Mineral Industry Surveys

For information, contact:
Cris Candice Tuck, Iron and Steel Scrap Commodity Specialist
National Minerals Information Center
Telephone: (703) 648-4912
Email: ctuck@usgs.gov

Tiffany J. Lin (Data)
Telephone: (703) 648-7963
Email: tjlin@usgs.gov
Internet: https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys

IRON AND STEEL SCRAP IN NOVEMBER 2022

In November 2022, purchased steel scrap receipts increased by 4%, recirculating scrap production increased by 5%, and iron and steel scrap consumption increased by 3% compared with those in October 2022. Stocks of purchased and home scrap were essentially unchanged from those at the end of October 2022. In November 2022, pig iron production and pig iron consumption decreased slightly from those in October 2022. Direct-reduced iron receipts were more than double and consumption was unchanged from those in October 2022 (table 1, fig. 1).

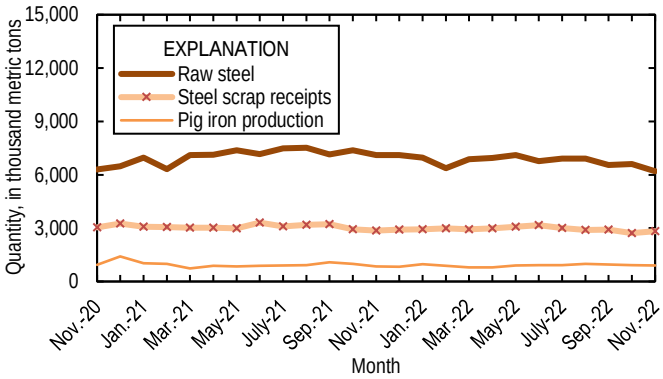

Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from November 2020 through November 2022. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in November 2022 decreased by 29% from those in October 2022 (fig. 2, table 4). In November 2022, India was the leading destination for exports, accounting for 28% of the total tonnage, followed by Turkey (17%) and Mexico (11%) (table 4). Los Angeles, CA, was the leading U.S. Customs district by tonnage of exports, accounting for 14% of the total, followed by Philadelphia, PA, (13%) and New York, NY, (10%) (table 5).

Imports of iron and steel scrap in November 2022 decreased by 20% compared with those in October 2022 (fig. 2, table 7). Canada was the leading country of origin, accounting for 86% of the total tonnage of imports, followed by Mexico (13%) (table 7).

Detroit, MI, was the leading U.S. Customs district by tonnage of imports, accounting for 49% of the total, followed by Seattle, WA, (22%) and Laredo, TX, (8%) (table 8).

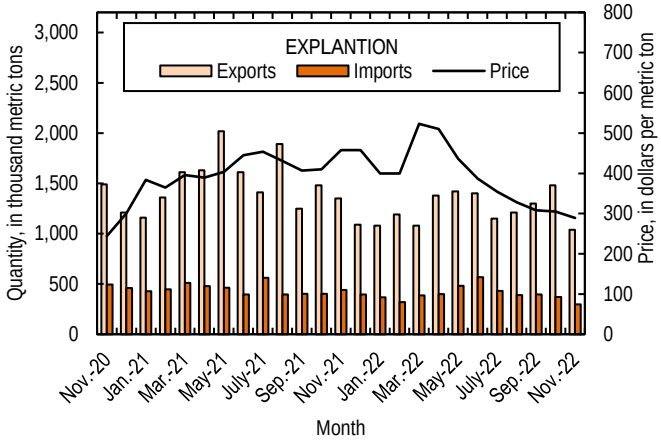

Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from November 2020 through November 2022. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for November, as calculated from the American Iron and Steel Institute's monthly production data, was 207,000 metric tons, a 3% decrease from than that in October 2022 and a 13% decrease from that in November 2021. Raw steel production capability utilization was 71.5% in November 2022, down from 73.7% in October 2022 and down from 82.7% in November 2021 (table 10).

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services.

