

# Mineral Industry Surveys

#### For information, contact:

Michael D. Fenton, Iron and Steel Scrap 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

Hoa P. Phamdang (Data) Telephone: (703) 648-7965 Fax: (703) 648-7975

E-mail: hphamdan@usgs.gov

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

#### IRON AND STEEL SCRAP IN MARCH 2009

On a daily average basis in March 2009, estimated consumption of iron and steel scrap was down 9%, net receipts of purchased scrap were down 13%, and home scrap production was down 6% from those of February 2009, according to the U.S. Geological Survey. Stocks of purchased and home scrap at the end of March were down slightly from those at the end of February 2009. These observations are based upon responses from about 41% of the companies surveyed that manufacture pig iron and semifinished steel products, which represent about 43% of the total scrap consumption in those sectors, and estimates for non-respondents to this survey.

On a daily average basis, pig iron production in March was up slightly from that in February 2009. Pig iron consumption in March was down slightly from that in February 2009. Stocks of pig iron at the end of March were up slightly from those at the end of February 2009.

Exports of iron and steel scrap for the month of February 2009 increased 60% from those of January 2009. China was the leading country of destination, accounting for 30% of the total tonnage of exports, followed by the Republic of Korea, with 23%, and Turkey, with 15% (table 6). Los Angeles, CA, was the leading U.S. Customs district for tonnage of exports, accounting for 23% of the total, followed by New York, NY, with 14%, and New Orleans, LA, with 12% (table 7).

Imports of iron and steel scrap for February 2009, increased 7% from those of January. Canada was the leading country of origin, accounting for 92% of the total tonnage of imports, followed by Mexico, with 8% (table 9). Seattle, WA, was the leading U.S. Customs district for tonnage of imports, accounting for 37% of the total, followed by Buffalo, NY, with 29%, and Detroit, MI, with 21% (table 10).

The daily average domestic raw steel production for March, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, amounted to 127,000 metric tons (t), down 10% from 141,000 t in February 2009, and down 54% from 277,000 t in March 2008 (table 12). The electric furnace portion of raw steel production for March was 59%, down from 62% in February 2009 and up from 57% in March 2008.

Raw steel production capability utilization (AISI data) in March was 43%, down from 46% in February 2009, and down from 90% in March 2008 (table 12). Continuous cast steel production in March accounted for 97% of total raw steel production, up from 96% in February 2009, and the same as that in March 2008.

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

		March 2009		Year to date <sup>3</sup>			
		Electric			Electric		
	Integrated steel producers <sup>4</sup>	furnace steel producers <sup>5</sup>	Total for steel producers	Integrated steel producers <sup>4</sup>	furnace steel producers <sup>5</sup>	Total for steel producers	
Scrap:	•	•		•	•		
Receipts from dealers and other sources	1,120	1,990	3,100	3,460	6,160	9,620	
Receipts from other own company plants	29	212	241	95	538	633	
Production recirculating scrap	331	329	660	970	970	1,940	
Production obsolete scrap	W	W	7	W	W	23	
Consumption (by type of furnace):							
Blast furnace	W	W	138	W	W	422	
Basic oxygen process	W	W	570	W	W	1,660	
Electric furnace	787	2,470	3,260	2,490	7,410	9,900	
Other (including air furnace) <sup>6</sup>	W		W	W		W	
Total consumption	1,410	2,560	3,970	4,300	7,680	12,000	
Shipments	132	23	155	361	69	430	
Stocks end of month	1,470	2,060	3,530	XX	XX	XX	
Pig iron (includes hot metal):							
Receipts	507	105	612	1,540	303	1,840	
Production	W	W	1,690	W	W	4,740	
Consumption (by type of furnace):							
Basic oxygen process	W	W	2,020	W	W	5,750	
Direct castings <sup>7</sup>	W		W	W		W	
Electric furnace	W	W	W	W	W	W	
Total consumption	2,150	91	2,240	6,080	248	6,330	
Shipments	W	W	W	W	W	W	
Stocks at end of month	W	W	920	XX	XX	XX	
Direct-reduced iron: <sup>8</sup>	<del></del>						
Receipts	W	W	68	W	W	250	
Production	W		W	W		W	
Total consumption	W	W	92	W	W	300	
Shipments	W	W	W	W	W	W	
Stocks end of month	321	55	376	XX	XX	XX	

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

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes manufacturers of raw steel that also produce steel castings. March 2009 data are based on returns from 41% of monthly respondents, representing 43% of scrap consumption during this month, and estimates for nonrespondents of this survey.

