Mineral Industry Surveys

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IRON AND STEEL SCRAP IN JANUARY 2018

On a daily average basis in January 2018, iron and steel scrap consumption decreased slightly and home scrap production decreased by 8% compared with those of December 2017 (table 1). Purchased scrap receipts in January 2018 increased slightly compared to those of December 2017. Stocks of purchased and home scrap at the end of January 2018 were down slightly from those at the end of December 2017. 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 28% of the total scrap consumption in those sectors, and estimates for nonrespondents to this survey.

On a daily average basis in January 2018, pig iron production increased by 3% and consumption was unchanged compared with those of December 2017 (table 1). Stocks of pig iron at the end of January 2017 increased by 10% from those at the end of December.

Exports of iron and steel scrap in January 2018 decreased by 9% from those in December 2017 (table 6). Turkey was the leading destination, accounting for 27% of the total tonnage of exports, followed by China and Taiwan with 11% each. New York, NY, was the leading U.S. Customs district for tonnage of exports, accounting for 14% of the total, followed by Los Angeles, CA, with 13%, and Seattle, WA, with 10% (table 7).

Imports of iron and steel scrap for January 2018 increased slightly from those in December 2017 (table 9). Canada was the leading country of origin, accounting for 66% of the total tonnage of imports, followed by Mexico, with 12% and the United Kingdom with 11%. Detroit, MI, was the leading U.S. Customs district for tonnage of imports, accounting for 33% of the total, followed by New Orleans, LA, with 18%, and Seattle, WA, with 17% (table 10).

The daily average domestic raw steel production for January 2018, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, was 222,000 metric tons, up slightly from that in December 2017 and down slightly from that in January 2017 (table 12). Raw steel production capability utilization (AISI data) was 74% in January 2018, up from 72% in December 2017, and 73% in January 2017 (table 12). The electric furnace portion of raw steel production for January 2018 was 68%, down from 69% in December 2017 and the same as 68% in January 2017.

Continuous cast steel production accounted for 98% of total raw steel production in January 2018, and 99.6% in December 2017 and January 2017 (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 2018		
	Integrated steel producers[3]	Electric furnace steel producers[4]	Total for steel producers
Scrap:			
Receipts from dealers and other sources	1,420	1,740	3,160
Receipts from other own company plants	47	197	244
Production recirculating scrap	198	140	338
Production obsolete scrap	W	W	7
Consumption (by type of furnace):			
Blast furnace	W	W	125
Basic oxygen process	W	W	321
Electric furnace	1,200	1,830	3,030
Other (including air furnace)[5]	W	W	213
Total consumption	1,640	2,050	3,690
Shipments	W	W	W
Stocks, end of period	1,800	2,300	4,100
Pig iron (includes hot metal):			
Receipts	402	87	489
Production	1,230	--	1,230
Consumption (by type of furnace):			
Basic oxygen process	W	W	W
Direct castings[6]	--	--	--
Electric furnace	W	W	W
Total consumption	1,610	76	1,680
Shipments	--	--	--
Stocks, end of period	W	W	429
Direct-reduced iron:[7]			
Receipts	113	65	178
Total consumption	84	78	162
Stocks, end of period	197	80	277

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

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

[2]Includes manufacturers of raw steel that also produce steel castings. January 2018 data are based on returns from 21% of consumer surveys, representing 28% of scrap consumption during this month, and estimates for nonrespondents of this survey.

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

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

[5]Includes vacuum melting furnaces and miscellaneous uses.

[6]Includes ingot molds and stools.

[7]Includes 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 2018			
	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	41	W	43	W
Cut structural and plate	264	26	291	337
No. 1 heavy melting steel	252	46	301	193
No. 2 heavy melting steel	329	24	362	215
No. 1 and electric furnace bundles	167	W	167	186
No. 2 and all other bundles	58	W	62	31
Electric furnace 1 foot and under (not bundles)	W	W	W	W
Railroad rails	18	W	18	14
Turnings and borings	174	2	186	160
Slag scrap	35	67	70	88
Shredded and fragmentized	940	W	1,060	1,650
No. 1 busheling	374	18	400	304
Steel cans (post consumer)	7	--	9	3
All other carbon steel scrap	209	69	285	386
Stainless steel scrap	75	28	111	56
Alloy steel scrap	28	16	44	174
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	101	21	122	78
Other mixed scrap	70	W	122	76
Total	3,160	338	3,690	4,100

