16	W	W	125	5	64	W
Total	636	1,830	563	1,240	415	2,490	7,420	2,270	5,000	1,590

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

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²A breakout of the States within each region is provided in Table 3.

³Includes manufacturers of raw steel that also produce steel castings.

⁴Less than 1/2 unit.

 ${\it TABLE~6}$ U.S. EXPORTS OF IRON AND STEEL SCRAP BY SELECTED REGION AND COUNTRY 1,2

(Thousand metric tons and thousand dollars)

	March 2	2003	Year to date		
Region and country	Quantity	Value	Quantity	Value	
North America and South America:					
Canada	88	11,800	265	34,900	
Guatemala	(3)	29	2	233	
Mexico	148	18,200	399	48,200	
Turks and Caicos Islands	1 ^r	94 ^r	1 ^r	142 1	
Other	1 ^r	212 ^r	1 ^r	521 1	
Total	237	30,400	669	83,900	
Africa, Europe, Middle East:	-				
Belgium	(3)	73	5	1,040	
Egypt			6	318	
Finland	14	10,400	20	14,200	
Italy	(3)	178	7	5,810	
Netherlands	2	1,060	6	3,260	
Portugal			4	458	
Spain	5	3,890	38	21,800	
Turkey	118	15,500	292	34,600	
United Kingdom	2	1,030	8	3,590	
Other	1 ^r	330 ^r	2 ^r	1,300 1	
Total	142	32,500	389	86,300	
Asia, Australia, Oceania:					
China	184	38,200	654	112,000	
Hong Kong	1	442	6	2,020	
India	1	655	9	1,820	
Japan	6	1,730	11	5,070	
Korea, Republic of	158	18,200	642	76,700	
Malaysia	14	372	98	8,770	
Singapore	(3)	46	3	348	
Taiwan	60	9,960	128	21,400	
Thailand	(3)	36	56	6,360	
Vietnam	1	368	2	854	
Other	1 ^r	146 ^r	3 ^r	753 1	
Total	426	70,200	1,610	236,000	
Grand total	806	133,000	2,670	406,000	

^rRevised; unspecified group of countries differs from that of the previous report. -- Zero.

¹Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Export valuation is on a "free alongside ship" (f.a.s.) basis.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than 1/2 unit.

TABLE 7 U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND SELECTED CUSTOMS DISTRICT $^{1,\,2,\,3}$

(Thousand metric tons and thousand dollars)

	March 2	2003	Year to date		
Region and customs district	Quantity	Value	Quantity	Value	
Canadian-U.S. Border:			•		
Buffalo, NY	10	2,300	32	7,340	
Detroit, MI	23	3,140	60	8,040	
Duluth, MN	6	845	12	1,480	
Ogdensburg, NY	2	763	5	1,820	
Pembina, ND	11	1,150	53	5,480	
Other ⁴	2	463	5	1,100	
Total	54	8,660	168	25,200	
East Coast:					
Boston, MA	54	7,190	213	25,300	
Miami, FL	2	573	14	2,500	
New York, NY	144	27,100	381	60,700	
Norfolk, VA	16	1,960	56	7,500	
Philadelphia, PA	65	9,080	122	15,900	
Portland, ME	13	1,640	52	6,630	
Providence, RI			73	8,920	
Savannah, GA	3	1,190	7	2,530	
St. Albans, VT	3	614	5	1,310	
Other	35	4,210	102	12,100	
Total	335	53,500	1,020	143,000	
Gulf Coast and Mexican-U.S.					
Border (includes Caribbean territories):					
Houston-Galveston, TX	2	1,060	21	13,700	
Laredo, TX	27	4,430	75	10,900	
New Orleans, LA	15	11,100	119	39,500	
Nogales, AZ	8	159	9	279	
San Juan, PR	(5)	27	16	2,260	
Tampa, FL	72	9,700	122	15,400	
Other	(5) ^r	36 ^r	(5) r	170 ^r	
Total	124	26,500	362	82,200	
West Coast and Hawaii:					
Columbia-Snake, OR	28	3,480	118	15,300	
Honolulu, HI, and Anchorage, AK	(5)	357	22	3,220	
Los Angeles, CA	174	26,300	547	75,900	
San Diego, CA	22	855	32	1,930	
San Francisco, CA	52	9,810	278	39,700	
Seattle, WA	18	3,550	120	19,000	
Total	293	44,300	1,120	155,000	
Grand total	806	133,000	2,670	406,000	

^rRevised; unspecified group of customs districts differs from that in the previous report.

¹Re-export activity for March 2003 amounted to 2,070 metric tons valued at \$367,000.

²Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Export valuation is on a "free alongside ship" (f.a.s.) basis.