<sup>&</sup>lt;sup>3</sup>Prior months' data may have been revised.

<sup>&</sup>lt;sup>4</sup>Includes data for electric furnaces operated by integrated steel producers.

<sup>&</sup>lt;sup>5</sup>Includes minimill and specialty steel producers; includes data for other furnaces operated by these steel producers.

<sup>&</sup>lt;sup>6</sup>Includes vacuum melting furnaces and miscellaneous uses.

<sup>&</sup>lt;sup>7</sup>Includes ingot molds and stools.

<sup>&</sup>lt;sup>8</sup>Includes 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  $^{1,\,2}$ 

		March 2009				Year to date <sup>p, 3</sup>	
	Receipts of scrap from brokers, dealers, and other	Production of home scrap (recirculating scrap resulting from	Consumption of purchased and	Ending	Receipts of scrap from brokers, dealers, and other	Production of home scrap (recirculating scrap resulting from	Consumption of purchased and
Item	outside sources	current operations)	home scrap <sup>4</sup>	stocks	outside sources	current operations)	home scrap <sup>4</sup>
Carbon steel:	<u>.</u>						
Low-phosphorus plate and							
punchings	57	W	58	W	173	W	176
Cut structural and plate	259	42	323	244	810	125	1,000
No. 1 heavy melting steel	299	150	466	398	963	460	1,430
No. 2 heavy melting steel	376	18	435	412	1,290	54	1,350
No. 1 and electric furnace							
bundles	244	W	333	264	744	W	972
No. 2 and all other bundles	57	W	62	36	172	W	184
Electric furnace 1 foot and							
under (not bundles)	W	W	W		W	W	W
Railroad rails	13	W	20	5	41	W	56
Turnings and borings	157	11	191	140	466	32	552
Slag scrap	74	74	101	160	223	192	300
Shredded and fragmentized	652	W	793	687	2,040	83	2,430
No. 1 busheling	344	13	392	265	1,050	43	1,160
Steel cans (post consumer)	11		11	5	30		30
All other carbon steel scrap	286	145	401	306	805	414	1,180
Stainless steel scrap	66	30	102	49	214	92	328
Alloy steel scrap	6	32	47	49	19	96	130
Ingot mold and stool scrap	W	W	5	15	W	W	16
Machinery and cupola cast iron	W	W	W	W	W	W	W
Cast iron borings	11	W	13	12	38	W	41
Motor blocks	W		W		W		W
Other iron scrap	63	9	76	189	188	25	226
Other mixed scrap	129	20	135	159	357	60	419
Total	3,100	660	3,970	3,530	9,620	1,940	12,000

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

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes manufacturers of raw steel that also produce steel castings.

<sup>&</sup>lt;sup>3</sup>Prior months' data may have been revised.

<sup>&</sup>lt;sup>4</sup>Includes 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 $^{\!1,2}$

		March 2009			Year to date <sup>p, 3</sup>	
Region and State	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap <sup>4</sup>	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap <sup>4</sup>
Mid-Atlantic and New England:		•			*	
New Jersey, New York,	_					
Pennsylvania	407	168	685	1,200	484	1,920
North Central:	<del>-</del> '					
Illinois and Indiana	397	139	513	1,190	417	1,560
Iowa, Minnesota, Nebraska,	<del></del>					
Wisconsin	137	3	151	394	11	442
Michigan	121	70	143	338	175	389
Ohio	350	58	410	1,240	185	1,360
Total	1,010	270	1,220	3,160	788	3,740
South Atlantic:						
Delaware, Maryland, Virginia,	_					
West Virginia	172	56	268	588	169	815
Florida, Georgia, North	<del></del>					
Carolina, South Carolina	138	6	168	412	18	548
Total	310	62	436	1,000	187	1,360
South Central:						
Alabama, Kentucky,						
Mississippi, Tennessee	520	27	558	1,640	85	1,730
Arkansas, Louisiana,						
Oklahoma, Texas	498	55	651	1,560	162	1,970
Total	1,020	82	1,210	3,200	247	3,700
Mountain and Pacific:						
Arizona, California, Colorado,						
Oregon, Utah, Washington	364	78	419	1,060	234	1,260
Grand total	3,100	660	3,970	9,620	1,940	12,000