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

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

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

[3]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]

(Thousand metric tons)

Region and State	January 2018		
	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	306	46	351
North Central:			
Illinois and Indiana	398	35	463
Iowa, Minnesota, Nebraska, Wisconsin	236	15	252
Michigan	159	49	163
Ohio	432	89	508
Total	1,230	189	1,390
South Atlantic:			
Virginia, West Virginia	80	--	113
Georgia, North Carolina, South Carolina	225	14	272
Total	304	14	384
South Central:			
Alabama, Kentucky, Mississippi, Tennessee	535	35	616
Arkansas, Louisiana, Texas	528	37	618
Total	1,060	73	1,230
Mountain and Pacific:			
Arizona, California, Colorado, Oregon, Utah, Washington	262	16	330
Grand total	3,160	338	3,690

-- Zero.

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

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

[3]Includes 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 2018				
	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	23	86	25	110	W
No. 1 heavy melting steel	45	87	13	79	27
No. 2 heavy melting steel	6	93	33	163	W
No. 1 and electric furnace bundles	7	98	2	57	W
No. 2 and all other bundles	11	32	W	W	W
Electric furnace 1 foot and under (not bundles)	--	--	--	--	--
Railroad rails	W	W	--	4	W
Turnings and borings	19	54	24	70	7
Slag scrap	5	25	W	W	W
Shredded and fragmentized	52	306	138	350	94
No. 1 busheling	42	155	W	145	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	31	138	W	31	3
Stainless steel scrap	W	W	--	W	--
Alloy steel scrap	2	23	--	W	--
Ingot mold and stool scrap	W	W	--	W	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	W	W
Other iron scrap	4	29	W	6	W
Other mixed scrap	W	36	W	5	W
Total	306	1,230	304	1,060	262

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

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

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

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

[4]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[1, 2, 3]

(Thousand metric tons)

Item	January 2018				
	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	24	98	41	108	W
No. 1 heavy melting steel	45	115	18	96	28
No. 2 heavy melting steel	10	96	37	180	39
No. 1 and electric furnace bundles	7	101	2	54	W
No. 2 and all other bundles	11	29	W	14	W
Electric furnace 1 foot and under (not bundles)	--	W	--	--	--
Railroad rails	W	W	--	4	W
Turnings and borings	19	61	24	74	7
Slag scrap	9	44	W	12	W
Shredded and fragmentized	43	315	183	429	94
No. 1 busheling	47	166	30	155	2
Steel cans (post consumer)	W	W	W	--	--
All other carbon steel scrap	44	181	12	45	3
Stainless steel scrap	54	21	--	W	--
Alloy steel scrap	9	26	--	W	--
Ingot mold and stool scrap	W	2	--	W	--
Machinery and cupola cast iron	--	W	W	W	--
Cast iron borings	W	W	W	W	W
Other iron scrap	5	37	W	8	--
Other mixed scrap	W	35	W	5	W
Total	351	1,390	384	1,230	330

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

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

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

[3]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 OR LOCALITY[1, 2]

(Thousand metric tons and thousand dollars)

Region and country or locality	January 2018	
	Quantity	Value
North America and South America:		
Canada	67	16,200
Mexico	127	35,200
Other[3]	(4)	108
Total	195	51,500
Africa, Europe, Middle East:		
Austria	(4)	269
Belgium	(4)	331
Egypt	40	12,300
Germany	(4)	237
Italy	(4)	29
Kuwait	17	6,120
Netherland	1	480
Spain	(4)	29
Sweden	(4)	37
Turkey	308	92,400
United Arab Emirates	1	521
United Kingdom	(4)	181
Other[3]	(4)	94
Total	368	113,000
Asia, Australia, Oceania:		
Australia	(4)	53
Bangladesh	36	11,000
China	128	61,100
Hong Kong	5	3,150
India	78	18,500
Indonesia	18	6,120
Japan	1	696
Korea, Republic of	76	24,600
Malaysia	10	4,180
Pakistan	39	17,000
Philippines	2	1,330
Taiwan	129	46,100
Thailand	4	2,010
Vietnam	34	11,300
Total	559	207,000
Grand total	1,120	372,000

[1]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.