³Data are rounded to no more than three significant digits; may not add to totals shown.

⁴Includes Code 70, which is for low-valued exports from the United States to Canada.

⁵Less than 1/2 unit.

TABLE 8 U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY $\mathsf{GRADE}^{1,\,2}$

(Thousand metric tons and thousand dollars)

	March	2003	Year to date		
Item	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	101	12,600	470	54,600	
No. 2 heavy melting steel	_ 3	408	106	11,800	
No. 1 bundles	10	1,260	29	3,540	
No. 2 bundles	1	58	7	693	
Shredded steel scrap	264	36,500	902	109,000	
Borings, shovelings and turnings		889	32	2,430	
Cut plate and structural	48	7,450	181	21,100	
Tinned iron or steel		9,260	124	17,900	
Remelting scrap ingots	(3)	394	1	1,200	
Cast iron	82	9,270	198	26,200	
Other iron and steel	85	6,950	234	23,500	
Total carbon steel and cast iron	663	85,100	2,290	272,000	
Stainless steel	69	31,800	177	90,300	
Other alloy steel		16,100	210	43,600	
Total stainless and alloy steel	143	47,900	387	134,000	
Total carbon, stainless, alloy steel and cast iron	806	133,000	2,670	406,000	
Ships, boats, and other vessels for	_				
breaking up (for scrapping)	(3)	12	1	182	
Used rails for rerolling and other uses	_ 2	694	4	1,510	
Total scrap exports	808	134,000	2,680	408,000	
Exports of manufactured ferrous products:					
Pig iron < or = 0.5% phosphorus	1	157	4	615	
Pig iron > 0.5% phosphorus					
Alloy pig iron	(3)	21	(3)	59	
Total pig iron	2	179	5	674	
Direct-reduced iron (DRI)			4	404	
Spongy iron products, not DRI	(3)	296	(3)	611	
Granules for abrasive cleaning and other uses	2	1,110	6	3,340	
Powders of alloy steel	1	1,230	3	3,300	
Other ferrous powders	5	5,270	12	13,200	
Total DRI, granules, powders	8	7,910	25	20,900	
Grand total	817	142,000	2,710	429,000	

⁻⁻ Zero.

¹Export valuation is on a "free alongside ship" (f.a.s.) basis.
²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than 1/2 unit.

TABLE 9 $\mbox{U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP } \\ \mbox{BY SELECTED COUNTRY}^{1,2}$

(Thousand metric tons and thousand dollars)

	March 2	2003	Year to	date	
Country	Quantity	Value	Quantity	Value	
Brazil			22	2,480	
Canada	204	26,500	541	64,300	
Dominican Republic	4	390	10	975	
Mexico	6	3,090	16	8,510	
Russia	(3)	13	31	3,330	
Sweden	40	5,260	84	10,500	
United Kingdom	95	13,200	221	29,900	
Other	1	457	4	2,630	
Total	349	48,900	929	123,000	

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 10 $\mbox{U.s. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP BY SELECTED CUSTOMS DISTRICT } ^{1,2}$

(Thousand metric tons and thousand dollars)

	March 2	003	Year to date		
Customs district	Quantity	Value	Quantity	Value	
Buffalo, NY	27	4,790	70	11,800	
Charleston, SC	132	18,400	361	46,300	
Detroit, MI	104	12,500	286	32,500	
Great Falls, MT		386	6	697	
Laredo, TX		2,070	9	5,600	
Mobile, AL	4	286	9	820	
New Orleans, LA		4,510	33	4,510	
Ogdenburg, NY		254	5	764	
Pembina, ND		596	9	2,030	
Seattle, WA	35	3,180	95	8,250	
Other	6 ^r	1,920 ^r	46 ^r	9,360 ^r	
Total	349	48,900	929	123,000	

^rRevised; unspecified group of customs districts differs from that in the previous report.

¹Includes 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.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than 1/2 unit.

¹Includes 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.

²Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 11 U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY $\mathsf{GRADE}^{1,2}$

(Thousand metric tons and thousand dollars)