<sup>&</sup>lt;sup>p</sup>Preliminary.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes manufacturers of raw steel that also produce steel castings.

<sup>&</sup>lt;sup>3</sup>Prior months' data may have been revised.

<sup>&</sup>lt;sup>4</sup>Includes recirculating scrap and home-generated obsolete scrap.

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

		N	March 2009				,	Year to date <sup>p, 5</sup>		
	Mid-Atlantic and	North	South	South	Mountain and	Mid-Atlantic and	North	South	South	Mountain and
Item	New England	Central	Atlantic	Central	Pacific	New England	Central	Atlantic	Central	Pacific
Carbon steel:	<u> </u>									
Low-phosphorus plate and										
punchings	18	W	W	W	W	54	W	W	W	W
Cut structural and plate	35	98	54	66	W	116	288	164	222	W
No. 1 heavy melting steel	52	57	45	126	W	164	200	133	407	W
No. 2 heavy melting steel	W	117	16	208	W	$\mathbf{W}$	464	77	640	W
No. 1 and electric furnace										
bundles	24	156	23	37	W	59	476	68	128	W
No. 2 and all other bundles		19	3	19	W	32	59	9	58	W
Electric furnace 1 foot and	<del>_</del>									
under (not bundles)				W					W	
Railroad rails	W	W	W	6	W	W	W	W	19	W
Turnings and borings	14	33	9	97	4	43	116	31	265	12
Slag scrap		25	W	19	W	33	75	W	61	W
Shredded and fragmentized		160	88	250	76	239	479	291	806	227
No. 1 busheling		15	16	96	W	205	467	50	312	W
Steel cans (post consumer)	4	4		W	W	11	12		W	W
All other carbon steel scrap	29	112	W	39	W	72	295	W	121	W
Stainless steel scrap	36	4		W		111	26		W	
Alloy steel scrap	_ 2	3		W		7	8		W	
Ingot mold and stool scrap	W					W				
Machinery and cupola cast iron	W	W	W			W	W	W		
Cast iron borings	W	W	W	5	W	W	W	W	15	W
Motor blocks	<del>-</del>			W					W	
Other iron scrap	4	18	W	W	W	13	52	W	W	W
Other mixed scrap	W	3	W	15	W	W	9	W	47	W
Total	407	1,010	310	1,020	364	1,200	3,160	1,000	3,200	1,060

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

<sup>&</sup>lt;sup>1</sup>Scrap received from brokers, dealers, and other outside sources.

<sup>&</sup>lt;sup>2</sup>A breakout of the States within each region is provided in Table 3.

<sup>&</sup>lt;sup>3</sup>Includes manufacturers of raw steel that also produce steel castings.

<sup>&</sup>lt;sup>4</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>5</sup>Prior months' data may have been revised.

