

Mineral Industry Surveys

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IRON AND STEEL SCRAP IN JANUARY 2016

On a daily average basis in January 2016, iron and steel scrap consumption increased slightly, purchased scrap decreased slightly, and home scrap production decreased slightly compared with those of December 2015. Stocks of purchased and home scrap at the end of January were down slightly from those at the end of December. These observations are based upon responses from 21% of the companies surveyed that manufacture pig iron and semifinished steel products, which account for about 30% of the total scrap consumption in those sectors, and estimates for nonrespondents to this survey.

On a daily average basis, pig iron production and consumption in January 2016 each increased by 8% compared with those of December. Stocks of pig iron at the end of January decreased by 18% from those at the end of December.

Exports of iron and steel scrap in January 2016 were less than one-half of those in December. Turkey was the leading country of destination, accounting for 19% of the total tonnage of exports, followed by India with 16% and the Mexico with 12% (table 6). San Francisco, CA, was the leading U.S. Customs district for tonnage of exports, accounting for 21% of the total, followed by Los Angeles, CA, with 20%, and Philadelphia, PA, with 10% (table 7).

Imports of iron and steel scrap for January 2016 increased by 18% from those in December. Canada was the leading country of origin, accounting for 92% of the total tonnage of imports,

followed by the Mexico with 7% and India with 1% (table 9). Detroit, MI, was the leading U.S. Customs district for tonnage of imports, accounting for 42% of the total, followed by Seattle, WA, with 20% and Buffalo, NY, with 18% (table 10).

The daily average domestic raw steel production for January 2016, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, was 208,000 metric tons, up 8.3% from that in December 2015 and down 11% from that in January 2015 (table 12). Raw steel production capability utilization (AISI data) was 69% in January 2016, up from 62% in December 2015, and down from 76% in January 2015 (table 12). The electric furnace portion of raw steel production for January 2016 was 66%, up from 65% in December 2015 and up from 62% in January 2015.

Continuous cast steel production in January 2016 accounted for 99% of total raw steel production, the same as that in December 2015 and January 2015.

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

(Thousand metric tons)

	January 2016		
	Integrated steel producers ³	Electric furnace steel producers ⁴	Total for steel producers
Scrap:			
Receipts from dealers and other sources	1,560	1,760	3,320
Receipts from other own company plants	52	151	203
Production recirculating scrap	260	166	426
Production obsolete scrap	W	W	13
Consumption (by type of furnace):			
Blast furnace	W	W	166
Basic oxygen process	W	W	386
Electric furnace	1,370	1,890	3,260
Other (including air furnace) ⁵	W	W	217
Total consumption	1,920	2,110	4,030
Shipments	57	9	66
Stocks, end of period	2,050	1,880	3,920
Pig iron (includes hot metal):			
Receipts	186	55	241
Production	1,580	--	1,580
Consumption (by type of furnace):			
Basic oxygen process	W	W	1,710
Direct castings ⁶	W	--	W
Electric furnace	W	W	W
Total consumption	1,850	88	1,940
Shipments	--	--	--
Stocks, end of period	W	W	515
Direct-reduced iron:⁷			
Receipts	34	33	67
Total consumption	297	20	317
Stocks, end of period	167	32	199

W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and (or) "Total consumption."
-- 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. January 2016 data are based on returns from 21% of consumer surveys, representing 30% 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.

⁵Includes vacuum melting furnaces and miscellaneous uses.

⁶Includes ingot molds and stools.

⁷Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipt."

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

(Thousand metric tons)

Item	January 2016			
	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 ³	Ending stocks
Carbon steel:				
Low-phosphorus plate and punchings	57	W	59	W
Cut structural and plate	280	27	319	307
No. 1 heavy melting steel	321	51	378	313
No. 2 heavy melting steel	389	30	430	236
No. 1 and electric furnace bundles	148	W	163	189
No. 2 and all other bundles	69	--	76	32
Electric furnace 1 foot and under (not bundles)	1	W	W	W
Railroad rails	14	--	15	18
Turnings and borings	184	4	186	142
Slag scrap	44	68	75	103
Shredded and fragmentized	977	W	1,110	1,310
No. 1 busheling	374	19	449	322
Steel cans (post consumer)	8	--	8	(4)
All other carbon steel scrap	178	98	293	336
Stainless steel scrap	75	27	114	63
Alloy steel scrap	27	20	47	177
Ingot mold and stool scrap	W	W	9	4
Machinery and cupola cast iron	W	W	W	W
Cast iron borings	12	W	12	4
Other iron scrap	49	19	67	57
Other mixed scrap	109	36	207	160
Total	3,320	426	4,030	3,920

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.

