



2019 Minerals Yearbook

IRON AND STEEL SCRAP [ADVANCE RELEASE]

IRON AND STEEL SCRAP

By Candice C. Tuck

Domestic survey data and tables were prepared by Hoa P. Phamdang, statistical assistant.

In 2019, U.S. ferrous scrap consumption was 50.1 million metric tons (Mt) valued at an estimated \$12.5 billion, a slight decrease from 51.6 Mt valued at an estimated \$16.7 billion (tables 1, 8). Exports of iron and steel scrap, excluding ships and used rails, reached 17.6 Mt in 2019 valued at \$5.32 billion, a 3% increase in quantity from 17.1 Mt in 2018, but a 10% decrease in value from \$5.90 billion (tables 1, 11). The U.S. steel industry has been commercially recycling steel scrap since 1906 using electric arc furnaces (EAFs) (Desy, 1980, p. 456). Production from EAFs accounted for 69.7% of the total raw steel produced in 2019, compared with 68.0% in 2018. U.S. raw steel production increased slightly to 87.8 Mt in 2019 compared with 86.6 Mt in 2018 (American Iron and Steel Institute, 2020, p. 71).

Iron and steel scrap is a vital raw material in the production of new steel and cast-iron products. The steelmaking and foundry industries in the United States are highly dependent upon the ready availability of scrap from manufacturing operations and the recovery of obsolete products. On average, the rate of scrap consumption by weight among raw materials is 25% for basic oxygen furnaces and 90% for EAFs. Iron foundries utilize steel mixtures containing an average of 75% steel scrap. Each metric ton of steel recycled accounts for 1.1 metric tons (t) of iron ore, 0.64 t of coal, and 0.05 t of limestone that will be conserved. Steel scrap recycling conserves energy, landfill space, and raw materials. Each year, steel recycling saves the energy equivalent of the electricity needed to power 18 million homes in the United States through its lower energy requirement than traditional steel production from iron ore. Steel is the most recycled material in the world, by tonnage, outpacing recycling of aluminum, glass, paper, and plastic combined (Steel Recycling Institute, undated).

In the United States, the primary source of obsolete steel is recycled automobiles. Historically, the U.S. automotive recycling industry recycled an estimated 18 Mt of steel from end-of-life vehicles annually, the equivalent of 13 million automobiles, using more than 275 car shredders. By weight, the typical car consists of about 60% iron and steel (James Woods, Senior Director, Steel Recycling Institute, unpub. data, January 8, 2016).

Minimills, in which EAFs are used, consumed direct-reduced iron (DRI) to improve steel quality, and integrated steelmakers continued to use small quantities of DRI in blast furnaces as a process coolant. Minimills commonly used a feed mix that had various proportions of DRI, pig iron, and scrap. Raw steel production by U.S. minimills increased to 61.2 Mt in 2019, 4% higher than the production of 58.9 Mt in 2018 (American Iron and Steel Institute, 2020, p. 70). Production of DRI in the United States decreased to 3.24 Mt in 2019 from 3.35 Mt in 2018. Global DRI production increased to 108 Mt in 2019 from 101 Mt in 2018 (Midrex Technologies, Inc., 2020, p. 6, 8).

Legislation and Government Programs

In March 2018, the President of the United States issued Proclamation 9705 on adjusting imports of steel into the United States, after investigations conducted by the U.S. Department of Commerce (DOC), under section 232 of the Trade Expansion Act of 1962, concluded that dependence on steel imports constituted a national security threat. The initial proclamations were announced in Federal Register notices and instituted a 25% ad valorem tariff on certain steel-mill articles imported from all countries, with the exception of Canada and Mexico. There were several additional proclamations in 2018 that instituted the tariff on Canada and Mexico and most countries in the world. Two proclamations were issued in May 2019 to remove the section 232 tariffs on imports from Canada and Mexico following an agreement with both countries on additional trade provisions (Executive Office of the President, 2018; U.S. Department of Homeland Security, undated). As of December 2019, steel imports from all countries except Argentina, Australia, Brazil, Canada, the Republic of Korea, and Mexico were subject to the 25% ad valorem tariff.

Consumption

The U.S. Geological Survey obtained domestic data for ferrous scrap from voluntary monthly and (or) or annual surveys of U.S. scrap-consuming operations. Total consumption for consumers included actual survey responses, statistically based estimates, and prior reports.

In 2019, total domestic consumption of ferrous scrap, based on reported and estimated data, was 50.1 Mt, slightly lower than the 51.6 Mt consumed in 2018. Apparent consumption of domestically produced scrap (net receipts plus imports minus exports) was 57.4 Mt in 2019, a slight decrease from 58.6 Mt in 2018. Consumption of pig iron decreased by 4% to 16.6 Mt in 2019 from 17.3 Mt in 2018. Consumption of DRI increased by 5% to 2.50 Mt in 2019 from 2.37 Mt in 2018. Manufacturers of pig iron, raw steel, and castings accounted for the largest share (93%) of total ferrous scrap consumption, followed by iron foundries and miscellaneous users (6%) and manufacturers of steel castings (1%). Ferrous scrap accounted for the largest share (72%) of ferrous materials consumed in steel making, followed by pig iron (24%) and DRI (4%) (tables 1–3).

In 2019, continuous cast steel production represented 99.7% of total raw steel production. Raw steel production capability decreased slightly to 110 Mt in 2019 from 111 Mt in 2018. The capability utilization increased to 79.8% in 2019 from 78.2% in 2018. Net shipments of all grades of steel mill products increased slightly to 87.3 Mt from 86.4 Mt in 2018 (American Iron and Steel Institute, 2020, p. 3).

Prices

The average composite delivered price of No. 1 heavy-melting steel scrap in 2019, calculated from prices per long ton published monthly by American Metal Market, was \$249.22 per metric ton, a 23% decrease from \$322.99 per metric ton in 2018. The average monthly price ranged from a low of \$186.39 per metric ton in October to a high of \$309.87 per metric ton in March (table 8). The average unit value of total ferrous scrap exports (including used rails for rerolling and other uses and ships, boats, and other vessels for scrapping) decreased by 13% to \$302.00 per metric ton from \$346.01 per metric ton in 2018 (table 11). The average unit value of total imports decreased by 15% to \$305.16 per metric ton from \$360.38 per metric ton in 2018 (table 17).

