

# Mineral Industry Surveys

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## IRON AND STEEL SCRAP IN JANUARY 2013

On a daily average basis in January 2013, estimated consumption of iron and steel scrap decreased by 10%, net receipts of purchased scrap decreased by 13%, and home scrap production increased by 6% from that of December 2012. Stocks of purchased and home scrap at the end of January 2013 increased slightly from those at the end of December 2012. These observations are based upon responses from about 27% of the companies surveyed that manufacture pig iron and semifinished steel products, which represent about 33% of the total scrap consumption in those sectors, and estimates for nonrespondents to this survey.

On a daily average basis, pig iron production decreased slightly and consumption decreased slightly in January 2013 from those in December 2012. Stocks of pig iron at the end of January 2013 increased by 6% from those at the end of December 2012.

Exports of iron and steel scrap for the month of January 2013 decreased by 5% from those of December 2012. Turkey was the leading country of destination, accounting for 32% of the total tonnage of exports, followed by Taiwan, with 17%, and the Republic of Korea, with 12% (table 6). Los Angeles, CA, was the leading U.S. Customs district for tonnage of exports, accounting for 21% of the total, followed by New York, NY, with 20%, and San Francisco, CA, with 10% (table 7).

Imports of iron and steel scrap for January 2013 increased by 10% from those of December 2012. Canada was the leading country of origin, accounting for 74% of the total tonnage of imports, followed by Sweden, with 13%, and the United Kingdom with 7% (table 9). Detroit, MI, was the leading U.S. Customs district for tonnage of imports, accounting for 29% of the total, followed by Seattle, WA, with 20%, and Buffalo, NY, with 16% (table 10).

The daily average domestic raw steel production for January 2013, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, amounted to 238,000 metric tons, up by 3% from that in December 2012, and decreased by 4% from that in January 2012 (table 12). The electric furnace portion of raw steel production for January 2013 was 58%, decreased from 60% in December 2012, and decreased from 60% in January 2012.

Raw steel production capability utilization (AISI data) in January 2013 was 77%, increased from 72% in December 2012, and decreased from 78% in January 2012 (table 12). Continuous cast steel production in January 2013 accounted for 99% of total raw steel production, the same as that in December 2012, and up from 98% in January 2012.

TABLE 1  
IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS  
FOR STEEL PRODUCERS<sup>1,2</sup>

(Thousand metric tons)

	January 2013		
	Integrated steel producers <sup>3</sup>	Electric furnace steel producers <sup>4</sup>	Total for steel producers
<b>Scrap:</b>			
Receipts from dealers and other sources	1,660	2,030	3,680
Receipts from other own company plants	43	209	252
Production recirculating scrap	351	235	586
Production obsolete scrap	W	W	11
<b>Consumption (by type of furnace):</b>			
Blast furnace	W	W	202
Basic oxygen process	W	W	624
Electric furnace	1,190	2,290	3,480
Other (including air furnace) <sup>5</sup>	W	--	W
Total consumption	2,010	2,430	4,430
Shipments	86	18	104
Stocks, end of period	1,910	1,880	3,790
<b>Pig iron (includes hot metal):</b>			
Receipts	449	83	532
Production	2,420	--	2,420
<b>Consumption (by type of furnace):</b>			
Basic oxygen process	W	W	2,740
Direct castings <sup>6</sup>	W	--	W
Electric furnace	W	W	W
Total consumption	2,850	75	2,930
Shipments	--	--	--
Stocks, end of period	W	W	411
<b>Direct-reduced iron:<sup>7</sup></b>			
Receipts	89	37	126
Total consumption	340	58	398
Stocks, end of period	97	40	137

W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and/or "Total consumption."

-- Zero.

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

<sup>2</sup>Includes manufacturers of raw steel that also produce steel castings. January 2013 data are based on returns from 27% of consumer surveys, representing 33% of scrap consumption during this month, and estimates for nonrespondents of this survey.

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

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

<sup>5</sup>Includes vacuum melting furnaces and miscellaneous uses.

<sup>6</sup>Includes ingot molds and stools.