⁴Less than ½ unit.

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

(Thousand metric tons)

Region and State	January 2016		
	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 ³
Mid-Atlantic and New England:			
New Jersey, New York, Pennsylvania	422	64	485
North Central:			
Illinois and Indiana	397	35	447
Iowa, Minnesota, Nebraska, Wisconsin	219	27	255
Michigan	127	78	194
Ohio	423	94	557
Total	1,170	236	1,450
South Atlantic:			
Virginia, West Virginia	70	7	107
Georgia, North Carolina, South Carolina	280	18	311
Total	350	25	418
South Central:			
Alabama, Kentucky, Mississippi, Tennessee	607	40	706
Arkansas, Louisiana, Texas	514	45	645
Total	1,120	85	1,350
Mountain and Pacific:			
Arizona, California, Colorado, Oregon, Utah, Washington	261	16	320
Grand total	3,320	426	4,030

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 4
RECEIPTS OF IRON AND STEEL SCRAP, BY REGION AND GRADE,
FOR STEEL PRODUCERS^{1, 2, 3, 4}

(Thousand metric tons)

Item	January 2016				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	21	W	--	W	W
Cut structural and plate	50	88	24	98	W
No. 1 heavy melting steel	59	81	21	132	28
No. 2 heavy melting steel	10	110	52	183	W
No. 1 and electric furnace bundles	13	107	3	21	W
No. 2 and all other bundles	14	38	2	W	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	19	62	26	70	7
Slag scrap	8	18	2	16	1
Shredded and fragmentized	89	263	170	366	88
No. 1 busheling	60	149	23	140	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	27	119	3	26	3
Stainless steel scrap	W	W	--	W	--
Alloy steel scrap	--	24	--	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	36	W	7	W
Other mixed scrap	W	5	W	15	W
Total	422	1,170	350	1,120	261

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.

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

(Thousand metric tons)

Item	January 2016				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	21	W	W	W	W
Cut structural and plate	47	104	42	106	W
No. 1 heavy melting steel	65	107	22	155	29
No. 2 heavy melting steel	14	121	57	199	39
No. 1 and electric furnace bundles	13	115	3	28	W
No. 2 and all other bundles	14	40	5	16	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	19	62	27	70	7
Slag scrap	12	34	2	25	W
Shredded and fragmentized	91	302	196	433	88
No. 1 busheling	59	159	29	201	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	48	194	7	42	3
Stainless steel scrap	54	24	--	W	--
Alloy steel scrap	10	29	--	W	--
Ingot mold and stool scrap	W	8	--	W	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	--	W
Other iron scrap	7	50	W	9	W
Other mixed scrap	W	47	W	15	W
Total	485	1,450	418	1,350	320

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.

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

(Thousand metric tons and thousand dollars)

Region and country	January 2016	
	Quantity	Value
North America and South America:		
Canada	40	6,730
Mexico	64	12,900
Peru	58	11,000
Other ³	(4)	122
Total	162	30,800
Africa, Europe, Middle East:		
Belgium	1	771
Germany	1	615
Netherland	1	546
Sweden	1	882
Turkey	105	19,700
United Arab Emirates	1	301
Other ³	(4)	581
Total	110	23,400
Asia, Australia, Oceania:		
Bangladesh	14	3,090
China	42	34,100
Hong Kong	3	2,030
India	88	23,000
Indonesia	1	325
Japan	3	4,160
Korea, Republic of	14	5,670
Malaysia	1	355
Pakistan	21	8,890
Taiwan	56	16,600
Thailand	35	6,300
Vietnam	3	516
Other ³	(4)	54
Total	281	105,000
Grand total	552	159,000

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 basis.