Foreign Trade

In 2019, U.S. net exports for all classes of ferrous scrap (excluding used rails for rerolling and other uses and ships, boats, and other vessels for scrapping) increased to 13.4 Mt with a net value of \$4.02 billion, from 12.1 Mt with a net value of \$4.09 billion in 2018 (table 1). This represented an increase of 11% in quantity and a slight decrease in value compared with 2018. The leading recipient of United States scrap in 2019 was Turkey (3.9 Mt), followed by Taiwan (1.8 Mt), Canada (1.7 Mt), Mexico (1.5 Mt), and Vietnam (1.3 Mt) (table 9). The leading type of scrap metal exported was shredded steel scrap (5.3 Mt), followed by No. 1 heavy-melting scrap (5.1 Mt), other steel scrap (including tinplate and terneplate) (2.4 Mt), iron scrap (1.4 Mt), and other alloy steel scrap (1.3 Mt) (table 11).

World Review

Iron and steel scrap is an essential raw material for the steel and foundry industries. Because scrap comes from such sources as discarded cars, consumer durables, industrial machinery, manufacturing operations, and old buildings, industrialized economies are generally the leading exporters of scrap to lesser developed steelmaking countries.

The United States exported more iron and steel scrap in 2019 than any other country (17.7 Mt), followed by, in decreasing order of export tonnage, the United Kingdom (8.1 Mt), Germany (7.9 Mt), Japan (7.7 Mt), France (6.5 Mt), the Netherlands (6.2 Mt), Canada (4.4 Mt), Belgium (3.8 Mt), and Russia (3.7 Mt). The leading importing nations, in decreasing order of import tonnage, were Turkey (18.9 Mt), the Republic of Korea (6.5 Mt), Italy (5.2 Mt), Belgium (4.5 Mt), and the United States (4.3 Mt) (World Steel Association, 2020a, p. 22).

World capacity for DRI production in 2019 was estimated to be about 136 million metric tons per year (Mt/yr), including about 121 Mt/yr of operational capacity, 15 Mt/yr of idled capacity, and 12 Mt/yr of capacity under construction. DRI production worldwide was estimated to have increased by 7% to 108 Mt in 2019 from 101 Mt in 2018. The leading producer of DRI was India (33.7 Mt), followed by Iran (28.5 Mt), Russia (8.03 Mt), Mexico (5.97 Mt), Saudi Arabia (5.79 Mt), and Egypt (4.05 Mt). In 2019, DRI capacity of about 12 Mt/yr was under

construction primarily in Algeria, Iran, and the United States. The leading technologies, in order of production capacity, were the Midrex process (92.7 Mt/yr), followed by HYL/Energiron (22.7 Mt/yr), Rotary Kiln (14.1 Mt/yr), and other technologies (6.6 Mt/yr) (Midrex Technologies Inc., 2020, p. 2–9, 12–15).

In 2018, Cleveland-Cliffs Inc. began construction of a 1.9-Mt/yr hot-briquetted iron plant at a brownfield site in Toledo, OH. The feedstock for the plant would be sourced from Cleveland-Cliffs mines, and products were expected to be sold to EAF partners throughout the Great Lakes region. The project was expected to be complete by mid-2020 (Cleveland-Cliffs Inc., 2020, p. 4).

Outlook

World apparent steel consumption (ASC) was reported to be 1,767 Mt in 2019 and is forecast to decrease slightly to 1,725 Mt in 2020, before increasing to 1,795 Mt in 2021. China's ASC is expected to increase to 980 Mt in 2020 and 2021, from 908 Mt in 2019. In 2020, the ASC is expected to decrease in the United States to 82.3 Mt, in India to 81.9 Mt, in Japan to 50.8 Mt, in the Republic of Korea to 48.9 Mt, and in Russia to 40.0 Mt. In 2021, the ASC is then expected to increase in India to 100 Mt, in the United States to 87.6, in Japan to 54.9 Mt, in the Republic of Korea to 50.8 Mt, and in Russia to 42.0 Mt (World Steel Association, 2020b).

References Cited

- American Iron and Steel Institute, 2020, Annual statistical report 2019: Washington, DC, American Iron and Steel Institute, 104 p.
- Cleveland-Cliffs Inc., 2020, 2019 annual report: Cleveland, OH, Cleveland-Cliffs Inc., 149 p. (Accessed November 13, 2020, at <http://d18rn0p25nwr6d.cloudfront.net/CIK-0000764065/6d3830b8-767a-4ebd-9d7f-5e1d82430c9d.pdf>.)
- Desy, D.H., 1980, Iron and steel, in Knoerr, A.W., ed., Mineral facts and problems—1980 edition: U.S. Bureau of Mines Bulletin 671, p. 455–480.
- Executive Office of the President, 2018, Adjusting imports of steel into the United States—Proclamation 9711 of March 22, 2018: Federal Register, v. 83, no. 60, March 28, p. 13361–13365. (Accessed November 1, 2019, at <https://www.federalregister.gov/documents/2018/03/28/2018-06425/adjusting-imports-of-steel-into-the-united-states>.)
- Midrex Technologies, Inc., 2020, 2019 world direct reduction statistics: Charlotte, NC, Midrex Technologies, Inc., September 8, 15 p. (Accessed December 8, 2020, at <https://www.midrex.com/wp-content/uploads/Midrex-STATSbook2019Final.pdf>.)
- Steel Recycling Institute, [undated], Buy recycled with recyclable steel: Pittsburgh, PA, Steel Recycling Institute, 2 p. (Accessed September 15, 2018, at <https://www.steelsustainability.org/-media/recycling-resources/buy-recycled-recyclable-steel.ashx>.)
- U.S. Department of Homeland Security, [undated], U.S. Customs and Border Protection—Section 232 tariffs on aluminum and steel: U.S. Department of Homeland Security. (Accessed November 1, 2019, via <https://www.cbp.gov/trade/remedies/232-tariffs-aluminum-and-steel>.)
- World Steel Association, 2020a, 2020 world steel in figures: Brussels, Belgium, World Steel Association, April 30, 30 p. (Accessed November 1, 2020, at <https://www.worldsteel.org/en/dam/jcr:f7982217-cfde-4fde-8ba0-795ed807f513/World%2520Steel%2520in%2520Figures%25202020i.pdf>.)
- World Steel Association, 2020b, Worldsteel short range outlook 2020: Brussels, Belgium, World Steel Association press release, October 15, 7 p. (Accessed December 1, 2020, at https://www.worldsteel.org/en/dam/jcr:c2e03246-332d-4bfa-aed8-e97a12b41bfe/worldsteel%2520Short%2520Range%2520Outlook%2520October%25202020_FINAL.pdf.)