TABLE 1
IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS
FOR STEEL PRODUCERS, IN NOVEMBER 2022[1, 2]

(Thousand metric tons)

	November	January–November[3]
Scrap:		
Receipts:		
From outside sources	2,830	32,400
From other own company plants	171	1,810
Production:		
Recirculating scrap	335	3,490
Obsolete scrap	10	113
Consumption (by type of furnace):		
Blast furnace	117	1,240
Basic oxygen process	278	3,060
Electric furnace	2,960	33,200
Other	-- [4]	-- [4]
Total consumption	3,360	37,500
Shipments	34	362
Stocks, end of period	3,910	3,910
Pig iron (includes hot metal):		
Receipts	115	1,520
Production	898	9,960
Consumption	1,030	11,500
Stocks, end of period	702	702
Direct-reduced iron:[5]		
Receipts	138	2,400
Consumption	138	2,520
Stocks, end of period	323	323

-- 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. November 2022 data are based on surveys, representing 53% of scrap consumption during this month, and estimates for nonrespondents of this survey.

[3]May include revisions to previously published data.

[4]One company updated survey to correct furnace type. Included in electric furnace.

[5]Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

TABLE 2

RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, FOR STEEL PRODUCERS, IN NOVEMBER 2022[1, 2]

(Thousand metric tons)

Item	November				January–November[3]		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]	Ending stocks	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]
Carbon steel:							
Low-phosphorus plate and punchings	14	W	16	10	151	W	175
Cut structural and plate	240	25	284	327	2,700	310	3,130
No. 1 heavy melting steel	258	53	327	201	3,050	538	3,670
No. 2 heavy melting steel	331	26	378	237	3,670	287	4,220
No. 1 and electric furnace bundles	99	--	107	105	1,170	--	1,180
No. 2 and all other bundles	59	W	62	43	731	W	741
Electric furnace 1 foot and under (not bundles)	W	--	W	W	W	--	W
Railroad rails	18	7	19	97	200	81	204
Turnings and borings	130	W	133	206	1,490	27	1,520
Slag scrap	27	24	62	43	301	241	591
Shredded and fragmentized	861	--	923	1,540	9,980	W	10,700
No. 1 busheling	327	23	378	347	3,590	241	3,890
Steel cans (post consumer)	W	W	10	293	99	W	114
All other carbon steel scrap	175	121	319	234	2,030	1,210	3,380
Stainless steel scrap	42	19	62	32	459	207	680
Alloy steel scrap	23	8	31	50	254	91	345
Ingot mold and stool scrap	W	W	6	5	W	W	W
Machinery and cupola cast iron	4	--	W	W	50	--	52
Cast iron borings	12	--	12	W	131	W	136
Other iron scrap	44	9	49	56	577	102	572
Other mixed scrap	145	10	172	73	1,690	96	2,130
Total	2,830	335	3,360	3,910	32,400	3,490	37,500

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]May include revisions to previously published data.

[4]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, IN NOVEMBER 2022[1, 2]

(Thousand metric tons)

Region and State	November			January–November[3]		
	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]	Receipts of scrap from outside sources	Production of recirculating scrap	Consumption[4]
Mid-Atlantic and New England:						
New Jersey, New York, Pennsylvania	179	38	249	2,270	417	2,850
North Central:						
Illinois and Indiana	349	76	444	4,040	843	5,190
Iowa, Minnesota, Nebraska, Wisconsin	217	6	235	2,430	72	2,620
Michigan	38	5	43	418	52	474
Ohio	360	92	478	4,120	842	4,920
Total	963	179	1,200	11,000	1,810	13,200
South Atlantic:						
Georgia, North Carolina, South Carolina	251	W	281	2,770	W	3,040
Virginia, West Virginia	99	W	100	1,080	W	1,200
Total	351	17	381	3,850	189	4,240
South Central:						
Alabama, Kentucky, Mississippi, Tennessee	642	46	705	7,060	464	7,840
Arkansas and Texas	401	37	516	4,910	407	5,720
Total	1,040	83	1,220	12,000	872	13,600
Mountain and Pacific:						
California, Colorado, Oregon, Utah, Washington	290	18	307	3,270	206	3,600
Grand total	2,830	335	3,360	32,400	3,490	37,500

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

[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]May include revisions to previously published data.

[4]Includes recirculating scrap and home-generated obsolete scrap.