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

[3]Includes countries with January 2018 quantities of less than 500 metric tons.

[4]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[1, 2]

(Thousand metric tons and thousand dollars)

Region and customs district	January 2018	
	Quantity	Value
Canada–United States border:		
Buffalo, NY	10	2,600
Detroit, MI	18	4,290
Duluth, MN	1	274
Great Falls, MT	1	201
Ogdensburg, NY	2	534
Pembina, ND	23	6,350
Other	7	1,010
Total	62	15,300
East coast:		
Baltimore, MD	42	16,100
Boston, MA	72	20,900
Charleston, SC	13	7,220
Miami, FL	45	16,500
New York City, NY	153	58,000
Norfolk, VA	11	6,670
Philadelphia, PA	96	23,300
Portland, ME	17	5,590
Savannah, GA	14	6,050
St. Albans, VT	4	936
Winmington, NC	(3)	53
Total	466	161,000
Gulf coast and Mexico–United States		
border (includes Caribbean territories):		
El Paso, TX	9	1,420
Houston–Galveston, TX	52	6,050
Laredo, TX	78	22,200
San Juan, PR	23	7,050
Tampa, FL	25	9,540
Other	1	286
Total	188	46,500
West coast and Hawaii:		
Columbia–Snake, OR	65	20,900
Honolulu, HI, and Anchorage, AK	2	492
Los Angeles, CA	143	60,200
San Diego, CA	13	2,970
San Francisco, CA	68	24,400
Seattle, WA	116	39,700
Total	407	149,000
Grand total	1,120	372,000

[1]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.

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

[3]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[1, 2]

(Thousand metric tons and thousand dollars)

Item	January 2018	
	Quantity	Value
No. 1 heavy melting steel	368	112,000
No. 2 heavy melting steel	44	13,000
No. 1 bundles	3	869
No. 2 bundles	--	--
Shredded steel scrap	362	113,000
Borings, shovelings and turnings	(3)	79
Cut plate and structural	41	13,600
Tinned iron or steel	4	1,220
Remelting scrap ingots	(3)	117
Cast iron	97	25,400
Other iron and steel	140	49,400
Total carbon steel and cast iron	1,060	329,000
Stainless steel	24	20,500
Other alloy steel	39	22,500
Total stainless and alloy steel	63	43,000
Total carbon, stainless, alloy steel and cast iron	1,120	372,000
Ships, boats, and other vessels for breaking up (for scrapping)	(3)	44
Used rails for rerolling and other uses	(3)	298
Total scrap exports	1,120	372,000
Exports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	1	569
Pig iron > or = 0.5% phosphorus	--	--
Alloy pig iron	(3)	7
Total pig iron	1	576
Direct-reduced iron (DRI)	80	23,200
Spongy iron products, not DRI	45	20,200
Granules for abrasive cleaning and other uses	3	3,060
Powders of alloy steel	2	6,570
Other ferrous powders	6	8,550
Total DRI, granules, powders	137	61,600
Grand total	1,260	434,000

-- Zero.

[1]Export valuation is on a free-alongside-ship basic.

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

[3]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF IRON AND
STEEL SCRAP BY SELECTED COUNTRY OR LOCALITY[1, 2]

(Thousand metric tons and thousand dollars)

Country or locality	January 2018	
	Quantity	Value
Bahamas	(3)	41
Brazil	1	286
Canada	241	77,000
China	(3)	32
Colombia	(3)	32
Ecuador	(3)	83
Egypt	(3)	72
France	(3)	7
Germany	1	149
Japan	1	294
Mexico	45	16,500
Netherlands	10	14,100
Russia	2	1,370
Sweden	27	9,390
Taiwan	(3)	90
United Kingdom	39	13,600
Other[4]	(3)	277
Total	367	133,000

[1]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.
[2]Data are rounded to no more than three significant digits; may not add to totals shown.
[3]Less than ½ unit.
[4]Includes countries with January 2018 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[1, 2]

(Thousand metric tons and thousand dollars)