GENERAL SOURCES OF INFORMATION

U.S. Geological Survey Publications

Historical Statistics for Mineral and Material Commodities in the United States. Data Series 140.

Iron. Ch. in United States Mineral Resources, Professional Paper 820, 1973.

Iron and Steel. Ch. in Mineral Commodity Summaries, annual.

Iron and Steel Scrap. Mineral Industry Surveys, monthly.

Iron and Steel Slag. Ch. in Mineral Commodity Summaries, annual.

Slag—Iron and Steel. Ch. in Minerals Yearbook, annual.

Other

American Metal Market, daily.

Annual Statistical Report. American Iron and Steel Institute.

Direct From Midrex. Midrex Direct Reduction Corporation, quarterly.

Directory of Iron and Steel Plants. Association of Iron and Steel Engineers.

Iron and Steel. Ch. in Mineral Facts and Problems, U.S. Bureau of Mines Bulletin 675, 1985.

Iron and Steel Technology. American Institute of Mining, Metallurgical, and Petroleum Engineers—Association for Iron and Steel Technology.

Making, Shaping, and Treating of Steel. Association of Iron and Steel Engineers.

Metal Bulletin, daily.

Steel Manufacturers Association.

Steel Statistical Yearbook. International Iron and Steel Institute.

Steel Times International.

TABLE 1
SALIENT U.S. IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS¹

(Thousand metric tons and thousand dollars)

	2015	2016	2017	2018	2019
Manufacturers of pig iron and raw steel and castings:²					
Ferrous scrap consumption	46,100	44,900	45,900	47,100 ^r	46,700
Pig iron consumption	22,200	20,700	19,800	16,700	16,100
Direct-reduced iron consumption	4,130	4,780	1,890	2,370	2,490
Net receipts of ferrous scrap ³	41,400	40,400	41,700	42,700	41,400
Home scrap production ⁴	4,990	4,820	4,430	4,940	5,010
Ending stocks of ferrous scrap, December 31	3,890	4,040	4,150	4,610 ^r	3,640
Manufacturers of steel castings:⁵					
Ferrous scrap consumption	468	406	406	658 ^r	436
Pig iron consumption	9	8	8	24 ^r	7
Direct-reduced iron consumption	--	1	1	1 ^r	1
Net receipts of ferrous scrap ³	348 ^r	298 ^r	298 ^r	544 ^r	348
Home scrap production ⁴	124 ^r	107 ^r	105 ^r	115 ^r	89
Ending stocks of ferrous scrap, December 31	67 ^r	65	67 ^r	81 ^r	70
Iron foundries and miscellaneous users:⁵					
Ferrous scrap consumption	4,440	4,190	4,080	3,800 ^r	2,940
Pig iron consumption	634	617	634	574 ^r	482
Direct-reduced iron consumption	3	3	3	3	3
Net receipts of ferrous scrap ³	3,280	3,180	3,080	3,250 ^r	2,330
Home scrap production ⁴	1,160	1,000	1,070	700 ^r	596
Ending stocks of ferrous scrap, December 31	240	234	313	425 ^r	242
Total, all manufacturing types:					
Ferrous scrap consumption	51,100	49,500	50,400	51,600 ^r	50,100
Pig iron consumption	22,800	21,300	20,500	17,300 ^r	16,600
Direct-reduced iron consumption	4,130	4,780	1,890	2,370	2,500
Net receipts of ferrous scrap ³	45,000	43,900	45,100	46,500 ^r	44,100
Home scrap production ⁴	6,270	5,930	5,600	5,750 ^r	5,690
Ending stocks, December 31:					
Ferrous scrap at consumer plants	4,200	4,340	4,530	5,120 ^r	3,950
Pig iron at consumer and supplier plants	672	440	453	577 ^r	496
Direct-reduced iron at consumer plants	216	237	265	334	224
Exports:⁶					
Ferrous scrap (includes tinplate and terneplate):⁷					
Quantity	12,800	12,600	15,000	17,100 ^r	17,600
Value	4,010,000	3,550,000	4,860,000	5,900,000	5,320,000
Pig iron, all grades:					
Quantity	17	16	34	14	7
Value	5,450	4,120	12,000	6,330	2,250
Direct-reduced iron, steelmaking grade:					
Quantity	20	178	640	551	314
Value	548	21,600	155,000	168,000	52,800
Imports for consumption:⁶					
Ferrous scrap (includes tinplate and terneplate):⁷					
Quantity	3,510	3,860	4,630	5,030	4,270
Value	955,000	949,000	1,490,000	1,810,000	1,300,000
Pig iron, all grades:					
Quantity	4,530	3,870	5,130	6,020	4,920
Value	1,290,000	948,000	1,770,000	2,360,000	1,740,000
Direct-reduced iron, steelmaking grade:					
Quantity	1,860	1,600	1,790	1,750	1,760
Value	483,000	334,000	563,000	639,000	585,000

¹Revised. -- Zero.

²Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

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

⁴Net receipts of scrap is defined as receipts from brokers, dealers, and other outside sources plus receipts from other company-owned plants minus shipments.

⁵Includes recirculating scrap that results from current operations and obsolete home scrap.

⁶Some consumers in the "Manufacturers of steel castings" category also produce iron castings; some consumers in the "Iron foundries and miscellaneous users" category also produce steel castings.

⁷Data from the U.S. Census Bureau. Export valuation is free alongside ship and import valuation is customs value.

⁸Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping.