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

		N	1arch 2009				Y	ear to date <sup>4</sup>		
	Mid-Atlantic and	North	South	South	Mountain and	Mid-Atlantic and	North	South	South	Mountain and
Item	New England	Central	Atlantic	Central	Pacific	New England	Central	Atlantic	Central	Pacific
Carbon steel:	_									
Low-phosphorus plate and										
punchings	18	W	W	W	W	55	W	W	W	W
Cut structural and plate	46	113	86	71	W	144	329	267	240	W
No. 1 heavy melting steel	97	93	48	178	50	294	302	148	536	150
No. 2 heavy melting steel	16	139	29	226	W	48	452	91	678	W
No. 1 and electric furnace										
bundles	50	214	20	44	W	110	648	68	133	W
No. 2 and all other bundles	11	20	3	21	W	32	60	9	63	W
Electric furnace 1 foot and										
under (not bundles)		W		W			W		W	
Railroad rails	W	W	W	9	W	W	W	W	24	W
Turnings and borings	46	44	10	86	4	106	144	35	254	13
Slag scrap	19	35	W	30	W	55	91	W	101	W
Shredded and fragmentized	105	177	134	301	76	315	532	416	936	227
No. 1 busheling	81	155	19	132	W	221	477	62	383	W
Steel cans (post consumer)	4	4	W	W	W	11	12	W	W	W
All other carbon steel scrap	88	113	33	47	W	224	350	98	152	W
Stainless steel scrap	57	8		W		175	44		W	
Alloy steel scrap		22		W		51	73		W	
Ingot mold and stool scrap	W	W		W		W	W		W	
Machinery and cupola cast iron		W	W				W	W		
Cast iron borings	W	W	W	5	W	W	W	W	16	W
Motor blocks				W					W	
Other iron scrap	11	21	W	W	W	32	60	W	W	W
Other mixed scrap	W	10	1	11	W	W	31	W	40	W
Total	685	1,220	436	1,210	419	1,920	3,740	1,360	3,700	1,260

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

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown. <sup>2</sup>A breakout of the States within each region is provided in Table 3.

<sup>&</sup>lt;sup>3</sup>Includes manufacturers of raw steel that also produce steel castings.

<sup>&</sup>lt;sup>4</sup>Prior months' data may have been revised.

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

	Februar	y 2009	Year to date		
Region and country	Quantity	Value	Quantity	Value	
North America and South America:			-		
Canada	89	18,800	166	39,400	
Mexico	18	3,570	49	11,300	
Peru	(3)	24	32	8,730	
Other <sup>4</sup>	(3)	357	2	978	
Total	109	22,700	249	60,500	
Africa, Europe, Middle East:					
Belgium	(3)	866	1	1,300	
Egypt			103	28,000	
Greece	46	11,500	77	19,300	
Italy	(3)	93	48	16,800	
Pakistan	33	8,560	54	13,700	
Portugal			25	4,460	
Spain	(3)	196	1	499	
Switzerland	44	12,000	44	12,000	
Turkey	277	73,700	489	130,000	
Other <sup>4</sup>	(3)	1,530	1	2,430	
Total	403	109,000	843	228,000	
Asia, Australia, Oceania:					
Bangladesh	6	2,020	20	6,790	
China	535	204,000	807	307,000	
Hong Kong	9	5,760	15	9,340	
India	120	34,400	239	64,300	
Indonesia	6	1,730	11	2,950	
Japan	5	4,410	7	8,240	
Korea, Republic of	408	148,000	446	162,000	
Malaysia	1	519	1	732	
Taiwan	125	47,600	180	66,900	
Thailand	48	12,900	52	13,600	
Vietnam	32	8,480	64	17,300	
Other <sup>4</sup>	(3)	99	1	777	
Total	1,300	471,000	1,840	660,000	
Grand total	1,810	602,000	2,940	949,000	

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Includes 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 basis.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than 1/2 unit.

<sup>&</sup>lt;sup>4</sup>Includes countries with year to date quantities of less than 500 metric tons.

 ${\it TABLE~7}$  U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND SELECTED CUSTOMS DISTRICT  $^{\rm l,2}$ 