Item Quantity Value Quantity Value No. 1 heavy melting steel 2 186 4 331 No. 2 heavy melting steel 33 4 (3) 34 No. 1 bundles 28 4,250 76 10,300 No. 2 bundles Shredded steel scrap 121 15,900 282 34,300 Borings, shovelings and turnings 3 242 8 630 Cut plate and structural 12 1,680 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots (3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel <td< th=""><th></th><th>March</th><th>2003</th><th colspan="3">Year to date</th></td<>		March	2003	Year to date		
No. 2 heavy melting steel (3) 4 (3) 34 No. 1 bundles 28 4,250 76 10,300 No. 2 bundles Shredded steel scrap 121 15,900 282 34,300 Borings, shovelings and turnings 3 242 8 630 Cut plate and structural 12 1,680 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots (3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel and cast iron 349 48,900 929 123,000	Item	Quantity	Value	Quantity	Value	
No. 1 bundles 28 4,250 76 10,300 No. 2 bundles Shredded steel scrap 121 15,900 282 34,300 Borings, shovelings and turnings 3 242 8 630 Cut plate and structural 12 1,660 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots (3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) - <t< td=""><td>No. 1 heavy melting steel</td><td>2</td><td>186</td><td>4</td><td>331</td></t<>	No. 1 heavy melting steel	2	186	4	331	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	No. 2 heavy melting steel	(3)	4	(3)	34	
Shredded steel scrap 121 15,900 282 34,300 Borings, shovelings and turnings 3 242 8 630 Cut plate and structural 12 1,680 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots	No. 1 bundles	28	4,250	76	10,300	
Borings, shovelings and turnings 3 242 8 630 Cut plate and structural 12 1,680 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots 3 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel 21 7,120 61 20,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 <td>No. 2 bundles</td> <td></td> <td></td> <td></td> <td></td>	No. 2 bundles					
Cut plate and structural 12 1,680 21 2,750 Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots (3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron	Shredded steel scrap	121	15,900	282	34,300	
Tinned iron or steel 1 320 9 1,280 Remelting scrap ingots 3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < or = 0.5% phosphorus	Borings, shovelings and turnings	3	242	8	630	
Remelting scrap ingots (3) 26 Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: (3) 6 Pig iron < or = 0.5% phosphorus	Cut plate and structural	12	1,680	21	2,750	
Cast iron 21 2,230 65 6,070 Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) -3 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: Pig iron < or = 0.5% phosphorus	Tinned iron or steel	1	320	9	1,280	
Other iron and steel 140 17,000 403 46,800 Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel 21 7,120 61 20,000 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for 50	Remelting scrap ingots			(3)	26	
Total carbon steel and cast iron 329 41,800 868 103,000 Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel 21 7,120 61 20,000 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for 30 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: Pig iron < or = 0.5% phosphorus	Cast iron	21	2,230	65	6,070	
Stainless steel 6 4,580 16 11,600 Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel 21 7,120 61 20,000 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < or = 0.5% phosphorus	Other iron and steel	140	17,000	403	46,800	
Other alloy steel 14 2,540 45 8,480 Total stainless and alloy steel 21 7,120 61 20,000 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < or = 0.5% phosphorus	Total carbon steel and cast iron	329	41,800	868	103,000	
Total stainless and alloy steel 21 7,120 61 20,000 Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) 3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < or = 0.5% phosphorus	Stainless steel	6	4,580	16	11,600	
Total carbon, stainless, alloy steel and cast iron 349 48,900 929 123,000 Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < 0r = 0.5% phosphorus	Other alloy steel	14	2,540	45	8,480	
Ships, boats, and other vessels for breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: 8 34,500 910 112,000 Pig iron < or = 0.5% phosphorus	Total stainless and alloy steel	21	7,120	61	20,000	
breaking up (for scrapping) (3) 6 Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products:	Total carbon, stainless, alloy steel and cast iron	349	48,900	929	123,000	
Used rails for rerolling and other uses 4 4,030 53 11,500 Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: Pig iron < or = 0.5% phosphorus	Ships, boats, and other vessels for					
Total scrap imports 353 52,900 982 134,000 Imports of manufactured ferrous products: Pig iron < or = 0.5% phosphorus	breaking up (for scrapping)			(3)	6	
Imports of manufactured ferrous products: 288 34,500 910 112,000 Pig iron < 0r = 0.5% phosphorus	Used rails for rerolling and other uses	4	4,030	53	11,500	
Pig iron < or = 0.5% phosphorus 288 34,500 910 112,000 Pig iron > 0.5% phosphorus Alloy pig iron (3) 13 (3) 13 Total pig iron 288 34,500 910 112,000 Direct-reduced iron (DRI) 145 15,900 365 40,000 Spongy iron products, not DRI (3) 140 (3) 247 Granules for abrasive cleaning and other uses 1 817 3 2,020 Powders of alloy steel 4 4,220 12 12,200	Total scrap imports	353	52,900	982	134,000	
Pig iron > 0.5% phosphorus <th< td=""><td>Imports of manufactured ferrous products:</td><td><u></u></td><td></td><td></td><td>_</td></th<>	Imports of manufactured ferrous products:	<u></u>			_	
Alloy pig iron (3) 13 (3) 13 Total pig iron 288 34,500 910 112,000 Direct-reduced iron (DRI) 145 15,900 365 40,000 Spongy iron products, not DRI (3) 140 (3) 247 Granules for abrasive cleaning and other uses 1 817 3 2,020 Powders of alloy steel 4 4,220 12 12,200	Pig iron $<$ or $= 0.5\%$ phosphorus	288	34,500	910	112,000	
Total pig iron 288 34,500 910 112,000 Direct-reduced iron (DRI) 145 15,900 365 40,000 Spongy iron products, not DRI (3) 140 (3) 247 Granules for abrasive cleaning and other uses 1 817 3 2,020 Powders of alloy steel 4 4,220 12 12,200	Pig iron > 0.5% phosphorus					
Direct-reduced iron (DRI) 145 15,900 365 40,000 Spongy iron products, not DRI (3) 140 (3) 247 Granules for abrasive cleaning and other uses 1 817 3 2,020 Powders of alloy steel 4 4,220 12 12,200	Alloy pig iron	(3)	13	(3)	13	
Spongy iron products, not DRI (3) 140 (3) 247 Granules for abrasive cleaning and other uses 1 817 3 2,020 Powders of alloy steel 4 4,220 12 12,200	Total pig iron	288	34,500	910	112,000	
Granules for abrasive cleaning and other uses181732,020Powders of alloy steel44,2201212,200	Direct-reduced iron (DRI)	145	15,900	365	40,000	
Powders of alloy steel 4 4,220 12 12,200	Spongy iron products, not DRI	(3)	140	(3)	247	
	Granules for abrasive cleaning and other uses	1	817	3	2,020	
Other ferrous powders 6 4,840 16 13,500	Powders of alloy steel	4	4,220	12	12,200	
	Other ferrous powders	6	4,840	16	13,500	
Total DRI, granules, powders 156 25,900 397 68,000	Total DRI, granules, powders	156	25,900	397	68,000	
Grand total 797 113,000 2,290 314,000	Grand total	797	113,000	2,290	314,000	