Customs district	January 2018	
	Quantity	Value
Baltimore, MD	1	236
Buffalo, NY	35	15,600
Chicago, IL	4	696
Cleveland, OH	(3)	249
Columbia–Snake, OR	4	881
Detroit, MI	120	41,000
Duluth, MN	4	1,140
El Paso, TX	4	1,430
Great Falls, MT	2	686
Houston–Galveston, TX	2	1,860
Laredo, TX	27	10,400
Miami	1	120
Mobil, AL	13	15,900
New Orleans, LA	66	23,100
Nogales, AZ	1	219
Ogdensburg, NY	1	502
Pembina, ND	9	2,840
Portland, ME	(3)	189
San Diego, CA	10	2,580
Seattle, WA	61	13,000
S. Albans, VT	2	460
Other	1	286
Total	367	133,000

[1]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.
[2]Data are rounded to no more than three significant digits; may not add to totals shown.
[3]Less than ½ unit.

Source: 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 2018	
	Quantity	Value
No. 1 heavy melting steel	12	3,340
No. 2 heavy melting steel	12	2,450
No. 1 bundles	128	45,100
No. 2 bundles	6	1,470
Shredded steel scrap	30	5,910
Borings, shovelings and turnings	7	1,530
Cut plate and structural	12	3,350
Tinned iron or steel	8	2,910
Remelting scrap ingots	--	--
Cast iron	18	4,720
Other iron and steel	51	13,800
Total carbon steel and cast iron	282	84,500
Stainless steel	37	35,300
Other alloy steel	48	13,500
Total stainless and alloy steel	85	48,900
Total carbon, stainless, alloy steel and cast iron	367	133,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--
Used rails for rerolling and other uses	1	803
Total scrap imports	368	134,000
Imports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	491	172,000
Pig iron > or = 0.5% phosphorus	--	--
Alloy pig iron	(3)	71
Total pig iron	491	172,000
Direct-reduced iron (DRI)	507	113,000
Spongy iron products, not DRI	(3)	358
Granules for abrasive cleaning and other uses	2	2,280
Powders of alloy steel	6	9,110
Other ferrous powders	5	8,050
Total DRI, granules, powders	521	133,000
Grand total	1,380	439,000

-- Zero.

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

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

[3]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[1]

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]
2017:						
January	6,980	6,980	73.3	73.3	99.6	99.6
February	6,420	13,400	75.9	75.2	99.6	99.6
March	6,890	20,300	73.6	74.6	99.6	99.6
April	6,690	27,000	73.6	74.6	99.6	99.6
May	6,900	33,900	73.7	74.3	99.6	99.6
June	6,790	40,700	74.9	74.4	99.6	99.6
July	6,960	47,600	74.3	74.4	99.7	99.6
August	7,100	54,700	75.8	74.6	99.7	99.6
September	6,650	61,400	73.4	74.4	99.7	99.6
October	6,850	68,200	73.2	74.3	99.7	99.6
November	6,640	74,900	73.3	74.2	99.6	99.6
December	6,730	81,600	71.9	74.0	99.6	99.6
2018, January	6,890	6,890	73.6	73.6	98.0	98.0

[1]Data are rounded to no more than three significant digits.
[2]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 No. 1 HMS		Scrap Price Bulletin No. 1 HMS		Scrap Price Bulletin Pig Iron[1]	
	$/lt	$/t	$/lt	$/t	$/lt	$/t
2017:						
January	274.26	269.93	221.74	218.24	345.44	339.98
February	255.72	251.68	261.58	257.45	345.44	339.98
March	281.38	276.94	295.17	290.51	417.83	411.23
April	263.66	259.50	272.67	268.36	417.83	411.23
May	265.15	260.96	270.70	266.42	434.34	427.48
June	262.58	258.43	268.08	263.85	434.34	427.48
July	264.87	260.69	269.50	265.25	434.34	427.48
August	279.18	274.77	288.50	283.94	434.34	427.48
September	286.66	282.13	294.33	289.68	419.11	412.49
October	263.78	259.61	270.17	265.90	409.96	403.48
November	258.33	254.25	266.00	261.80	408.94	402.48
December	283.67	279.19	286.83	279.35	408.94	402.48
Average, January–December	269.94	265.67	272.11	267.56	409.24	402.77
2018, January	315.05	310.07	255.46	251.43	410.97	404.48

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

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