	February	/ 2009	Year to date		
Region and customs district	Quantity	Value	Quantity	Value	
Canadian-U.S. Border:					
Buffalo, NY	4	1,630	10	4,070	
Chicago, IL	(3)	56	(3)	176	
Detroit, MI	14	4,490	31	12,600	
Duluth, MN	3	505	5	892	
Great Falls, MT	1	162	2	332	
Ogdensburg, NY	25	4,270	34	6,360	
Pembina, ND	37	7,890	73	16,000	
Other <sup>4</sup>	5	756	9	1,180	
Total	89	19,800	164	41,600	
East Coast:					
Baltimore, MD	42	13,000	49	18,100	
Boston, MA	110	30,400	250	69,700	
Charleston, SC	8	3,760	18	6,990	
Charlotte, NC	1	621	3	1,460	
Miami, FL	21	7,580	64	19,900	
New York, NY	255	84,000	347	119,000	
Norfolk, VA	45	16,100	48	18,200	
Philadelphia, PA	66	17,900	145	39,900	
Portland, ME			39	10,600	
Providence, RI			35	9,490	
Savannah, GA	24	20,100	44	27,000	
St. Albans, VT	1	343	2	650	
Washington, DC			(3)	3	
Total	573	193,804	1,044	341,000	
Gulf Coast and Mexican-U.S.					
Border (includes Caribbean territories):					
El Paso, TX	(3)	104	1	194	
Houston-Galveston, TX	87	28,500	152	44,400	
Laredo, TX	17	3,310	19	3,900	
Mobile, AL	14	8,400	18	10,700	
New Orleans, LA	218	61,900	250	69,400	
San Juan, PR	27	8,190	38	11,100	
Tampa, FL	8	3,530	70	23,300	
Other <sup>4</sup>	(3)	8	(3)	10	
Total	371	114,000	548	163,000	
West Coast and Hawaii:					
Columbia-Snake, OR	152	47,800	217	65,200	
Honolulu, HI and Anchorage, AK	32	10,900	33	11,500	
Los Angeles, CA	410	155,000	581	222,000	
San Diego, CA	1	131	1	245	
San Francisco, CA	92	32,500	206	59,900	
Seattle, WA	87	28,300	141	45,700	
Total	774	275,000	1,180	404,000	
Grand total	1,810	602,000	2,940	949,000	

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Includes 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 basis.

 $<sup>^2\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than 1/2 unit

 $<sup>^4\</sup>mathrm{Includes}$  Code 70, which is for low-valued exports from the United States to Canada.