⁻⁻ Zero

¹Import valuation is on a Customs basis.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Less than 1/2 unit.

TABLE 12 U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION, AND CONTINUOUS CAST STEEL PRODUCTION $^{\rm I}$

	Raw steel pr	oduction,	Raw steel c	apability	Continuous	cast steel
	thousand m	etric tons	utilization,	percent	production	, percent
		Year		Year		Year
Period	Monthly	to date	Monthly	to date	Monthly	to date
2002:						
April	7,450	29,300	90.3	87.3	96.7	96.9
May	7,620	37,000	89.4	87.7	96.8	96.9
June	7,630	44,700	92.5	89.3	96.8	96.9
July	7,720	52,500	86.8	89.0	97.5	97.0
August	8,090	60,700	91.0	89.3	97.1	97.0
September	8,090	69,000	94.0	90.2	97.1	97.0
October	8,180	77,200	90.8	90.2	97.1	97.0
November	7,570	84,700	86.8	89.9	97.2	97.0
December	7,560	92,200	83.9	89.4	97.0	97.0
2003:						
January	7,820	7,820	83.1	83.1	97.1	97.1
February	7,420	15,200	87.3	85.1	95.3	95.4
March	8,000	23,200	85.0	84.9	96.8	97.0
April	7,890	31,100	87.8	85.7	97.1	97.0

¹Data are rounded to no more than three significant digits.

Source: American Iron and Steel Institute.

 ${\it TABLE~13}$ COMPOSITE PRICES FOR NO. 1 HEAVY MELTING STEEL SCRAP AND PIG IRON

Period	American Metal Market No. 1 HMS		Iron Age No. 1 HMS		Iron Age Pig Iron	
	2002:					
April	92.03	90.58	86.77	85.40	133.81	131.70
May	101.53	99.93	97.17	95.64	140.72	138.50
June	101.60	100.00	97.00	95.47	148.08	145.74
July	101.67	100.06	96.83	95.30	149.86	147.49
August	101.67	100.06	97.88	96.33	149.86	147.49
September	103.62	101.98	99.13	97.56	149.86	147.49
October	103.12	101.49	98.33	96.78	149.86	147.49
November	97.25	95.71	93.87	92.39	149.86	147.49
December	97.00	95.47	94.10	92.61	138.72	136.53
Average	93.05	91.58	89.63	88.21	141.22	138.99
2003:						
January	106.41	104.73	105.79	104.12	159.77	157.24
February	115.91	114.08	116.21	114.37	163.07	160.49
March	120.42	118.52	121.83	119.91	163.07	160.49
April	119.80	117.91	115.92	114.09	(1)	(1)

¹There is currently no U.S. merchant market for domestic pig iron or direct-reduced iron (DRI).

Note: Long tons = lt; metric tons = t.