TABLE 4
U.S. EXPORTS OF IRON AND STEEL SCRAP BY SELECTED REGION AND COUNTRY OR LOCALITY, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

	November		January–November[3]	
Region and country or locality	Quantity	Value	Quantity	Value
Australia	(4)	4	33	15,700
Bangladesh	62	24,200	1,540	666,000
Belgium	2	1,790	24	16,900
Brazil	(4)	153	5	3,230
Canada	42	13,100	495	184,000
China	5	5,220	187	61,200
Ecuador	--	--	136	65,700
Germany	2	626	30	9,570
Greece	28	9,680	311	140,000
Hong Kong	1	711	12	12,700
India	289	128,000	1,390	765,000
Indonesia	1	301	16	11,900
Japan	1	1,630	35	21,800
Korea, Republic of	18	8,670	379	203,000
Malaysia	12	16,100	518	194,000
Mexico	118	35,100	2,460	699,000
Pakistan	58	28,900	425	257,000
Peru	44	14,200	535	231,000
Philippines	1	1,020	24	24,700
Switzerland	--	--	33	20,300
Taiwan	89	37,300	943	400,000
Thailand	22	16,800	195	153,000
Turkey	181	61,600	2,870	1,230,000
United Arab Emirates	1	661	9	6,590
United Kingdom	(4)	66	3	2,220
Vietnam	40	14,300	610	278,000
Other[5]	28	12,900	514	236,000
Total	1,040	433,000	13,700	5,910,000

-- Zero.

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

[2]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.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

[5]Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND SELECTED CUSTOMS DISTRICT, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

Region and customs district	November		January–November[3]	
	Quantity	Value	Quantity	Value
Canada–United States border:				
Buffalo, NY	5	2,690	85	54,700
Detroit, MI	17	6,440	237	89,100
Duluth, MN	(4)	833	83	3,400
Ogdensburg, NY	1	255	19	5,350
Pembina, ND	7	2,770	82	15,700
Other	10	1,190	92	14,600
Total	40	14,200	599	183,000
East coast:				
Baltimore, MD	56	24,800	606	291,000
Boston, MA	94	34,300	783	332,000
Charleston, SC	7	5,360	65	53,200
Miami, FL	17	7,860	318	154,000
New York City, NY	109	57,100	2,100	1,030,000
Norfolk, VA	31	19,000	496	304,000
Philadelphia, PA	138	45,400	968	400,000
Portland, ME	2	696	40	18,900
Providence, RI	52	17,000	436	180,000
Savannah, GA	16	12,100	281	137,000
St. Albans, VT	1	296	20	5,950
Wilmington, NC	--	--	(4)	138
Total	524	224,000	6,110	2,910,000
Gulf coast and Mexico–United States border (includes Caribbean territories):				
El Paso, TX	(4)	140	5	2,790
Houston–Galveston, TX	45	23,600	443	244,000
Laredo, TX	78	22,400	1,390	265,000
Mobile, AL	1	658	7	6,360
New Orleans, LA	1	564	31	17,200
San Juan, PR	34	10,200	175	67,600
Tampa, FL	1	686	339	129,000
Other	(4)	67	2	796
Total	160	58,300	2,400	733,000
West coast and Hawaii:				
Columbia–Snake, OR	36	12,800	650	308,000
Honolulu, HI, and Anchorage, AK	32	10,900	139	59,200
Dallas-Forth Worth, TX	--	--	(4)	4
Los Angeles, CA	149	68,200	1,810	854,000
San Diego, CA	14	4,070	202	63,300
San Francisco, CA	54	22,300	1,210	542,000
Seattle, WA	37	18,300	597	255,000
Total	321	137,000	4,610	2,080,000
Grand total	1,040	433,000	13,700	5,910,000

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]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.
[3]May include revisions to previously published data.
[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER
FERROUS PRODUCTS BY GRADE, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