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

Item         Quantity         Value         Quantity         Value           No. 1 heavy melting steel         406         118,000         756         210,000           No. 2 heavy melting steel         126         35,300         147         40,400           No. 1 bundles         8         1,990         15         3,770           No. 2 bundles         2         428         2         485           Shredded steel scrap         735         205,000         1,130         306,000           Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         87         61,200         184         113,000           Other alloy steel         87         61,200         2,940         949,000		February	2009	Year to date	
No. 2 heavy melting steel         126         35,300         147         40,400           No. 1 bundles         8         1,990         15         3,770           No. 2 bundles         2         428         2         485           Shredded steel scrap         735         205,000         1,130         306,000           Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel and cast iron         1,810         602,000         2,940	Item	Quantity	Value	Quantity	Value
No. 1 bundles         8         1,990         15         3,770           No. 2 bundles         2         428         2         485           Shredded steel scrap         735         205,000         1,130         306,000           Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for         5         (3)<	No. 1 heavy melting steel	406	118,000	756	210,000
No. 2 bundles         2         428         2         485           Shredded steel scrap         735         205,000         1,130         306,000           Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         1,640         491,000         2,610         749,000           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)            (3)         101           Used rails for rerolling and other u	No. 2 heavy melting steel	126	35,300	147	40,400
Shredded steel scrap         735         205,000         1,130         306,000           Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for         5         4,800         8         5,710           Used rails for rerolling and other uses	No. 1 bundles	8	1,990	15	3,770
Borings, shovelings and turnings         4         520         34         5,870           Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured f	No. 2 bundles	2	428	2	485
Cut plate and structural         153         44,300         190         54,600           Tinned iron or steel         10         3,270         14         4,760           Remelting scrap ingots         3         3,390         5         5,780           Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         10           Exports for manufactured	Shredded steel scrap	735	205,000	1,130	306,000
	Borings, shovelings and turnings	4	520	34	5,870
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Cut plate and structural	153	44,300	190	54,600
Cast iron         35         16,800         62         27,000           Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           -         (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:         (3)         107         (3)         238           Pig iron < or = 0.5% phosphorus	Tinned iron or steel	10	3,270	14	4,760
Other iron and steel         156         61,400         250         90,200           Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           -         (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         107         (3)         238           Pig iron $<$ or $<$ 0.5% phosphorus         (3)         107         (3)         238           Pig iron $<$ 0.5% phosphorus         (3)         13         (3)         29           Alloy pig iron         (3)         13	Remelting scrap ingots		3,390	5	5,780
Total carbon steel and cast iron         1,640         491,000         2,610         749,000           Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         2,940         955,000           Exports of manufactured ferrous products:          (3)         107         (3)         238           Pig iron < 0.5% phosphorus	Cast iron	35	16,800	62	27,000
Stainless steel         82         50,200         146         87,100           Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         2940         955,000           Exports of manufactured ferrous products:           (3)         107         (3)         238           Pig iron < 0.5% phosphorus	Other iron and steel	156	61,400	250	90,200
Other alloy steel         87         61,200         184         113,000           Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         107         (3)         238           Pig iron < or = 0.5% phosphorus	Total carbon steel and cast iron	1,640	491,000	2,610	749,000
Total stainless and alloy steel         169         111,000         330         200,000           Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         107         (3)         238           Pig iron < 0 = 0.5% phosphorus	Stainless steel	82	50,200	146	87,100
Total carbon, stainless, alloy steel and cast iron         1,810         602,000         2,940         949,000           Ships, boats, and other vessels for breaking up (for scrapping)           (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:           (3)         107         (3)         238           Pig iron < 0 = 0.5% phosphorus	Other alloy steel	87	61,200	184	113,000
Ships, boats, and other vessels for breaking up (for scrapping)         (3)       101         Used rails for rerolling and other uses       6       4,800       8       5,710         Total scrap exports       1,810       607,000       2,940       955,000         Exports of manufactured ferrous products:       Pig iron < or = 0.5% phosphorus	Total stainless and alloy steel	169	111,000	330	200,000
breaking up (for scrapping)            (3)         101           Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:         Pig iron < or = 0.5% phosphorus	Total carbon, stainless, alloy steel and cast iron	1,810	602,000	2,940	949,000
Used rails for rerolling and other uses         6         4,800         8         5,710           Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:                 Pig iron < or = 0.5% phosphorus	Ships, boats, and other vessels for				
Total scrap exports         1,810         607,000         2,940         955,000           Exports of manufactured ferrous products:         Pig iron < or = 0.5% phosphorus	breaking up (for scrapping)			(3)	101
Exports of manufactured ferrous products:         Pig iron < or = 0.5% phosphorus       (3)       107       (3)       238         Pig iron > 0.5% phosphorus       (3)       29       (3)       29         Alloy pig iron       (3)       13       (3)       29         Total pig iron       (3)       149       (3)       296         Direct-reduced iron (DRI)       (3)       15       (3)       14         Spongy iron products, not DRI       (3)       31       1       626         Granules for abrasive cleaning and other uses       1       1,920       3       3,480         Powders of alloy steel       (3)       1,290       1       1,920         Other ferrous powders       7       6,650       12       12,400         Total DRI, granules, powders       8       9,900       17       18,500	Used rails for rerolling and other uses	6	4,800	8	5,710
Pig iron < or = 0.5% phosphorus       (3)       107       (3)       238         Pig iron > 0.5% phosphorus       (3)       29       (3)       29         Alloy pig iron       (3)       13       (3)       29         Total pig iron       (3)       149       (3)       296         Direct-reduced iron (DRI)       (3)       15       (3)       14         Spongy iron products, not DRI       (3)       31       1       626         Granules for abrasive cleaning and other uses       1       1,920       3       3,480         Powders of alloy steel       (3)       1,290       1       1,920         Other ferrous powders       7       6,650       12       12,400         Total DRI, granules, powders       8       9,900       17       18,500	Total scrap exports	1,810	607,000	2,940	955,000
Pig iron > 0.5% phosphorus         (3)         29         (3)         29           Alloy pig iron         (3)         13         (3)         29           Total pig iron         (3)         149         (3)         296           Direct-reduced iron (DRI)         (3)         15         (3)         14           Spongy iron products, not DRI         (3)         31         1         626           Granules for abrasive cleaning and other uses         1         1,920         3         3,480           Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Exports of manufactured ferrous products:				
Alloy pig iron       (3)       13       (3)       29         Total pig iron       (3)       149       (3)       296         Direct-reduced iron (DRI)       (3)       15       (3)       14         Spongy iron products, not DRI       (3)       31       1       626         Granules for abrasive cleaning and other uses       1       1,920       3       3,480         Powders of alloy steel       (3)       1,290       1       1,920         Other ferrous powders       7       6,650       12       12,400         Total DRI, granules, powders       8       9,900       17       18,500	Pig iron $<$ or $= 0.5\%$ phosphorus	(3)	107	(3)	238
Total pig iron         (3)         149         (3)         296           Direct-reduced iron (DRI)         (3)         15         (3)         14           Spongy iron products, not DRI         (3)         31         1         626           Granules for abrasive cleaning and other uses         1         1,920         3         3,480           Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Pig iron > 0.5% phosphorus	(3)	29	(3)	29
Direct-reduced iron (DRI)         (3)         15         (3)         14           Spongy iron products, not DRI         (3)         31         1         626           Granules for abrasive cleaning and other uses         1         1,920         3         3,480           Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Alloy pig iron	(3)	13	(3)	29
Spongy iron products, not DRI         (3)         31         1         626           Granules for abrasive cleaning and other uses         1         1,920         3         3,480           Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Total pig iron	(3)	149	(3)	296
Granules for abrasive cleaning and other uses         1         1,920         3         3,480           Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Direct-reduced iron (DRI)	(3)	15	(3)	14
Powders of alloy steel         (3)         1,290         1         1,920           Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Spongy iron products, not DRI	(3)	31	1	626
Other ferrous powders         7         6,650         12         12,400           Total DRI, granules, powders         8         9,900         17         18,500	Granules for abrasive cleaning and other uses	1	1,920	3	3,480
Total DRI, granules, powders 8 9,900 17 18,500	Powders of alloy steel	(3)	1,290	1	1,920
	Other ferrous powders	7	6,650	12	12,400
Grand total 1.820 617.000 2.960 974.000	Total DRI, granules, powders	8	9,900	17	18,500
1,020 017,000 27,000	Grand total	1,820	617,000	2,960	974,000

