Mineral Industry Surveys

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IRON AND STEEL SCRAP IN JANUARY 2019

Iron and steel scrap consumption decreased slightly and home (recirculating) scrap production decreased by 7% in January 2019 compared with those of December 2018. Purchased scrap receipts in January 2019 decreased by 3% compared with those in December 2018. Stocks of purchased and home scrap at the end of January 2019 decreased slightly compared with those at the end of December 2018 (table 1). These observations are based upon responses from about 18% of the companies surveyed that manufacture pig iron and semifinished steel products, which account for about 23% of the total scrap consumption in those sectors and estimates for nonrespondents to this survey.

Pig iron production in January 2019 decreased by 20%, and pig iron consumption decreased by 15% from those of December 2018 (table 1).

Exports of iron and steel scrap in January 2019 decreased by 21% from those in December 2018 (table 6). Turkey, Canada, Mexico, and Taiwan were the leading destinations, accounting for 16%, 14%, 11%, and 11%, respectively, of the total tonnage of exports. Los Angeles, CA, New York City, NY, and San Francisco, CA, were the leading U.S. Customs districts for tonnage of exports, accounting for 22%, 18%, and 16%, respectively, of the total (table 7).

Imports of iron and steel scrap for January 2019 increased by 6% from those in December 2018. Canada was the leading country of origin, accounting for 55% of the total tonnage of imports, followed by Sweden and Mexico, with 13% and 12%, respectively (table 9). Detroit, MI, was the leading U.S. Customs district by tonnage of imports, accounting for 27% of the total, followed by New Orleans, LA, and Seattle, WA with 20% and 14%, respectively (table 10).

The daily average domestic raw steel production for January 2019, as calculated from the American Iron and Steel Institute's (AISI) monthly production data, was 242,000 metric tons, slightly more than that in December 2018 and a 9% increase from that in January 2018 (table 12). Raw steel production capability utilization (AISI data) was 80.4% in January 2019, up from 79.4% in December 2018 and 73.6% in January 2018 (table 12).

Continuous cast steel production accounted for 98.1% of total raw steel production in January 2019 (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 2019		
	Integrated steel producers[3]	Electric furnace steel producers[4]	Total for steel producers
Scrap:			
Receipts from dealers and other sources	1,530	1,710	3,240
Receipts from other own company plants	61	153	214
Production recirculating scrap	200	148	348
Production obsolete scrap	W	W	72
Consumption (by type of furnace):			
Blast furnace	W	W	126
Basic oxygen process	W	W	483
Electric furnace	1,170	1,770	2,940
Other (including air furnace)[5]	W	W	209
Total consumption	1,770	1,990	3,760
Shipments	W	W	117
Stocks, end of period	1,820	2,690	4,520
Pig iron (includes hot metal):			
Receipts	361	86	448
Production	1,120	--	1,120
Consumption (by type of furnace):			
Basic oxygen process	W	W	W
Direct castings[6]	W	W	W
Electric furnace	W	W	W
Total consumption	1,510	84	1,590
Shipments	--	--	--
Stocks, end of period	237	273	510
Direct-reduced iron:[7]			
Receipts	114	87	201
Total consumption	100	94	194
Stocks, end of period	196	142	339

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 2019 data are based on returns from 18% of consumer surveys, representing 23% 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 2019			
	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	252	36	298	356
No. 1 heavy melting steel	267	49	317	218
No. 2 heavy melting steel	306	28	355	211
No. 1 and electric furnace bundles	146	--	147	166
No. 2 and all other bundles	79	W	83	25
Electric furnace 1 foot and under (not bundles)	W	W	W	W
Railroad rails	17	W	17	12
Turnings and borings	155	W	157	206
Slag scrap	35	62	64	95
Shredded and fragmentized	1,010	W	1,090	1,970
No. 1 busheling	324	W	370	316
Steel cans (post consumer)	W	W	W	W
All other carbon steel scrap	285	59	350	375
Stainless steel scrap	74	28	112	72
Alloy steel scrap	27	16	43	173
Ingot mold and stool scrap	W	W	3	2
Machinery and cupola cast iron	W	W	W	W
Cast iron borings	11	W	11	3
Motor blocks	W	--	W	W
Other iron scrap	116	W	144	78
Other mixed scrap	64	10	119	99
Total	3,240	348	3,760	4,520

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 2019		
	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	454	50	526
North Central:			
Illinois and Indiana	408	36	477
Iowa, Minnesota, Nebraska, Wisconsin	237	17	254
Michigan	141	49	155
Ohio	433	101	535
Total	1,220	204	1,420
South Atlantic:			
Virginia, West Virginia	96	--	118
Georgia, North Carolina, South Carolina	266	16	276
Total	361	16	393
South Central:			
Alabama, Kentucky, Mississippi, Tennessee	495	34	610
Arkansas, Louisiana, Texas	435	34	473
Total	930	68	1,080
Mountain and Pacific:			
Arizona, California, Colorado, Oregon, Utah, Washington	270	12	334
Grand total	3,240	348	3,760