Item	November		January–November[3]	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	412	154,000	5,130	2,140,000
No. 2 heavy melting steel	44	18,800	663	309,000
No. 1 bundles	18	1,130	145	34,400
No. 2 bundles	(4)	68	24	2,900
Shredded steel scrap	381	138,000	4,480	1,960,000
Borings, shovelings, and turnings	2	635	36	11,300
Cut plate and structural	50	17,800	643	287,000
Tinned iron or steel	6	1,730	76	22,300
Remelting scrap ingots	(4)	155	5	2,910
Cast iron	43	28,500	1,000	389,000
Other iron and steel	5	1,160	45	11,400
Total carbon steel and cast iron	960	362,000	12,200	5,180,000
Stainless steel	29	35,900	358	357,000
Other alloy steel	55	35,200	1,120	375,000
Total stainless and alloy steel	83	71,100	1,480	732,000
Total carbon, stainless, alloy steel, and cast iron	1,040	433,000	13,700	5,910,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	1	125
Used rails	(4)	69	1	4,310
Used rails for rerolling and other uses	--	--	1	611
Total scrap exports	1,040	433,000	13,700	5,910,000
Exports of manufactured ferrous products,				
Pig iron < or = 0.5% phosphorus	1	555	8	6,710
Pig iron > or = 0.5% phosphorus	--	--	1	53
Pig iron alloy	--	--	(4)	12
Total pig iron	1	555	9	6,780
Direct-reduced iron (DRI)	(4)	15	52	4,840
Granules for abrasive cleaning and other uses	2	3,270	21	35,500
Powders of alloy steel	1	5,950	12	74,100
Other ferrous powders	4	6,520	57	82,000
Total DRI, granules, powders	8	15,800	143	196,000
Grand total	1,050	449,000	13,900	6,120,000

-- Zero.

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

[2]Export valuation is on a free-alongside-ship basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED COUNTRY OR LOCALITY, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

	November		January–November[3]	
Country or locality	Quantity	Value	Quantity	Value
Canada	253	94,700	3,250	1,650,000
Cayman Islands	1	171	11	1,960
China	(4)	57	32	22,100
Colombia	--	--	2	4,020
Germany	1	217	30	15,100
Japan	2	41	25	1,250
Mexico	38	16,200	584	368,000
Netherlands	--	--	169	94,900
Spain	--	--	26	15,100
Sweden	--	--	146	82,700
United Kingdom	--	--	116	76,100
Other[5]	1	626	17	17,300
Total	296	112,000	4,410	2,340,000

-- Zero.

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

[2]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.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

[5]Includes countries with quantities of less than 500 metric tons for the current year.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP
BY SELECTED CUSTOMS DISTRICT, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

	November		January–November[3]	
Customs district	Quantity	Value	Quantity	Value
Baltimore, MD	(4)	27	2	1,010
Buffalo, NY	14	7,380	228	202,000
Charleston, SC	(4)	89	281	147,000
Chicago, IL	(4)	211	31	7,430
Cleveland, OH	(4)	24	34	4,000
Detroit, MI	145	56,800	1,880	1,040,000
Duluth, MN	8	2,330	75	31,500
El Paso, TX	4	1,700	53	23,900
Great Falls, MT	4	2,120	53	28,900
Houston-Galveston, TX	--	--	7	14,600
Laredo, TX	24	11,400	397	264,000
Miami, FL	1	287	18	4,480
Mobile, AL	1	710	66	59,700
New Orleans, LA	2	217	226	138,000
New York City, NY	(4)	19	1	1,160
Nogales, AZ	2	600	26	11,800
Ogdensburg, NY	1	612	7	6,020
Pembina, ND	15	5,220	179	83,200
San Diego, CA	7	1,840	74	25,500
Seattle, WA	66	19,900	746	244,000
St. Albans, VT	1	368	15	5,910
Other	(4)	203	3	4,200
Total	296	112,000	4,410	2,340,000

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]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.
[3]May include revisions to previously published data.
[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER
FERROUS PRODUCTS BY GRADE, IN NOVEMBER 2022[1, 2]

(Thousand metric tons and thousand dollars)