TABLE 2

U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF IRON AND STEEL SCRAP IN 2019, BY GRADE¹

(Thousand metric tons)

Grade	Receipts of scrap		Production of home scrap		Consumption of purchased and home scrap	Shipments of scrap	Ending stocks, December 31
	From brokers, dealers, and other outside sources	From other company-owned plants	Recirculating scrap from current operations	Obsolete scrap ²			
Manufacturers of pig iron and raw steel and castings:							
Carbon steel:							
Low-phosphorus plate and punchings	165	--	W	8	184	--	7
Cut structural and plate	4,470	95	646	--	5,230	W	331
No. 1 heavy-melting steel	3,260	72	489	W	3,770	W	164
No. 2 heavy-melting steel	4,540	287	330	--	5,140	W	243
No. 1 and electric furnace bundles	1,850	35	--	--	1,900	7	130
No. 2 and all other bundles	891	1	W	--	913	W	31
Electric furnace, 1 foot and under (not bundles)	W	--	W	--	W	W	W
Railroad rails	177	W	--	--	183	--	9
Turnings and borings	1,890	36	20	--	1,950	W	180
Slag scrap	419	W	691	--	742	W	76
Shredded or fragmented	11,500	953	W	--	12,700	W	1,440
No. 1 busheling	4,500	113	276	W	4,910	W	276
Steel cans, postconsumer	W	--	W	--	W	--	2
All other carbon steel scrap	2,540	313	1,270	W	4,020	108	444
Stainless steel scrap	797	W	360	--	1,230	4	62
Alloy steel (except stainless)	294	W	120	--	412	W	59
Ingot mold and stool scrap	W	2	W	W	36	W	2
Machinery and cupola cast iron	27	W	--	--	29	--	2
Cast-iron borings	145	W	W	--	155	W	4
Motor blocks	5	--	--	--	5	--	1
Other iron scrap	1,470	W	323	W	1,760	W	108
Other mixed scrap	610	W	100	--	1,280	72	68
Total	39,600	2,710	4,880	131	46,700	893	3,640
Manufacturers of steel castings:							
Carbon steel:							
Low-phosphorus plate and punchings	144	7	30	(3)	178	2	31
Cut structural and plate	20	--	7	(3)	26	--	2
No. 1 heavy-melting steel	7	(3)	(3)	--	7	--	2
No. 2 heavy-melting steel	10	--	11	(3)	21	--	1
No. 1 and electric furnace bundles	(3)	--	--	--	(3)	--	(3)
No. 2 and all other bundles	--	--	--	--	--	--	--
Electric furnace, 1 foot and under (not bundles)	3	--	--	--	3	--	--
Railroad rails	(3)	--	--	--	(3)	--	(3)
Turnings and borings	W	2	W	--	40	--	2
Slag scrap	W	--	1	--	W	1	W
Shredded or fragmented	23	--	--	--	23	--	(3)
No. 1 busheling	30	--	--	--	30	W	1
Steel cans, postconsumer	--	(3)	--	--	(3)	--	(3)
All other carbon steel scrap	6	(3)	W	--	19	(3)	(3)
Stainless steel scrap	25	1	8	W	37	2	28
Alloy steel (except stainless)	21	W	9	--	33	W	3
Ingot mold and stool scrap	(3)	--	(3)	--	(3)	--	(3)
Machinery and cupola cast iron	--	--	--	--	--	--	--
Cast-iron borings	(3)	--	--	--	(3)	--	(3)
Motor blocks	--	--	--	--	--	--	--
Other iron scrap	7	4	(3)	(3)	11	(3)	(3)
Other mixed scrap	1	--	--	--	1	--	--
Total	338	15	84	5	436	6	70

See footnotes at end of table.

TABLE 2—Continued

U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF IRON AND STEEL SCRAP IN 2019, BY GRADE¹

(Thousand metric tons)

Grade	Receipts of scrap		Production of home scrap		Consumption of purchased and home scrap	Shipments of scrap	Ending stocks, December 31
	From brokers, dealers, and other outside sources	From other company-owned plants	Recirculating scrap from current operations	Obsolete scrap ²			
Iron foundries and miscellaneous users:							
Carbon steel:							
Low-phosphorus plate and punchings	174	W	6	W	180	W	5
Cut structural and plate	333	W	79	2	415	1	10
No. 1 heavy-melting steel	W	51	W	--	W	W	1
No. 2 heavy-melting steel	72	--	--	--	72	--	4
No. 1 and electric furnace bundles	52	--	(3)	--	52	--	1
No. 2 and all other bundles	W	--	1	--	W	3	1
Electric furnace, 1 foot and under (not bundles)	7	--	(3)	--	7	--	(3)
Railroad rails	40	--	W	--	41	--	2
Turnings and borings	W	--	11	(3)	47	6	16
Slag scrap	(3)	(3)	W	(3)	(3)	W	(3)
Shredded or fragmented	394	--	W	1	405	--	15
No. 1 busheling	318	--	3	--	324	W	11
Steel cans, postconsumer	5	--	(3)	(3)	5	(3)	(3)
All other carbon steel scrap	55	(3)	69	W	122	1	4
Stainless steel scrap	2	--	(3)	W	2	(3)	(3)
Alloy steel (except stainless)	W	--	1	--	6	(3)	1
Ingot mold and stool scrap	21	W	2	--	28	W	5
Machinery and cupola cast iron	270	(3)	87	W	368	W	52
Cast-iron borings	75	W	8	--	110	(3)	1
Motor blocks	66	--	--	--	66	--	(3)
Other iron scrap	159	24	222	W	395	11	107
Other mixed scrap	78	7	42	(3)	125	1	6
Total	2,240	116	590	6	2,940	25	242

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.²Includes ingot molds, stools, and scrap from old equipment and buildings.³Less than ½ unit.

TABLE 3
U.S. CONSUMER RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF PIG IRON
AND DIRECT-REDUCED IRON IN 2019¹

(Thousand metric tons)

	Receipts	Production	Consumption	Shipments	Stocks, December 31
Manufacturers of pig iron, raw steel, and castings:					
Pig iron	2,520 ²	13,500	16,100	W	463
Direct-reduced iron (DRI)	W	--	2,490	W	220
Manufacturers of steel castings:					
Pig iron	8	44	7	W	W
DRI	W	1	1	W	W
Iron foundries and miscellaneous users:					
Pig iron	471	3	482	W	W
DRI	W	--	3	W	W
Total, all manufacturing types:					
Pig iron	3,010	13,600	16,600	49	496
DRI	2,390	1	2,500	W	224

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes 1.390 million metric tons purchased by electric furnace steel producers and 12,438 metric tons purchased by integrated steel producers.