-- 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 2019				
	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	36	79	30	86	W
No. 1 heavy melting steel	72	94	18	60	24
No. 2 heavy melting steel	6	84	38	138	W
No. 1 and electric furnace bundles	2	97	2	40	W
No. 2 and all other bundles	W	36	W	W	W
Electric furnace 1 foot and under (not bundles)	--	--	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	16	46	30	56	7
Slag scrap	6	23	W	W	W
Shredded and fragmentized	81	315	171	351	94
No. 1 busheling	39	151	W	105	2
Steel cans (post consumer)	W	W	--	--	--
All other carbon steel scrap	W	140	W	28	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
Motor block	--	W	--	W	--
Other iron scrap	2	44	--	W	W
Other mixed scrap	W	26	W	4	W
Total	454	1,220	361	930	270

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 2019				
	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	43	102	47	87	W
No. 1 heavy melting steel	77	127	20	68	25
No. 2 heavy melting steel	10	90	45	165	W
No. 1 and electric furnace bundles	2	94	W	45	W
No. 2 and all other bundles	W	35	W	W	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	3	W
Turnings and borings	17	50	30	52	7
Slag scrap	11	38	2	11	W
Shredded and fragmentized	89	344	176	390	94
No. 1 busheling	40	160	W	140	2
Steel cans (post consumer)	W	W	W	--	--
All other carbon steel scrap	W	184	W	36	3
Stainless steel scrap	53	23	--	W	--
Alloy steel scrap	10	25	--	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
Motor block	--	W	--	W	--
Other iron scrap	W	59	--	W	W
Other mixed scrap	W	35	W	3	W
Total	526	1,420	393	1,080	334

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 2019	
	Quantity	Value
North America and South America:		
Canada	137	22,300
Brazil	1	433
Ecuador	33	10,000
Mexico	104	28,900
Peru	32	9,590
Other[3]	(4)	180
Total	306	71,500
Africa, Europe, Middle East:		
Belgium	1	444
Egypt	42	11,300
Germany	1	861
Italy	2	1,500
Kuwait	47	12,700
Russia	1	290
Spain	1	605
Turkey	156	41,500
United Arab Emirates	2	832
Other[3]	1	780
Total	253	70,800
Asia, Australia, Oceania:		
Bangladesh	41	13,700
China	7	3,150
Hong Kong	7	5,850
India	48	23,800
Indonesia	19	6,640
Japan	2	1,670
Korea, Republic of	100	31,100
Malaysia	63	28,800
Pakistan	23	11,900
Philippines	2	1,260
Taiwan	104	42,000
Thailand	7	3,640
Vietnam	5	1,350
Other[3]	(4)	322
Total	430	175,000
Grand total	989	317,000

[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 2019 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 2019	
	Quantity	Value
Canada–United States border:		
Buffalo, NY	12	4,230
Detroit, MI	29	2,820
Duluth, MN	1	283
Great Falls, MT	1	278
Ogdensburg, NY	4	1,010
Pembina, ND	38	12,400
Other	45	837
Total	130	21,900
East coast:		
Baltimore, MD	5	3,060
Boston, MA	48	13,400
Charleston, SC	6	3,790
Miami, FL	29	10,200
New York City, NY	179	61,000
Norfolk, VA	9	6,440
Portland, ME	3	683
Providence, RI	65	17,600
Savannah, GA	12	6,670
St. Albans, VT	4	1,120
Other	(3)	188
Total	361	124,000
Gulf coast and Mexico–United States		
border (includes Caribbean territories):		
El Paso, TX	6	2,160
Houston–Galveston, TX	15	7,780
Laredo, TX	50	15,400
Mobile, AL	1	570
New Orleans, LA	(3)	342
San Juan, PR	17	4,810
Tampa, FL	2	1,100
Total	92	32,200
West coast and Hawaii:		
Columbia–Snake, OR	1	463
Honolulu, HI, and Anchorage, AK	2	666
Los Angeles, CA	218	78,600
San Diego, CA	18	3,050
San Francisco, CA	159	51,100
Seattle, WA	9	5,410
Total	407	139,000
Grand total	989	317,000

[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 2019	
	Quantity	Value
No. 1 heavy melting steel	289	82,700
No. 2 heavy melting steel	50	15,200
No. 1 bundles	1	401
No. 2 bundles	(3)	16
Shredded steel scrap	279	83,600
Borings, shovelings and turnings	1	347
Cut plate and structural	27	7,530
Tinned iron or steel	8	1,870
Remelting scrap ingots	1	567
Cast iron	58	31,300
Other iron and steel	153	49,800
Total carbon steel and cast iron	866	273,000
Stainless steel	46	25,600
Other alloy steel	76	18,500
Total stainless and alloy steel	122	44,100
Total carbon, stainless, alloy steel and cast iron	988	317,000
Ships, boats, and other vessels for		
breaking up (for scrapping)	--	--
Used rails for rerolling and other uses	2	2,600
Total scrap exports	990	320,000
Exports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus		
Pig iron > or = 0.5% phosphorus	(3)	169
Alloy pig iron	(3)	40
Total pig iron	(3)	209
Direct-reduced iron (DRI)	22	6,820
Spongy iron products, not DRI	74	24,600
Granules for abrasive cleaning and other uses	2	2,840
Powders of alloy steel	1	6,110
Other ferrous powders	6	8,970
Total DRI, granules, powders	105	49,300
Grand total	1,100	370,000