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Export valuation is on a free-alongside-ship basis.
<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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

	February	February 2009		
Country	Quantity	Value	Quantity	Value
Canada	228	54,800	407	95,800
Mexico	20	5,890	38	11,400
Sweden	(3)	16	35	6,110
Other <sup>4</sup>	(3)	285	(3)	471
Total	249	60,900	480	114,000

<sup>&</sup>lt;sup>1</sup>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: 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)

	February	2009	Year to date		
Customs district	Quantity	Value	Quantity	Value	
Buffalo, NY	73	19,400	130	33,800	
Charleston, SC	(3)	13	35	6,150	
Detroit, MI	52	10,900	107	22,000	
Duluth, MN	5	870	10	1,910	
El Paso, TX	2	708	3	1,280	
Great Falls, MT	4	786	5	1,050	
Houston-Galveston, TX	(3)	31	(3)	126	
Laredo, TX	8	2,270	17	4,660	
New Orleans, LA			(3)	83	
Ogdensburg, NY	3	372	4	637	
Pembina, ND	1	283	2	628	
San Diego, CA	9	2,560	17	4,790	
Seattle, WA	92	22,200	148	35,700	
Other	(3)	546	(3)	939	
Total	249	60,900	480	114,000	

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than ½ unit.

<sup>&</sup>lt;sup>4</sup>Includes countries with year to date quantities of less than 500 metric tons.

<sup>&</sup>lt;sup>1</sup>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.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than ½ unit.

