

Mineral Industry Surveys

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IRON AND STEEL SCRAP IN JANUARY 2017

On a daily average basis in January 2017, iron and steel scrap consumption decreased by 5% and home scrap production decreased by 10% compared with those of December 2016 (table 1). Purchased scrap receipts in January 2017 decreased slightly from that of December 2016. Stocks of purchased and home scrap at the end of January 2017 were down by 4% from those at the end of December 2016. These observations are based upon responses from about 21% of the companies surveyed that manufacture pig iron and semifinished steel products, which account for about 33% of the total scrap consumption in those sectors and estimates for nonrespondents to this survey.

On a daily average basis in January 2017, pig iron production decreased by 9% and consumption decreased by 4% compared with those of December 2016 (table 1). Stocks of pig iron at the end of January 2017 decreased by 14% from those at the end of December 16.

Exports of iron and steel scrap in January 2017 decreased by 20% from those in December 2016 (table 6). Mexico was the leading country of destination, accounting for 19% of the total tonnage of exports, followed by Taiwan with 12% and China with 10%. Los Angeles, CA, was the leading U.S. Customs district for tonnage of exports, accounting for 19% of the total, followed by San Francisco, CA, with 13% and New York City, NY, with 10% (table 7).

Imports of iron and steel scrap for January 2017 increased by 20% from those in December 2016 (table 9). Canada was the leading country of origin, accounting for 72% of the total tonnage of imports, followed by United Kingdom with 11% and Sweden with 10%. Detroit, MI, was the leading U.S. Customs district for tonnage of imports, accounting for 36% of the total, followed by Buffalo, NY, with 17% and New Orleans, LA, with 15% (table 10).

The daily average domestic raw steel production for January 2017, as calculated from the American Iron and Steel Institute (AISI) monthly production data, was 225,000 metric tons, up by 8% from that in January and December 2016 (table 12). Raw steel production capability utilization (AISI data) was 73% in January 2017, up from 68% in December 2016 and up from 69% in January 2016 (table 12). The electric furnace portion of raw steel production for January 2017 was 68%, the same as that in December 2016, and up from 66% in January 2016.

Continuous cast steel production accounted for 99.6% of total raw steel production in January 2017, 99.6% in December 2016, and 99.2% in January 2016 (table 12).

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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 2017		
	Integrated steel producers ³	Electric furnace steel producers ⁴	Total for steel producers
Scrap:			
Receipts from dealers and other sources	1,420	1,710	3,130
Receipts from other own company plants	39	147	187
Production recirculating scrap	204	150	354
Production obsolete scrap	W	W	7
Consumption (by type of furnace):			
Blast furnace	W	W	134
Basic oxygen process	W	W	348
Electric furnace	1,210	1,770	2,980
Other (including air furnace) ⁵	W	W	217
Total consumption	1,690	1,990	3,680
Shipments	51	6	57
Stocks, end of period	1,730	2,080	3,800
Pig iron (includes hot metal):			
Receipts	335	57	392
Production	1,260	--	1,260
Consumption (by type of furnace):			
Basic oxygen process	W	W	W
Direct castings ⁶	--	--	--
Electric furnace	W	W	W
Total consumption	1,620	86	1,700
Shipments	--	--	--
Stocks, end of period	W	W	344
Direct-reduced iron:⁷			
Receipts	79	87	166
Total consumption	96	81	177
Stocks, end of period	151	73	224

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 2017 data are based on returns from 21% of consumer surveys, representing 33% 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 2017			
	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	42	W	44	W
Cut structural and plate	283	23	303	286
No. 1 heavy melting steel	281	42	336	226
No. 2 heavy melting steel	358	27	391	223
No. 1 and electric furnace bundles	149	W	178	162
No. 2 and all other bundles	65	--	73	27
Electric furnace 1 foot and under (not bundles)	W	W	W	W
Railroad rails	15	--	15	7
Turnings and borings	169	2	174	143
Slag scrap	30	70	65	125
Shredded and fragmentized	870	W	941	1,430
No. 1 busheling	384	19	448	273
Steel cans (post consumer)	5	--	5	(4)
All other carbon steel scrap	228	71	305	369
Stainless steel scrap	75	27	111	62
Alloy steel scrap	28	19	47	183
Ingot mold and stool scrap	W	W	3	2
Machinery and cupola cast iron	W	W	W	W
Cast iron borings	12	W	13	4
Other iron scrap	92	31	117	82
Other mixed scrap	44	5	105	72
Total	3,130	354	3,680	3,800

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 2017		
	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	339	52	393
North Central:			
Illinois and Indiana	389	27	426
Iowa, Minnesota, Nebraska, Wisconsin	215	17	235
Michigan	153	51	172
Ohio	451	86	556
Total	1,210	183	1,390
South Atlantic:			
Virginia, West Virginia	78	7	119
Georgia, North Carolina, South Carolina	239	14	276
Total	317	21	395
South Central:			
Alabama, Kentucky, Mississippi, Tennessee	550	38	602
Arkansas, Louisiana, Texas	545	44	670
Total	1,100	82	1,270
Mountain and Pacific:			
Arizona, California, Colorado, Oregon, Utah, Washington	173	16	232
Grand total	3,130	354	3,680