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

³Includes countries with January 2016 quantities of less than 500 metric tons.

⁴Less than ½ unit.

Sources: U.S. Census Bureau.

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

(Thousand metric tons and thousand dollars)

Region and customs district	January 2016	
	Quantity	Value
Canada–United States border:		
Buffalo, NY	16	1,520
Detroit, MI	7	1,820
Great Falls, MT	1	111
Ogdensburg, NY	1	301
Pembina, ND	6	899
Other	4	1,090
Total	35	5,740
East coast:		
Baltimore, MD	12	3,560
Boston, MA	21	4,700
Charleston, SC	5	2,530
Miami, FL	14	5,700
New York City, NY	36	14,700
Norfolk, VA	6	5,190
Philadelphia, PA	56	10,300
Portland, ME	4	598
Providence, RI	6	1,170
Savannah, GA	7	4,150
St. Albans, VT	1	549
Other	1	265
Total	169	53,400
Gulf coast and Mexico–United States border (includes Caribbean territories):		
El Paso, TX	3	632
Houston–Galveston, TX	11	5,190
Laredo, TX	22	4,740
Mobile, AL	1	476
New Orleans, LA	2	1,030
San Juan, PR	1	420
Tampa, FL	24	5,620
Total	63	18,100
West coast and Hawaii:		
Columbia–Snake, OR	28	5,110
Honolulu, HI, and Anchorage, AK	1	244
Los Angeles, CA	111	45,200
San Diego, CA	10	1,860
San Francisco, CA	113	22,600
Seattle, WA	22	7,070
Total	285	82,000
Grand total	552	159,000

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 basis.

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

Sources: U.S. Census Bureau.

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

(Thousand metric tons and thousand dollars)

Item	January 2016	
	Quantity	Value
No. 1 heavy melting steel	122	25,300
No. 2 heavy melting steel	19	4,190
No. 1 bundles	2	383
No. 2 bundles	(3)	14
Shredded steel scrap	194	40,100
Borings, shovelings and turnings	1	106
Cut plate and structural	25	6,530
Tinned iron or steel	2	857
Remelting scrap ingots	2	1,250
Cast iron	7	2,820
Other iron and steel	93	29,000
Total carbon steel and cast iron	468	111,000
Stainless steel	53	35,600
Other alloy steel	32	13,100
Total stainless and alloy steel	85	48,700
Total carbon, stainless, alloy steel and cast iron	552	159,000
Ships, boats, and other vessels for breaking up (for scrapping)	(3)	7
Used rails for rerolling and other uses	2	2,300
Total scrap exports	554	162,000
Exports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	(3)	106
Pig iron > or = 0.5% phosphorus	1	61
Alloy pig iron	--	--
Total pig iron	1	167
Direct-reduced iron (DRI)	--	--
Spongy iron products, not DRI	(3)	68
Granules for abrasive cleaning and other uses	2	2,930
Powders of alloy steel	2	4,880
Other ferrous powders	8	8,590
Total DRI, granules, powders	12	16,500
Grand total	568	178,000

-- Zero.

¹Export valuation is on a free-alongside-ship basis.

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

³Less than ½ unit.

Source: U.S. Census Bureau.

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

(Thousand metric tons and thousand dollars)

Country	January 2016	
	Quantity	Value
Canada	203	39,200
Germany	(3)	37
India	1	196
Mexico	16	5,620
Sweden	(3)	504
Other ⁴	1	367
Total	220	45,900

¹Includes tinsplate 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 ½ unit.

⁴Includes countries with January 2016 quantities of less than 500 metric tons.

Sources: U.S. Census Bureau.

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

(Thousand metric tons and thousand dollars)

Customs district	January 2016	
	Quantity	Value
Baltimore, MD	1	196
Buffalo, NY	39	9,460
Charleston, SC	(3)	68
Detroit, MI	92	19,100
Duluth, MN	5	711
El Paso, TX	2	631
Galveston, TX	(3)	43
Great Falls, MT	2	246
Laredo, TX	9	3,500
Mobil, AL	3	1,280
Nogales, AZ	1	195
Ogdensburg, NY	3	451
Pembina, ND	13	2,200
San Diego, CA	2	524
Seattle, WA	43	6,430
S. Albans, VT	4	565
Other	2	508
Total	220	45,900

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 ½ unit.