<sup>7</sup>Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

TABLE 2  
 RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION,  
 AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, FOR STEEL PRODUCERS<sup>1,2</sup>

(Thousand metric tons)

Item	January 2013			
	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>3</sup>	Ending stocks
<b>Carbon steel:</b>				
Low-phosphorus plate and punchings	58	W	61	W
Cut structural and plate	331	48	379	277
No. 1 heavy melting steel	376	83	481	341
No. 2 heavy melting steel	457	29	486	369
No. 1 and electric furnace bundles	206	W	275	259
No. 2 and all other bundles	98	W	105	40
Electric furnace 1 foot and under (not bundles)	2	W	W	W
Railroad rails	26	W	33	18
Turnings and borings	184	4	201	139
Slag scrap	55	67	93	138
Shredded and fragmentized	1,040	W	1,130	1,140
No. 1 busheling	360	15	397	309
Steel cans (post consumer)	11	--	10	2
All other carbon steel scrap	240	104	355	197
Stainless steel scrap	76	27	111	47
Alloy steel scrap	30	21	56	182
Ingot mold and stool scrap	W	W	11	14
Machinery and cupola cast iron	W	W	W	W
Cast iron borings	W	W	W	W
Other iron scrap	75	25	99	55
Other mixed scrap	36	39	122	94
<b>Total</b>	<b>3,680</b>	<b>586</b>	<b>4,430</b>	<b>3,790</b>

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

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

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

<sup>3</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<sup>1,2</sup>

(Thousand metric tons)

Region and State	January 2013		
	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>3</sup>
<b>Mid-Atlantic and New England:</b>			
New Jersey, New York, Pennsylvania	424	147	620
<b>North Central:</b>			
Illinois and Indiana	450	141	585
Iowa, Minnesota, Nebraska, Wisconsin	263	9	286
Michigan	138	74	169
Ohio	430	81	516
Total	1,280	306	1,550
<b>South Atlantic:</b>			
Delaware, Maryland, Virginia, West Virginia	170	21	206
Georgia, North Carolina, South Carolina	292	15	331
Total	462	35	537
<b>South Central:</b>			
Alabama, Kentucky, Mississippi, Tennessee	675	30	728
Arkansas, Louisiana, Oklahoma, Texas	568	46	648
Total	1,240	76	1,380
<b>Mountain and Pacific:</b>			
Arizona, California, Colorado, Oregon, Utah, Washington	273	23	347
Grand total	3,680	586	4,430

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

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

<sup>3</sup>Includes recirculating scrap and home-generated obsolete scrap.

TABLE 4  
RECEIPTS OF IRON AND STEEL SCRAP, BY REGION AND GRADE,  
FOR STEEL PRODUCERS<sup>1,2,3,4</sup>

(Thousand metric tons)

Item	January 2013				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	19	W	--	W	W
Cut structural and plate	44	93	57	116	W
No. 1 heavy melting steel	66	96	32	136	46
No. 2 heavy melting steel	10	145	55	191	56
No. 1 and electric furnace bundles	11	140	5	28	W
No. 2 and all other bundles	12	41	W	W	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	W	W
Turnings and borings	15	56	25	79	10
Slag scrap	11	22	4	W	W
Shredded and fragmentized	84	274	181	424	76
No. 1 busheling	61	141	29	128	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	41	123	16	56	3
Stainless steel scrap	W	15	--	W	--
Alloy steel scrap	--	25	--	W	--
Ingot mold and stool scrap	W	W	--	--	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	--	W
Other iron scrap	W	40	W	10	W
Other mixed scrap	W	W	W	W	W
Total	424	1,280	462	1,240	273

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

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

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

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

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

TABLE 5  
CONSUMPTION OF IRON AND STEEL SCRAP BY REGION AND GRADE,  
FOR STEEL PRODUCERS<sup>1, 2, 3</sup>

(Thousand metric tons)

Item	January 2013				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	19	W	1	W	W
Cut structural and plate	55	108	85	110	W
No. 1 heavy melting steel	111	120	37	163	51
No. 2 heavy melting steel	16	153	49	204	64
No. 1 and electric furnace bundles	23	190	5	30	W
No. 2 and all other bundles	12	38	W	17	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	W	W
Turnings and borings	30	57	25	79	10
Slag scrap	17	45	3	26	W
Shredded and fragmentized	105	286	215	451	76
No. 1 busheling	64	149	33	150	2
Steel cans (post consumer)	6	W	--	--	--
All other carbon steel scrap	70	192	19	71	3
Stainless steel scrap	55	21	--	W	--
Alloy steel scrap	15	31	--	W	--
Ingot mold and stool scrap	W	W	--	W	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	--	W
Other iron scrap	W	53	W	10	W
Other mixed scrap	W	37	W	1	W
Total	620	1,550	537	1,380	347