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 2017				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	10	W	--	W	W
Cut structural and plate	35	96	24	107	W
No. 1 heavy melting steel	58	83	15	100	25
No. 2 heavy melting steel	6	91	43	186	W
No. 1 and electric furnace bundles	8	106	4	27	W
No. 2 and all other bundles	11	36	1	W	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	18	55	24	65	7
Slag scrap	5	21	1	1	1
Shredded and fragmentized	59	273	152	360	25
No. 1 busheling	43	153	30	155	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	35	154	3	34	3
Stainless steel scrap	W	W	--	W	--
Alloy steel scrap	2	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	5	33	W	6	W
Other mixed scrap	W	19	W	5	W
Total	339	1,210	317	1,100	173

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 2017				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	10	W	W	W	W
Cut structural and plate	40	94	45	104	W
No. 1 heavy melting steel	60	111	18	121	26
No. 2 heavy melting steel	11	98	47	200	36
No. 1 and electric furnace bundles	8	114	4	48	W
No. 2 and all other bundles	10	39	6	16	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	20	57	24	66	7
Slag scrap	9	42	2	10	W
Shredded and fragmentized	54	289	184	389	25
No. 1 busheling	44	163	32	207	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	49	200	7	46	3
Stainless steel scrap	53	22	--	W	--
Alloy steel scrap	10	29	--	W	--
Ingot mold and stool scrap	W	2	--	W	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	--	W
Other iron scrap	6	49	W	5	--
Other mixed scrap	W	31	W	5	W
Total	393	1,390	395	1,270	232

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 2017	
	Quantity	Value
North America and South America:		
Canada	58	15,100
Ecuador	30	8,450
Mexico	182	52,400
Peru	65	17,200
Other ³	1	26
Total	336	93,100
Africa, Europe, Middle East:		
Belgium	1	163
Germany	(4)	109
Italy	36	9,580
Kuwait	46	12,100
Netherland	1	209
Spain	(4)	99
Sweden	(4)	99
Turkey	82	22,200
United Arab Emirates	2	558
Other ³	1	358
Total	169	45,400
Asia, Australia, Oceania:		
Bangladesh	32	7,560
China	95	69,400
Hong Kong	3	2,440
India	21	8,120
Indonesia	1	418
Japan	2	1,990
Korea, Republic of	88	24,500
Malaysia	3	912
Pakistan	32	12,000
Singapore	1	277
Taiwan	116	40,800
Thailand	33	8,710
Vietnam	47	12,400
Other ³	(4)	7
Total	473	190,000
Grand total	978	328,000

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 2017 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 2017	
	Quantity	Value
Canada–United States border:		
Buffalo, NY	11	3,640
Detroit, MI	11	3,030
Great Falls, MT	2	674
Ogdensburg, NY	2	758
Pembina, ND	19	4,820
Other	6	1,040
Total	51	14,000
East coast:		
Baltimore, MD	7	5,390
Boston, MA	77	21,400
Charleston, SC	4	2,800
Miami, FL	19	6,670
New York City, NY	100	41,200
Norfolk, VA	11	8,240
Philadelphia, PA	63	17,600
Portland, ME	4	687
Providence, RI	22	5,800
Savannah, GA	11	6,720
St. Albans, VT	4	628
Other	1	93
Total	323	117,000
Gulf coast and Mexico–United States border (includes Caribbean territories):		
El Paso, TX	4	961
Houston–Galveston, TX	38	14,300
Laredo, TX	63	20,500
San Juan, PR	15	3,890
Tampa, FL	27	8,240
Other	(3)	335
Total	147	48,300
West coast and Hawaii:		
Columbia–Snake, OR	30	7,970
Honolulu, HI, and Anchorage, AK	1	226
Los Angeles, CA	184	73,100
San Diego, CA	29	6,660
San Francisco, CA	130	37,300
Seattle, WA	82	23,500
Total	456	149,000
Grand total	978	328,000

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.

³Less than ½ unit.