TABLE 4
U.S. CONSUMPTION OF IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON (DRI) IN 2019,
BY TYPE OF FURNACE¹

(Thousand metric tons)

Type of furnace	Manufacturers of pig iron and raw steel and castings			Manufacturers of steel castings			Iron foundries and miscellaneous users			Total, all manufacturing types		
	Scrap	Pig iron	DRI	Scrap	Pig iron	DRI	Scrap	Pig iron	DRI	Scrap	Pig iron	DRI
Blast furnace	W	--	W	W	--	W	--	--	W	1,630	--	12
Basic oxygen process	4,770	13,900	--	W	--	--	W	--	--	4,790	13,900	--
Electric furnace	40,200	1,870	W	436	W	W	1,980	W	W	42,600	W	2,490
Cupola furnace	W	--	--	--	W	--	W	W	--	1,040	W	--
Total	46,700	16,100	2,490	436	7	3	2,940	482	3	50,100	16,600	2,500

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 5
IRON AND STEEL SCRAP SUPPLY AVAILABLE FOR CONSUMPTION IN 2019, BY REGION AND STATE^{1,2}

(Thousand metric tons)

Region and State	Receipts of scrap		Production of home scrap			Supply available for consumption
	From brokers, dealers, and other outside sources	From other company-owned plants	Recirculating scrap resulting from current operations	Obsolete scrap ³	Shipments of scrap ⁴	
New England and Middle Atlantic:						
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	19	4	W	(5)	(5)	27
New Jersey and New York	856	(5)	W	W	W	886
Pennsylvania	3,290	123	683	W	W	4,110
Total	4,170	127	719	3	W	5,020
North Central:						
Illinois	1,550	64	78	--	14	1,680
Indiana	4,050	407	1,000	W	W	5,490
Iowa and Nebraska	1,770	46	70	W	W	1,890
Kansas and Missouri	14	6	17	--	--	37
Michigan	1,890	38	740	(5)	497	2,170
Minnesota	76	104	143	--	--	323
Ohio	5,670	240	1,180	113	323	6,880
Wisconsin	842	(5)	117	5	5	959
Total	15,900	905	3,350	128	843	19,400
South Atlantic:						
Florida and Georgia	741	--	24	--	(5)	764
North Carolina and South Carolina	2,770	4	(5)	--	(5)	2,780
Virginia and West Virginia	1,560	148	311	(5)	5	2,010
Total	5,080	152	335	(5)	5	5,560
South Central:						
Alabama and Mississippi	4,530	557	310	--	1	5,390
Arkansas, Louisiana, Oklahoma	3,710	W	277	W	--	3,990
Kentucky and Tennessee	2,620	293	202	W	W	3,130
Texas	2,540	W	107	W	W	2,920
Total	13,400	1,190	896	10	32	15,400
Mountain and Pacific:						
Arizona, Colorado, Idaho, Montana, Utah	2,020	W	W	--	W	2,040
California, Oregon, Washington	1,640	W	W	1	W	2,260
Total	3,660	470	224	1	45	4,310
Grand total	42,200	2,840	5,520	142	924	49,700

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Supply available for consumption is a net figure calculated by adding production to receipts and deducting scrap shipped during the year. The difference in stock levels at the beginning and end of the year is not taken into consideration.

³Includes ingot molds, stools, and scrap from old equipment, buildings, and so forth.

⁴Includes scrap shipped, transferred, or otherwise disposed of during the year.

⁵Less than ½ unit.

TABLE 6
U.S. CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN 2019, BY REGION AND STATE^{1,2,3}

(Thousand metric tons)

Region and State	Manufacturers of pig iron and raw steel and castings		Manufacturers of steel castings		Iron foundries and miscellaneous users		Total, all manufacturing types	
	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron
New England and Middle Atlantic:								
Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont	741	--	13	--	89	7	843	7
Pennsylvania	3,450	1,740	127	(4)	173	19	3,750	1,760
Total	4,200	1,740	140	(4)	262	26	4,600	1,770
North Central:								
Illinois	1,540	1,810	5	--	154	54	1,690	1,870
Indiana	4,710	4,410	30	(4)	255	49	5,000	4,460
Iowa, Kansas, Minnesota, Missouri, Nebraska, Wisconsin	2,870	34	30	(4)	545	110	3,450	144
Michigan	1,600	3,400	30	--	441	14	2,080	3,410
Ohio	6,310	3,020	72	(4)	453	60	6,830	3,080
Total	17,000	12,700	167	(4)	1,850	287	19,000	13,000
South Atlantic:								
Florida, Georgia, North Carolina, South Carolina	W	269	(4)	--	W	111	3,500	380
Virginia and West Virginia	W	--	(4)	(4)	W	1	3,920	1
Total	7,050	269	(4)	(4)	371	112	7,420	381
South Central:								
Alabama, Kentucky, Mississippi, Tennessee	W	W	W	(4)	W	W	8,440	933
Arkansas, Louisiana, Oklahoma	W	W	W	--	W	W	3,790	519
Texas	2,570	W	39	7	104	12	2,710	40
Total	14,600	1,430	78	7	233	54	14,900	1,490
Mountain and Pacific:								
Arizona, Colorado, Idaho, Montana, Utah	W	W	W	(4)	W	W	2,000	16
California, Oregon, Washington	W	W	W	(4)	W	W	2,050	3
Total	3,780	16	55	(4)	222	3	4,050	19
Grand total	46,700	16,100	436	7	2,940	482	50,100	16,600

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes recirculating scrap resulting from current operations and home-generated obsolete scrap.

³Includes molten pig iron used for ingot molds and direct castings.

⁴Less than ½ unit.