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

(Thousand metric tons and thousand dollars)

	Februa	ry 2009	Year to date		
Item	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	20	4,250	29	6,120	
No. 2 heavy melting steel		429	3	638	
No. 1 bundles	55	12,200	92	20,600	
No. 2 bundles		342	6	863	
Shredded steel scrap	41	7,060	113	19,800	
Borings, shovelings and turnings		467	4	946	
Cut plate and structural		2,130	17	3,390	
Tinned iron or steel		349	2	473	
Remelting scrap ingots					
Cast iron		3,310	41	7,170	
Other iron and steel	30	5,650	57	10,900	
Total carbon steel and cast iron	184	36,200	364	70,900	
Stainless steel	8	5,500	14	9,270	
Other alloy steel	57	19,300	102	33,600	
Total stainless and alloy steel	65	24,800	116	42,900	
Total carbon, stainless, alloy steel and cast iron	249	60,900	480	114,000	
Ships, boats, and other vessels for					
breaking up (for scrapping)					
Total scrap imports	249	60,900	480	114,000	
Imports of manufactured ferrous products:					
Pig iron < or = 0.5% phosphorus	299	132,000	734	329,000	
Pig iron > or = 0.5% phosphorus					
Alloy pig iron			(3)	13	
Total pig iron	299	132,000	734	329,000	
Direct-reduced iron (DRI)	55	19,900	130	55,000	
Spongy iron products, not DRI	(3)	366	(3)	451	
Granules for abrasive cleaning and other uses	1	660	2	1,470	
Powders of alloy steel		3,350	5	8,540	
Other ferrous powders		2,500	4	6,670	
Total DRI, granules, powders	60	26,800	141	72,100	
Grand total	608	220,000	1,360	515,000	

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Import valuation is on a Customs basis.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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

	Raw steel p		Raw steel capability utilization, percent		Continuous production	
		Year		Year		Year
Period	Monthly	to date <sup>2</sup>	Monthly	to date	Monthly	to date
2008:						
March	8,600	25,700	89.7	90.5	97.0	96.9
April	8,380	34,100	90.3	90.5	96.6	96.8
May	8,730	42,800	91.1	90.6	97.1	96.9
June	8,370	51,200	90.3	90.5	97.2	96.9
July	8,520	59,700	88.8	90.3	97.5	97.0
August	8,670	68,400	90.4	90.3	97.4	97.1
September	7,840	76,200	84.5	89.7	97.2	97.1
October	6,760	83,000	70.5	88.0	96.3	97.0
November	4,700	87,700	50.7	84.7	96.5	97.0
December	3,920	91,600	40.9	80.9	96.2	96.9
2009:						
January	3,910	3,910	42.6	42.6	95.9	95.9
February	3,950	7,870	45.5	43.9	96.2	96.0
March	3,950	11,800	42.9	42.9	96.7	96.3

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

Source: American Iron and Steel Institute.

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 <sup>1</sup>	
	2008:					
March	352.44	346.87	345.44	339.98	563.88	554.97
April	469.32	461.91	502.10	494.17	657.86	647.47
May	513.65	505.54	516.67	508.51	825.50	812.46
June	500.16	492.26	501.63	493.71	924.56	909.96
July	519.24	511.04	518.83	510.64	944.88	929.96
August	452.78	445.63	457.10	449.89	944.88	929.96
September	311.13	306.22	315.42	310.44	944.88	929.96
October	191.90	188.87	195.83	192.74	870.46	856.71
November	100.74	99.13	100.00	98.40	647.19	636.83
December	176.35	173.53	168.67	165.97	647.19	636.83
Average	326.16	321.00	329.24	324.04	724.66	713.19
2009:						
January	200.17	196.97	201.74	198.51	647.19	636.83
February	188.46	185.44	186.50	183.52	355.60	349.91
March	162.50	159.90	162.03	159.44	284.48	279.93
Average	183.71	180.77	183.42	180.49	429.09	422.22

<sup>&</sup>lt;sup>1</sup>Prices are Brazilian basic pig iron, f.o.b. New Orleans, LA.

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

<sup>&</sup>lt;sup>2</sup>May include revisions for previous months.