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 2017	
	Quantity	Value
No. 1 heavy melting steel	236	63,600
No. 2 heavy melting steel	30	8,160
No. 1 bundles	5	1,400
No. 2 bundles	(3)	40
Shredded steel scrap	401	110,000
Borings, shovelings and turnings	(3)	94
Cut plate and structural	31	8,340
Tinned iron or steel	6	2,040
Remelting scrap ingots	(3)	74
Cast iron	14	5,040
Other iron and steel	184	67,200
Total carbon steel and cast iron	907	266,000
Stainless steel	34	36,900
Other alloy steel	37	25,200
Total stainless and alloy steel	71	62,100
Total carbon, stainless, alloy steel and cast iron	978	328,000
Ships, boats, and other vessels for breaking up (for scrapping)	1	57
Used rails for rerolling and other uses	1	2,050
Total scrap exports	979	330,000
Exports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	5	1,680
Pig iron > or = 0.5% phosphorus	(3)	11
Alloy pig iron	--	--
Total pig iron	5	1,700
Direct-reduced iron (DRI)	94	20,400
Spongy iron products, not DRI	(3)	3,030
Granules for abrasive cleaning and other uses	2	3,340
Powders of alloy steel	2	4,090
Other ferrous powders	8	8,440
Total DRI, granules, powders	106	39,300
Grand total	1,091	371,000

-- 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 2017	
	Quantity	Value
Bahamas	1	80
Brazil	(3)	555
Canada	247	71,400
China	(3)	156
France	(3)	98
Germany	(3)	57
Mexico	23	10,200
Sweden	33	8,610
United Kingdom	39	10,700
Other ⁴	1	480
Total	343	102,000

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 2017 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 2017	
	Quantity	Value
Baltimore, MD	(3)	60
Buffalo, NY	58	23,200
Charleston, SC	20	5,620
Detroit, MI	123	34,800
Duluth, MN	5	1,280
El Paso, TX	3	1,040
Galveston, TX	1	709
Great Falls, MT	2	338
Laredo, TX	12	5,680
Miami	1	115
Mobil, AL	3	1,610
New Orleans, LA	51	13,800
Nogales, AZ	1	167
Ogdensburg, NY	2	1,020
Pembina, ND	7	2,040
Portland, ME	1	347
San Diego, CA	3	1,790
Seattle, WA	46	7,780
S. Albans, VT	2	512
Other	2	495
Total	343	102,000

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.

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 2017	
	Quantity	Value
No. 1 heavy melting steel	14	3,600
No. 2 heavy melting steel	6	1,340
No. 1 bundles	74	21,400
No. 2 bundles	6	1,440
Shredded steel scrap	100	23,700
Borings, shovelings and turnings	6	1,390
Cut plate and structural	15	3,610
Tinned iron or steel	7	2,120
Remelting scrap ingots	(3)	62
Cast iron	9	2,300
Other iron and steel	37	8,130
Total carbon steel and cast iron	273	69,200
Stainless steel	22	21,800
Other alloy steel	48	11,500
Total stainless and alloy steel	70	33,200
Total carbon, stainless, alloy steel and cast iron	343	102,000
Ships, boats, and other vessels for breaking up (for scrapping)	(3)	3
Used rails for rerolling and other uses	6	1,780
Total scrap imports	350	104,000
Imports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	168	45,600
Pig iron > or = 0.5% phosphorus	--	--
Alloy pig iron	(3)	38
Total pig iron	168	45,600
Direct-reduced iron (DRI)	251	50,000
Spongy iron products, not DRI	(3)	396
Granules for abrasive cleaning and other uses	2	2,230
Powders of alloy steel	6	8,670
Other ferrous powders	4	6,000
Total DRI, granules, powders	264	67,200
Grand total	782	217,000

-- Zero.

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

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	Monthly	Year	Monthly	Year
		to date ²		to date ²		to date ²
2016:						
January	6,460	6,460	68.7	68.7	99.2	99.2
February	6,420	12,900	73.1	70.8	99.2	99.2
March	6,770	19,700	72.1	71.3	99.2	99.2
April	6,600	26,300	72.6	71.6	99.2	99.2
May	6,980	33,200	74.3	72.1	99.6	99.3
June	6,820	40,100	75.1	72.6	99.2	99.3
July	6,700	46,800	71.3	72.4	99.5	99.3
August	6,650	53,400	70.8	72.2	99.7	99.3
September	6,190	59,600	68.0	71.8	99.4	99.4
October	6,230	65,800	65.4	71.1	99.6	99.4
November	6,190	72,000	67.1	70.8	99.6	99.4
December	6,460	78,500	67.8	70.5	99.6	99.4
2017, January	6,980	6,980	73.3	73.3	99.6	99.6

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
2016:						
January	154.87	152.42	160.17	157.64	237.54	233.79
February	157.33	154.85	163.50	160.92	218.54	215.09
March	169.00	166.33	173.25	170.51	218.54	215.09
April	210.01	206.69	209.75	206.44	254.00	249.99
May	241.27	237.46	245.83	241.95	299.72	294.99
June	223.21	219.68	221.42	217.92	299.72	294.99
July	208.40	205.11	211.42	208.08	295.91	291.24
August	208.90	205.60	209.84	206.53	292.10	287.49
September	196.64	193.53	197.67	194.55	275.59	271.24
October	179.20	176.37	178.84	176.01	268.22	263.99
November	200.45	197.28	206.42	203.16	274.32	269.99
December	238.49	234.72	245.72	241.84	321.73	316.65
Average, January–December	198.98	195.84	201.99	198.80	271.33	267.04
2017, January	274.26	269.93	221.74	218.24	345.44	339.98

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

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