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

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

TABLE 6  
U.S. EXPORTS OF IRON AND STEEL SCRAP  
BY SELECTED REGION AND COUNTRY<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Region and country	January 2013	
	Quantity	Value
<b>North America and South America:</b>		
Canada	87	31,100
Ecuador	1	147
Mexico	81	30,300
Peru	32	11,900
Other <sup>3</sup>	1	348
<b>Total</b>	<b>202</b>	<b>73,800</b>
<b>Africa, Europe, Middle East:</b>		
Egypt	39	13,800
Netherlands	1	1,760
Spain	1	1,240
Turkey	483	181,000
Other <sup>3</sup>	1	1,410
<b>Total</b>	<b>526</b>	<b>199,000</b>
<b>Asia, Australia, Oceania:</b>		
Bangladesh	8	3,450
China	131	94,900
Hong Kong	14	6,310
India	72	32,000
Indonesia	34	13,500
Japan	4	5,240
Korea, Republic of	179	68,000
Malaysia	4	1,190
Pakistan	16	10,200
Taiwan	264	108,000
Thailand	3	1,270
Vietnam	77	28,000
Other <sup>3</sup>	(4)	432
<b>Total</b>	<b>806</b>	<b>372,000</b>
<b>Grand total</b>	<b>1,530</b>	<b>645,000</b>

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

<sup>3</sup>Includes countries with January 2013 quantities of less than 500 metric tons.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7  
U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND  
SELECTED CUSTOMS DISTRICT<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Region and customs district	January 2013	
	Quantity	Value
<b>Canada–United States border:</b>		
Buffalo, NY	18	6,440
Detroit, MI	21	8,290
Duluth, MN	4	1,490
Great Falls, MT	1	439
Ogdensburg, NY	1	332
Pembina, ND	36	13,300
Other	4	643
Total	85	31,000
<b>East coast:</b>		
Baltimore, MD	12	5,240
Boston, MA	75	29,200
Charleston, SC	10	4,830
Charlotte, NC	1	1,210
Miami, FL	31	13,500
New York, NY	301	123,000
Norfolk, VA	49	20,900
Philadelphia, PA	39	15,100
Portland, ME	5	1,930
Providence, RI	48	18,100
Savannah, GA	45	22,300
St. Albans, VT	3	840
Total	619	256,000
<b>Gulf coast and Mexico–United States border (includes Caribbean territories):</b>		
El Paso, TX	6	2,040
Houston–Galveston, TX	110	49,000
Laredo, TX	36	13,700
Mobile, AL	2	1,190
San Juan, PR	15	4,130
Tampa, FL	3	2,200
Other	(3)	204
Total	173	72,500
<b>West coast and Hawaii:</b>		
Columbia–Snake, OR	87	32,300
Honolulu, HI, and Anchorage, AK	5	1,660
Los Angeles, CA	317	152,000
San Diego, CA	6	1,620
San Francisco, CA	153	59,600
Seattle, WA	89	38,800
Total	657	286,000
Grand total	1,530	645,000

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

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.



TABLE 8  
U.S. EXPORTS OF IRON AND STEEL SCRAP AND  
OTHER FERROUS PRODUCTS BY GRADE<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Item	January 2013	
	Quantity	Value
No. 1 heavy melting steel	519	191,000
No. 2 heavy melting steel	74	26,300
No. 1 bundles	14	5,510
No. 2 bundles	1	323
Shredded steel scrap	401	151,000
Borings, shovelings and turnings	17	6,190
Cut plate and structural	79	30,300
Tinned iron or steel	10	4,910
Remelting scrap ingots	2	1,450
Cast iron	35	14,600
Other iron and steel	271	111,000
Total carbon steel and cast iron	1,420	543,000
Stainless steel	51	58,200
Other alloy steel	60	43,900
Total stainless and alloy steel	111	102,000
Total carbon, stainless, alloy steel and cast iron	1,530	645,000
Ships, boats, and other vessels for breaking up (for scrapping)	(3)	35
Used rails for rerolling and other uses	1	1,290
Total scrap exports	1,540	647,000
Exports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	2	616
Alloy pig iron	(3)	84
Total pig iron	2	700
Spongy iron products, not DRI	(3)	325
Granules for abrasive cleaning and other uses	3	4,580
Powders of alloy steel	2	4,290
Other ferrous powders	7	7,220
Total DRI, granules, powders	12	16,400
Grand total	1,550	664,000

<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>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9  
U.S. IMPORTS FOR CONSUMPTION OF IRON AND  
STEEL SCRAP BY SELECTED COUNTRY<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Country	January 2013	
	Quantity	Value
Canada	243	104,000
China	1	33
Japan	1	162
Mexico	18	8,740
Sweden	42	18,300
United Kingdom	23	9,320
Other <sup>3</sup>	1	531
Total	329	142,000

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

<sup>3</sup>Includes countries with January 2013 quantities of less than 500 metric tons.

Source: U.S. Census Bureau.