Item	November		January–November[3]	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	12	3,390	154	55,800
No. 2 heavy melting steel	8	2,060	107	35,400
No. 1 bundles	54	19,100	1,180	691,000
No. 2 bundles	11	4,820	86	41,100
Shredded steel scrap	59	22,500	686	311,000
Borings, shovelings, and turnings	5	1,460	50	20,700
Cut plate and structural	10	2,890	131	46,700
Tinned iron or steel	15	4,630	210	93,400
Remelting scrap ingots	(4)	27	1	1,420
Cast iron	10	3,450	223	86,900
Other iron and steel	50	15,900	753	315,000
Total carbon steel and cast iron	232	80,200	3,580	1,700,000
Stainless steel	15	16,400	226	371,000
Other alloy steel	49	15,400	597	276,000
Total stainless and alloy steel	64	31,800	822	647,000
Total carbon, stainless, alloy steel, and cast iron	296	112,000	4,410	2,340,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	20	4,000
Used rails	(4)	25	3	718
Used rails, nonalloyed	--	--	(4)	75
Used rails other	(4)	56	1	1,030
Total scrap imports	296	112,000	4,430	2,350,000
Imports of manufactured ferrous products:				
Pig iron > or = 0.5% phosphorus	362	220,000	4,180	2,790,000
Pig Iron < or =0.5% phosphorus	--	--	(4)	3
Alloy pig iron	--	--	(4)	93
Total pig iron	362	220,000	4,180	2,790,000
Direct-reduced iron (DRI)	227	78,900	3,230	1,280,000
Spongy iron products, not DRI	(4)	224	2	5,440
Granules for abrasive cleaning and other uses	2	3,340	19	40,200
Powders of alloy steel	5	11,300	58	129,000
Other ferrous powders	4	10,900	41	92,300
Total DRI, granules, powders	238	105,000	3,350	1,550,000
Grand total	895	437,000	12,000	6,690,000

-- Zero.

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

[2]Import valuation is on a Customs basis.

[3]May include revisions to previously published data.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
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]
2021:						
November	7,100	78,700	82.7	81.3	99.8	99.8
December	7,100	85,800	80.1	81.2	99.8	99.8
2022:						
January	6,970	6,970	79.8	79.8	99.8	99.8
February	6,370	13,300	80.8	80.3	99.7	99.8
March	6,870	20,200	78.7	79.7	99.6	99.7
April	6,950	27,200	81.9	80.3	99.7	99.7
May	7,120	34,300	81.1	80.5	99.7	99.7
June	6,760	41,000	79.6	80.3	99.7	99.7
July	6,910	47,900	78.1	80.0	99.7	99.7
August	6,910	54,900	78.0	79.7	99.7	99.7
September	6,550	61,400	76.4	79.4	99.7	99.7
October	6,610	68,000	73.7	78.8	99.7	99.7
November	6,200	74,200	71.5	78.1	99.6	99.7

[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 11
COMPOSITE PRICES FOR STEEL SCRAP AND PIG IRON

Period	Steel Scrap[1]		Pig Iron[2]	
	$/lt	$/t	$/lt	$/t
2021:				
November	465.00	457.66	525.36	517.06
December	465.00	457.66	566.23	557.29
Average, January–December	423.40	416.71	542.52	533.96
2022:				
January	406.67	400.25	517.30	509.13
February	406.67	400.25	517.30	509.13
March	531.67	523.27	513.66	505.55
April	518.33	510.14	649.12	638.87
May	443.33	436.33	566.12	557.18
June	393.33	387.12	753.47	741.57
July	360.00	354.31	742.36	730.64
August	333.33	328.07	974.43	959.04
September	313.33	308.38	618.84	609.07
October	310.00	305.11	924.99	910.38
November	293.33	288.70	511.23	503.16

[1]Prices are for No. 1 heavy melting steel scrap. Source: Fastmarkets AMM.
[2]Prices are Brazilian basic pig iron, free on board, New Orleans, LA. Source: U.S. Census Bureau.

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

TABLE 12
U.S. IRON AND STEEL SCRAP RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION OF PIG IRON, AND DIRECT-REDUCED IRON (DRI) CONSUMPTION[1]

(Thousand metric tons)

Period[2]	Receipts of scrap from outside sources		Pig iron production		DRI consumption	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2021:						
November	2,859	33,866	851	10,090	257	2,725
December	2,916	36,782	836	10,926	299	3,023
2022:						
January	2,920 r	2,920 r	970	970	243	243
February	2,970 r	5,890 r	877	1,850	213	456
March	2,920 r	8,810 r	802	2,650	211	668
April	2,970 r	11,800	802	3,450	250	918
May	3,080	14,900	903	4,350	255	1,170
June	3,170 r	18,000 r	920	5,270	307	1,480
July	2,990 r	21,000 r	922	6,200	286	1,770
August	2,890 r	23,900 r	994	7,190	241	2,010
September	2,910	26,800	950	8,140	238	2,250
October	2,720	29,500	918	9,060	138	2,380
November	2,830	32,400	898	9,960	138	2,520

[r]Revised.
[1]Data are rounded to no more than three significant digits.
[2]May include revisions to previously published data.