TABLE 7
U.S. CONSUMER STOCKS OF IRON AND STEEL SCRAP, DECEMBER 31, 2019, BY REGION AND STATE¹

(Thousand metric tons)

Region and State	Scrap					Total scrap
	Carbon steel ²	Stainless steel	Alloy steel	Cast iron ³	Other grades of scrap	
New England and Middle Atlantic:						
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	(4)	(4)	--	(4)	(4)	(4)
New Jersey and New York	54	--	--	2	(4)	56
Pennsylvania	155	14	25	9	5	207
Total	210	14	25	11	5	263
North Central:						
Illinois	66	(4)	(4)	1	W	67
Indiana	246	3	W	7	W	255
Iowa, Kansas, Missouri, Nebraska	54	(4)	W	50	W	106
Michigan	71	(4)	1	2	11	85
Minnesota and Wisconsin	35	2	W	5	W	45
Ohio	222	41	W	52	W	370
Total	694	46	42	117	21	928
South Atlantic:						
Florida, Georgia, North Carolina, South Carolina	390	(4)	(4)	W	W	415
Virginia and West Virginia	80	--	(4)	W	W	101
Total	470	(4)	(4)	24	22	516
South Central:						
Alabama, Kentucky, Mississippi, Tennessee	431	W	--	6	W	462
Arkansas, Louisiana, Oklahoma	196	W	(4)	35	W	231
Texas	1,260	W	(4)	14	W	1,280
Total	1,890	30	(4)	55	1	1,970
Mountain and Pacific:						
Arizona, Colorado, Idaho, Montana, Utah	77	(4)	(4)	W	W	130
California, Oregon, Washington	86	1	1	W	W	142
Total	163	1	1	75	31	273
Grand total	3,430	91	68	282	80	3,950

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

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Does not include rerolling rails.

³Includes borings.

⁴Less than ½ unit.

TABLE 8
 U.S. AVERAGE MONTHLY PRICE AND COMPOSITE PRICE FOR NO. 1
 HEAVY-MELTING STEEL SCRAP, WITH ANNUAL AVERAGES¹

(Dollars per metric ton)

Period	Chicago, IL	Philadelphia, PA	Pittsburgh, PA	Composite price
2018, average	314.22	315.82	338.92	322.99
2019:				
January	297.37	292.45	311.29	300.37
February	290.34	285.42	305.10	293.62
March	306.28	301.35	321.97	309.87
April	290.10	289.17	304.87	294.71
May	262.61	262.61	273.56	266.26
June	232.27	236.21	240.64	236.37
July	218.76	231.29	227.71	225.92
August	232.63	246.49	243.36	240.83
September	212.59	225.88	220.95	219.81
October	178.23	194.49	186.44	186.39
November	187.78	202.54	195.65	195.32
December	215.83	222.62	225.10	221.18
Average	243.73	249.21	254.72	249.22

¹Table includes data available through January 13, 2021. Calculated from prices published in American Metal Market.

TABLE 9
U.S. EXPORTS OF IRON AND STEEL SCRAP, BY COUNTRY OR LOCALITY^{1,2}

(Thousand metric tons and thousand dollars)

Country or locality	2018		2019	
	Quantity	Value	Quantity	Value
Argentina	(3)	182	(3)	189
Australia	(3)	126	1	553
Austria	2	1,980	1	2,440
Bangladesh	842 ^r	286,000 ^r	1,020	293,000
Belgium	24	11,000 ^r	19	13,900
Brazil	97	32,000	2	1,030
Canada	1,200 ^r	222,000 ^r	1,720	177,000
Cayman Islands	(3)	131	1	238
China	731	286,000	61	40,900
Colombia	(3)	62	42	13,900
Dominican Republic	1	271	1	592
Ecuador	140	47,400	93	26,500
Egypt	806 ^r	263,000	397	110,000
Finland	1	728	(3)	316
France	(3)	50	(3)	138
Germany	23	11,500	9	7,100
Greece	125	40,900	172	47,200
Guatemala	(3)	25	34	9,800
Hong Kong	123	99,700	117	91,700
India	945	423,000	1,030	506,000
Indonesia	467	164,000	280	90,600
Italy	6	5,420	43	18,800
Japan	136	64,000	103	43,700
Korea, Republic of	902	313,000	1,090	336,000
Kuwait	387	135,000	333	95,900
Malaysia	508	221,000	889	366,000
Mexico	1,820	551,000	1,460	321,000
Netherlands	13	9,220	4	3,650
Pakistan	416	200,000	507	227,000
Panama	1	759	1	711
Peru	379	128,000	407	112,000
Philippines	28	19,700	27	17,600
Russia	2	1,450	6	5,540
Saudi Arabia	44	14,900	347	94,000
Singapore	2	1,690	7	5,710
Spain	1	841	7	5,340
Sweden	2	2,140	1	1,710
Taiwan	1,960	714,000	1,840	645,000
Thailand	508	196,000	380	153,000
Turkey	3,390	1,080,000	3,910	1,050,000
United Arab Emirates	24	9,120	19	9,230
United Kingdom	4	1,690	5	2,970
Vietnam	1,040 ^r	339,000 ^r	1,260	366,000
Other	7 ^r	3,380 ^r	5	2,570
Total ⁴	17,100 ^r	5,900,000	17,600	5,320,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is free alongside ship value.

³Less than ½ unit.

⁴The United States exported scrap to 88 countries and (or) localities in 2018 and to 80 countries and (or) localities in 2019.

Source: U.S. Census Bureau.

TABLE 10
U.S. EXPORTS OF IRON AND STEEL SCRAP,
BY CUSTOMS DISTRICT^{1,2}

(Thousand metric tons and thousand dollars)

Customs district	2018		2019	
	Quantity	Value	Quantity	Value
Baltimore, MD	432	169,000	547	179,000
Boston, MA	908 ^r	306,000 ^r	1,060	297,000
Buffalo, NY	178 ^r	41,400 ^r	153	35,300
Charleston, SC	115	63,700	131	78,600
Chicago, IL	3	1,980	5	3,760
Cleveland, OH	1	468	2	1,060
Columbia-Snake, OR	845	290,000	740	212,000
Detroit, MI	252 ^r	53,500 ^r	180	42,300
Duluth, MN	249	6,620	12	4,720
El Paso, TX	123	40,300	221	47,600
Great Falls, MT	20	5,970	11	2,630
Honolulu, HI, and Anchorage, AK	142	48,500 ^r	137	39,000
Houston-Galveston, TX	421	171,000	452	192,000
Laredo, TX	888 ^r	272,000	773	171,000
Los Angeles, CA	3,030	1,190,000	3,230	1,090,000
Miami, FL	491	182,000	602	198,000
Mobile, AL	6	5,360	9	6,990
New Orleans, LA	6	2,910	84	37,500
New York, NY	2,620	988,000	2,660	919,000
Nogales, AZ	2	611	1	196
Norfolk, VA	260	135,000	320	158,000
Ogdensburg, NY	43 ^r	10,300 ^r	34	8,270
Pembina, ND	245	74,300	258	66,100
Philadelphia, PA	1,060	321,000	1,010	267,000
Portland, ME	91	25,200	75	17,100
Providence, RI	788	251,000	702	189,000
San Diego, CA	255	56,200	187	30,600
San Francisco, CA	1,730	602,000	1,670	513,000
San Juan, PR	182 ^r	55,400 ^r	188	52,300
Savannah, GA	199	93,100	178	101,000
Seattle, WA	886 ^r	320,000 ^r	686	236,000
St. Albans, VT	81	15,600 ^r	42	9,500
Tampa, FL	235	89,300	289	95,800
Wilmington, NC	2	1,760	4	2,960
Other	314	10,900 ^r	990	9,690
Total	17,100 ^r	5,900,000	17,600	5,320,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is free alongside ship value.