TABLE 10  
U.S. IMPORTS FOR CONSUMPTION OF IRON AND  
STEEL SCRAP BY SELECTED CUSTOMS DISTRICT<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Customs district	January 2013	
	Quantity	Value
Buffalo, NY	53	37,000
Charleston, SC	40	16,500
Columbia-Snake, OR	8	2,320
Detroit, MI	96	39,200
Duluth, MN	1	476
El Paso, TX	3	1,070
Great Falls, MT	13	4,050
Laredo, TX	8	5,520
Mobile, AL	3	2,050
New Orleans, LA	23	9,280
Nogales, AZ	3	967
Ogdensburg, NY	4	3,600
Pembina, ND	2	1,120
Portland, ME	1	298
San Diego, CA	4	1,170
Seattle, WA	64	16,100
St Albans, VT	1	225
Wilmington, NC	1	47
Other	1	547
Total	329	142,000

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

Source: U.S. Census Bureau.

TABLE 11  
U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER  
FERROUS PRODUCTS BY GRADE<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Item	January 2013	
	Quantity	Value
No. 1 heavy melting steel	16	5,330
No. 2 heavy melting steel	9	2,750
No. 1 bundles	81	31,100
No. 2 bundles	2	372
Shredded steel scrap	72	23,200
Borings, shovelings and turnings	4	882
Cut plate and structural	18	5,930
Tinned iron or steel	5	1,900
Remelting scrap ingots	--	--
Cast iron	13	4,330
Other iron and steel	62	18,200
Total carbon steel and cast iron	283	94,000
Stainless steel	15	21,100
Other alloy steel	31	26,500
Total stainless and alloy steel	46	47,600
Total carbon, stainless, alloy steel and cast iron	329	142,000
Ships, boats, and other vessels for breaking up (for scrapping)	(3)	3
Total scrap imports	329	142,000
Imports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	262	104,000
Alloy pig iron	(3)	26
Total pig iron	262	104,000
Direct-reduced iron (DRI)	213	70,200
Spongy iron products, not DRI	20	7,130
Granules for abrasive cleaning and other uses	2	1,690
Powders of alloy steel	4	7,150
Other ferrous powders	5	8,590
Total DRI, granules, powders	244	94,700
Grand total	835	340,000

-- Zero.

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

<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.

Source: U.S. Census Bureau.

TABLE 12  
U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION,  
AND CONTINUOUS CAST STEEL PRODUCTION<sup>1</sup>

Period	Raw steel production, thousand metric tons		Raw steel capability utilization, percent		Continuous cast steel production, percent	
	Monthly	Year	Monthly	Year	Monthly	Year
		to date <sup>2</sup>		to date <sup>2</sup>		to date <sup>2</sup>
2012:						
January	7,710	7,710	77.6	77.6	98.4	98.4
February	7,550	15,300	80.7	79.1	98.3	98.4
March	7,970	23,200	79.6	79.3	98.4	98.4
April	7,830	31,100	80.9	79.7	98.4	98.4
May	7,920	39,000	79.2	79.6	98.7	98.5
June	7,240	46,200	74.8	78.8	98.6	98.5
July	7,330	53,600	73.3	78.0	98.8	98.5
August	7,630	61,200	76.3	77.8	98.7	98.6
September	6,810	68,000	70.4	77.0	98.4	98.5
October	6,800	74,800	68.0	76.1	98.7	98.6
November	6,780	81,600	70.1	75.5	98.7	98.6
December	7,180	88,800	71.7	75.2	99.1	98.6
2013, January	7,370	7,370	76.5	76.5	98.7	98.7

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

<sup>2</sup>May include revisions to previously published data.

Source: American Iron and Steel Institute.

TABLE 13  
COMPOSITE PRICES FOR NO. 1 HEAVY MELTING STEEL SCRAP AND PIG IRON

Period	American Metal Market		Scrap Price Bulletin <sup>1</sup>			
	No. 1 HMS		No. 1 HMS		Pig Iron <sup>2</sup>	
	\$/lt	\$/t	\$/lt	\$/t	\$/lt	\$/t
2012:						
January	424.42	417.72	428.17	421.41	516.13	507.98
February	406.16	399.75	401.17	394.83	520.70	512.48
March	402.76	396.40	401.92	395.57	520.70	512.48
April	395.08	388.84	399.17	392.87	520.70	512.48
May	398.55	392.26	399.17	392.87	520.70	512.48
June	356.34	350.71	357.08	351.44	520.70	512.48
July	315.32	310.34	316.83	311.83	439.42	432.48
August	356.84	351.20	359.59	353.91	448.31	441.23
September	349.79	344.27	312.84	307.90	452.12	444.98
October	312.56	307.62	312.84	307.90	458.22	450.88
November	341.14	335.75	347.08	341.60	467.36	459.98
December	349.39	343.87	347.50	342.01	467.36	459.98
Average, January–December	367.36	361.56	365.28	359.51	487.70	479.99
2013, January	352.35	346.78	350.83	345.29	467.36	459.98

<sup>1</sup>Formerly Iron Age.

<sup>2</sup>Prices are Brazilian basic pig iron, f.o.b. New Orleans, LA.

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