-- 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 2019	
	Quantity	Value
Belgium	11	3,770
Canada	254	84,200
Germany	1	190
Japan	2	129
Marshall Islands	2	477
Mexico	55	20,100
Netherlands	29	10,100
Sweden	61	21,500
United Kingdom	49	19,700
Other[3]	1	1,080
Total	466	161,000

[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]Includes countries with January 2019 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 2019	
	Quantity	Value
Buffalo, NY	39	16,500
Charleston, SC	29	10,300
Detroit, MI	126	45,500
Duluth, MN	6	2,420
El Paso, TX	11	3,510
Great Falls, MT	1	271
Laredo, TX	34	12,500
Mobile, AL	35	13,100
New Orleans, LA	93	33,900
Nogales, AZ	4	1,200
Pembina, ND	18	5,680
San Diego, CA	3	810
Seattle, WA	65	14,000
S. Albans, VT	1	192
Other	2	1,420
Total	466	161,000

[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.

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 2019	
	Quantity	Value
No. 1 heavy melting steel	13	3,320
No. 2 heavy melting steel	9	2,390
No. 1 bundles	171	65,100
No. 2 bundles	10	3,470
Shredded steel scrap	76	24,800
Borings, shovelings and turnings	6	1,240
Cut plate and structural	10	2,760
Tinned iron or steel	14	4,410
Remelting scrap ingots	(3)	164
Cast iron	8	2,660
Other iron and steel	76	20,900
Total carbon steel and cast iron	393	131,000
Stainless steel	17	12,600
Other alloy steel	56	17,600
Total stainless and alloy steel	73	30,100
Total carbon, stainless, alloy steel and cast iron	466	161,000
Ships, boats, and other vessels for		
breaking up (for scrapping)	--	--
Used rails for rerolling and other uses	(3)	184
Total scrap imports	466	161,000
Imports of manufactured ferrous products:		
Pig iron < or = 0.5% phosphorus	609	232,000
Pig iron > or = 0.5% phosphorus	3	1,170
Alloy pig iron	(3)	90
Total pig iron	612	233,000
Direct-reduced iron (DRI)	313	83,400
Spongy iron products, not DRI	(3)	526
Granules for abrasive cleaning and other uses	3	3,380
Powders of alloy steel	6	9,270
Other ferrous powders	6	8,240
Total DRI, granules, powders	328	105,000
Grand total	1,410	499,000

-- 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]
2018:						
January	6,890	6,890	73.6	73.6	98.0	98.0
February	6,590	13,500	77.9	75.7	98.1	98.1
March	7,330	20,800	78.3	76.6	98.2	98.1
April	6,920	27,700	76.0	76.4	98.1	98.1
May	7,260	35,000	77.1	76.6	98.2	98.1
June	7,060	42,100	77.4	76.7	98.2	98.1
July	7,380	49,400	78.4	77.0	98.2	98.1
August	7,480	56,900	79.4	77.3	98.2	98.2
September	7,260	64,200	79.6	77.5	98.2	98.2
October	7,560	71,700	80.2	77.8	98.2	98.2
November	7,400	79,100	81.2	78.1	98.2	98.2
December	7,480	86,600	79.4	78.2	98.2	98.2
2019, January	7,520	7,520	80.4	80.4	98.1	98.1

[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 STEEL SCRAP AND PIG IRON

Period	Steel Scrap[1]		Pig Iron[2]	
	$/lt	$/t	$/lt	$/t
2018:				
January	315.05	310.07	389.98	383.82
February	318.75	313.72	388.45	382.32
March	335.15	329.86	386.92	380.81
April	350.47	344.93	395.45	389.20
May	342.83	377.91	394.19	387.96
June	334.58	329.30	392.93	386.72
July	340.72	335.34	412.09	405.58
August	323.99	318.87	431.25	424.44
September	304.21	299.41	390.23	384.07
October	311.01	306.09	460.00	452.74
November	331.33	326.10	462.83	455.52
December	329.93	324.72	396.44	390.18
Average, January–December	328.17	326.36	408.40	401.95
2019, January	305.19	300.37	395.27	389.03

[1]Prices are for No 1 heavy melting steel scrap. Source: American Metal Market.

[2]Prices are Brazilian basic pig iron, free on board, New Orleans, LA. Source: U.S. Census Bureau. Series was revised in January 2019 to reflect the new source of data.

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