Source: U.S. Census Bureau.

TABLE 11
U.S. EXPORTS OF IRON AND STEEL SCRAP, BY GRADE^{1,2}

(Thousand metric tons and thousand dollars)

Grade	2018		2019	
	Quantity	Value	Quantity	Value
No. 1 heavy-melting scrap	5,290	1,710,000	5,140	1,420,000
No. 2 heavy-melting scrap	772	250,000	757	240,000
No. 1 bundles	24	7,300	183	11,900
No. 2 bundles	4	753	38	11,300
Shredded steel scrap	5,700	1,910,000	5,340	1,510,000
Borings, shovelings, and turnings	17 ^r	5,250 ^r	25	6,600
Cut plate and structural	533 ^r	181,000	504	142,000
Tinned iron or steel	63 ^r	16,800	95	27,600
Remelting scrap ingots	3	2,550	7	3,990
Stainless steel scrap	545 ^r	319,000 ^r	469	348,000
Other alloy steel scrap	891 ^r	280,000 ^r	1,330	246,000
Other steel scrap ³	2,450	841,000	2,380	658,000
Iron scrap	798	383,000	1,390	692,000
Ships, boats, and other vessels for scrapping	3	521	4	716
Used rails for rerolling and other uses ⁴	13	16,200	12	15,200
Total	17,100 ^r	5,920,000	17,700	5,330,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Export valuation is free alongside ship value.

³Includes tinplate and terneplate.

⁴Includes mixed (used plus new) rails.

Source: U.S. Census Bureau.

TABLE 12
U.S. EXPORTS OF USED RAILS FOR REROLLING AND OTHER USES,
BY COUNTRY OR LOCALITY^{1,2}

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Argentina	11	\$16	--	--
Australia	341	526	96	\$157
Bahamas, The	20	36	6	17
Brazil	(3)	13	34	31
British Virgin Islands	5	19	1	45
Cayman Islands	1	11	18	43
China	3	222	89	398
Chile	41	184	598	548
Colombia	20	41	114	203
Dominican Republic	8	101	38	200
Ecuador	(3)	10	5	51
France	3	4	6	17
Germany	100	46	1	56
India	10	18	52	556
Indonesia	(3)	4	8	38
Italy	(3)	5	195	267
Jamaica	28	40	223	992
Japan	31	126	1	72
Latvia	--	--	11	97
Malaysia	222	157	--	--
Mexico	12,000	14,100	10,500	11,000
Nicaragua	(3)	5	16	39
Panama	7	39	1	3
Poland	(3)	5	33	81
Saudi Arabia	5	7	(3)	4
South Africa	30	43	--	--
Sweden	(3)	6	9	98
Taiwan	218	91	--	--
Trinidad and Tobago	16	96	--	--
Turks and Caicos Islands	2	14	8	68
Other ⁴	17 ^r	201 ^r	16	162
Total	13,100	16,200	12,100	15,200

^rRevised. -- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Export valuation is free alongside ship value.

³Less than ½ unit.

⁴All countries and (or) localities receiving less than 5 metric tons of exports from the United States in 2018 and 2019 included in "Other."

Source: U.S. Census Bureau.

TABLE 13
U.S. EXPORTS OF DIRECT-REDUCED IRON, BY COUNTRY OR LOCALITY¹

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Algeria	118,000	\$41,500	--	--
Austria	80,000	23,200	42,000	\$1,380
Bermuda	60	4	--	--
Canada	13,500	1,150	14,900	1,550
China	9,000	12	--	--
Colombia	--	--	283	39
Curacao	--	--	88	3
Ecuador	31	3	--	--
Germany	--	--	4320	6
Korea, Republic of	--	--	864	17
Mexico	112,000	32,300	214,000	37,800
Saudi Arabia	--	--	26	3
Slovenia	152,000	47,300	--	--
Spain	66,000	22,400	--	--
Turkey	--	--	37,600	12,000
Total	551,000	168,000	314,000	52,800

-- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 14
U.S. EXPORTS OF PIG IRON, BY COUNTRY OR LOCALITY^{1,2}

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Australia	2	\$11	342	\$35
Bangladesh	76	33	--	--
Brazil	3	7	114	13
Canada	1,470	482	1,030	215
China	456	201	101	53
Costa Rica	118	69	158	76
Germany	104	77	--	--
India	7,930	3,940	2,390	621
Malaysia	48	34	517	231
Mexico	2,430	1,010	1,540	691
Pakistan	547	321	118	55
United Arab Emirates	1,050	59	616	10
Other ³	96 ^r	91 ^r	405	252
Total	14,300	6,330	7,330	2,250

^rRevised. -- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes the following grades of pig iron: less than or equal to 0.5% phosphorus content, greater than 0.5% phosphorus content, and alloy grade. Export valuation is free alongside ship value.

³All countries and (or) localities with less than 50 metric tons of exports in both 2018 and 2019 are included in "Other."

Source: U.S. Census Bureau.

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP,
BY COUNTRY OR LOCALITY^{1,2}

(Thousand metric tons and thousand dollars)

Country or locality	2018		2019	
	Quantity	Value	Quantity	Value
Bahamas, The	6	660	3	336
Belgium	20	6,210	49	16,100
Canada	3,560	1,190,000	3,000	879,000
China	3	1,440	7	1,450
France	27	10,100	(3)	255
Marshall Islands	1	277	5	1,000
Mexico	588 ^r	245,000	617	206,000
Netherlands	249	129,000	177	54,800
Russia	9	14,900	2	512
South Africa	41	5,900	(3)	14
Spain	47	17,000	21	6,230
Sweden	188	71,100	227	77,200
United Kingdom	258	98,800	146	48,100
Other ⁴	33 ^r	23,100 ^r	14	10,500
Total ⁵	5,030	1,810,000	4,270	1,300,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Import valuation is customs value.