Sources: U.S. Census Bureau.

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

(Thousand metric tons and thousand dollars)

Item	January 2016	
	Quantity	Value
No. 1 heavy melting steel	15	2,300
No. 2 heavy melting steel	10	1,780
No. 1 bundles	48	9,360
No. 2 bundles	6	1,290
Shredded steel scrap	16	2,080
Borings, shovelings and turnings	3	459
Cut plate and structural	10	1,810
Tinned iron or steel	6	1,150
Remelting scrap ingots	--	--
Cast iron	8	1,270
Other iron and steel	35	5,690
Total carbon steel and cast iron	157	27,200
Stainless steel	17	9,760
Other alloy steel	46	8,960
Total stainless and alloy steel	63	18,700
Total carbon, stainless, alloy steel and cast iron	220	45,900
Ships, boats, and other vessels for breaking up (for scrapping)	--	--
Used rails for rerolling and other uses	--	--
Total scrap imports	220	45,900
Imports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	76	13,200
Pig iron > or = 0.5% phosphorus	--	--
Alloy pig iron	(3)	46
Total pig iron	76	13,200
Direct-reduced iron (DRI)	151	26,200
Spongy iron products, not DRI	(3)	346
Granules for abrasive cleaning and other uses	2	2,140
Powders of alloy steel	5	7,140
Other ferrous powders	3	5,470
Total DRI, granules, powders	162	41,300
Grand total	458	100,000

-- Zero.

¹Import valuation is on a free-alongside-ship basis.

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

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 12
 U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION,
 AND CONTINUOUS CAST STEEL PRODUCTION¹

Period	Raw steel production, thousand metric tons		Raw steel capability utilization, percent		Continuous cast steel production, percent	
	Monthly	Year to date ²	Monthly	Year to date ²	Monthly	Year to date ²
2015:						
January	7,260	7,260	76.4	76.4	98.7	98.7
February	6,190	13,400	72.1	74.4	98.4	98.6
March	6,430	19,900	67.7	72.1	98.7	98.6
April	6,410	26,300	69.8	71.5	98.7	98.6
May	6,840	33,100	72.1	71.6	99.0	98.7
June	6,840	40,000	74.4	72.1	99.0	98.8
July	7,030	47,000	73.2	72.3	99.4	98.9
August	6,940	53,900	72.2	72.3	99.3	98.9
September	6,560	60,500	70.5	71.2	99.4	99.0
October	6,550	67,100	68.1	71.7	99.2	99.0
November	5,830	72,900	62.7	70.9	99.1	99.0
December	5,960	78,800	62.1	70.1	99.3	99.0
2016, January	6,460	6,460	68.7	68.7	99.2	99.2

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

²May 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			
	No. 1 HMS		No. 1 HMS		Pig Iron ¹	
	\$/lt	\$/t	\$/lt	\$/t	\$/lt	\$/t
2015:						
January	320.70	315.63	324.17	319.05	424.18	417.48
February	247.16	243.26	257.09	253.03	347.98	342.48
March	226.67	223.09	234.43	230.73	322.58	317.49
April	229.24	225.62	235.33	231.61	322.58	317.49
May	231.33	227.67	234.83	231.12	322.58	317.49
June	246.12	242.23	249.56	245.62	322.58	317.49
July	239.74	235.95	245.09	241.22	322.58	317.49
August	214.38	210.99	217.10	213.67	302.26	297.49
September	200.67	197.50	199.17	196.02	297.18	292.49
October	162.94	160.37	164.17	161.58	297.18	292.49
November	141.81	139.57	146.57	144.26	297.18	292.19
December	142.03	139.79	149.75	147.38	276.86	272.49
Average, January–December	216.90	213.47	221.44	217.94	321.31	316.21
2016, January	154.87	152.42	160.17	157.64	237.54	233.79

¹Prices are Brazilian basic pig iron, f.o.b. New Orleans, LA.

Note: Long tons = 1t; metric tons = t.