³Less than ½ unit.

⁴All countries and (or) localities receiving less than 5,000 metric tons of exports from the United States in 2019 are included in "Other."

⁵The United States imported scrap from 66 countries and (or) localities in 2018 and 60 countries and (or) localities in 2019.

Source: U.S. Census Bureau.

TABLE 16
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP,
BY CUSTOMS DISTRICT^{1,2}

(Thousand metric tons and thousand dollars)

Customs district	2018		2019	
	Quantity	Value	Quantity	Value
Baltimore, MD	1	915	3	904
Buffalo, NY	544	264,000	341	154,000
Charleston, SC	328	112,000	240	70,900
Chicago, IL	29	5,500	30	3,980
Cleveland, OH	140	6,670	3	1,480
Columbia-Snake, OR	28	6,480	(3)	7
Detroit, MI	1,560	566,000	1,590	475,000
Duluth, MN	96	31,100	58	19,800
El Paso, TX	65	22,300	83	23,400
Great Falls, MT	21	5,640	28	6,730
Houston-Galveston, TX	16	23,200	6	4,400
Laredo, TX	356 ^r	151,000	403	136,000
Los Angeles, CA	1	2,560	1	1,530
Miami, FL	10	2,400	7	1,230
Mobile, AL	131	111,000	151	59,400
New Orleans, LA	528	190,000	322	110,000
New York, NY	1	626	(3)	530
Nogales, AZ	30	9,520	34	9,590
Ogdensburg, NY	10	6,650	5	3,590
Pembina, ND	207	68,600	147	45,100
Philadelphia, PA	5	2,860	9	864
Portland, ME	1	1,050	(3)	761
San Diego, CA	80	21,800	52	13,000
Savannah, GA	2	1,090	(3)	371
Seattle, WA	822	192,000	742	156,000
St. Albans, VT	14	3,840	14	3,190
Other	1 ^r	605 ^r	(3)	448
Total	5,030	1,810,000	4,270	1,300,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Import valuation is customs value.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 17
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP, BY CLASS^{1,2}

(Thousand metric tons and thousand dollars)

Class	2018		2019	
	Quantity	Value	Quantity	Value
No. 1 heavy-melting scrap	222	63,900	138	30,000
No. 2 heavy-melting scrap	133	33,700	80	18,200
No. 1 bundles	1,310	490,000	1,270	397,000
No. 2 bundles	96	28,100	107	30,900
Shredded steel scrap	740	231,000	476	127,000
Borings, shovelingen, and turnings	86	21,300	53	10,200
Cut plate and structural	177	52,100	109	29,300
Tinned iron or steel	115	40,600	142	47,600
Remelting scrap ingots	1	1,450	1	816
Stainless steel scrap	330	345,000	204	182,000
Other alloy steel scrap	680 ^r	220,000	537	144,000
Other steel scrap ³	852	233,000	1,030	257,000
Iron scrap	288	49,500	126	27,800
Ships, boats, and other vessels for scrapping	(4)	20	(4)	56
Used rails for rerolling and other uses ⁵	6	5,380 ^r	33	10,900
Total	5,040	1,820,000	4,300	1,310,000

^rRevised.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Import valuation is customs value.

³Includes tinplate and terneplate.

⁴Less than ½ unit.

⁵Includes mixed (used plus new) rails.

Source: U.S. Census Bureau.

TABLE 18
U.S. IMPORTS FOR CONSUMPTION OF USED RAILS FOR REROLLING
AND OTHER USES, BY COUNTRY OR LOCALITY^{1,2}

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Austria	741	\$1,110	940	\$1,580
Canada	1,450 ^r	1,390 ^r	27,900	7,310
China	3,480	2,210	4,110	1,870
Germany	5	68	1	12
Italy	33	68	1	23
Luxembourg	63	447	--	--
Netherlands	28	36	16	25
Other ³	66 ^r	55 ^r	9	73
Total	5,870 ^r	5,380 ^r	33,000	10,900

^rRevised. -- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Import valuation is customs value.

³All countries and (or) localities receiving less than 5 metric tons of exports from the United States in both 2018 and 2019 are included in "Other."

Source: U.S. Census Bureau.

TABLE 19
U.S. IMPORTS FOR CONSUMPTION OF DIRECT-REDUCED IRON,
BY COUNTRY OR LOCALITY^{1,2}

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Canada	1,780	\$609	2,010	\$662
Russia	157,000	51,200	73,800	22,300
South Africa	348	181	--	--
Sweden	278	163	387	245
Trinidad and Tobago	1,510,000	561,000	1,690,000	562,000
Venezuela	81,300	25,200	--	--
Total	1,750,000	639,000	1,760,000	585,000

-- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Import valuation is customs value.

Source: U.S. Census Bureau.

TABLE 20
U.S. IMPORTS FOR CONSUMPTION OF PIG IRON, BY COUNTRY OR LOCALITY^{1,2}

Country or locality	2018		2019	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Brazil	752,000	\$293,000	1,190,000	\$409,000
Canada	33,800	14,700	52,400	22,700
China	112	58	--	--
Denmark	808	920	173	197
Germany	6,070	1,670	6,840	2,930
Italy	--	--	50,500	16,900
Latvia	39,800	14,200	--	--
Russia	3,190,000	1,250,000	2,150,000	753,000
South Africa	174,000	71,000	104,000	42,500
Ukraine	1,820,000	712,000	1,370,000	493,000
Other ³	60	84	146	117
Total	6,020,000	2,360,000	4,920,000	1,740,000

-- Zero.

¹Table includes data available through January 13, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes the following grades of pig iron: less than or equal to 0.5% phosphorus content, greater than 0.5% phosphorus content, and alloy grade. Import valuation is customs value.

³All countries and (or) localities receiving less than 50 metric tons of exports from the United States in both 2018 and 2019 are included in "Other."

Source: U.S. Census Bureau.