

Mineral Industry Surveys

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IRON AND STEEL SCRAP IN FEBRUARY 2022

In February 2022, purchased steel scrap receipts increased by 3%, recirculating scrap production decreased by 10%, and iron and steel scrap consumption was essentially unchanged compared with those in January 2022. Stocks of purchased and home scrap increased slightly from those at the end of January 2022. In February 2022, pig iron production decreased by 10% and consumption decreased by 9%, although essentially unchanged on an average daily basis, from those in January 2022 (table 1, fig. 1). Direct-reduced iron receipts decreased 9% and consumption increased by 16%.

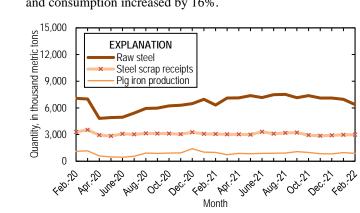


Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from February 2020 through February 2022. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in February 2022 increased 10% from those in January 2022 (fig. 2, table 4). Turkey was the leading destination for exports, accounting for 30% of the total tonnage, followed by Bangladesh (15%) and Mexico (14%) (table 4). Los Angeles, CA, was the leading U.S. Customs district by tonnage of exports, accounting for 15% of the total, followed by New York, NY, (13%) and San Francisco, CA, (12%) (table 5).

Imports of iron and steel scrap in February 2022 decreased by 13% from those in January 2022 (fig. 2, table 7). Canada was the leading country of origin, accounting for 76% of the total tonnage of imports, followed by Mexico (15%) and Sweden (8%) (table 7). Detroit, MI, was the leading U.S. Customs district by tonnage of imports, accounting for 43% of the total,

followed by Seattle, WA, (19%) and Laredo, TX, (10%) (table 8).

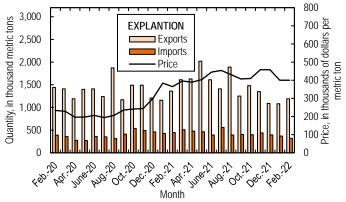


Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from February 2020 through February 2022. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for February, as calculated from the American Iron and Steel Institute's monthly production data, was 227,000 metric tons, essentially unchanged from that in January 2022 and that in February 2021. Raw steel production capability utilization was 80.8% in February 2022, up from 79.8% in January 2022 and up from 76.8% in February 2021 (table 10).

Industry News

China's Ministry of Industry and Information Technology issued a guideline in February laying out a peak carbon emissions timetable that may ease emissions requirements while still maintaining efforts to reach emissions peaks before 2030. This follows approval of construction of 43 new electric arc furnaces (EAF) mills in China in 2021, totaling 29 million metric tons per year (Mt/yr) through capacity swaps targeted to reduce emissions, which was followed by an additional 6.3 Mt/yr of EAF capacity approval in January 2022 (S&P Global, 2022).

Reference Cited

S&P Global, 2022, China's steel output caps to continue in 2022 despite easing emissions: New York, NY, February 9. (Accessed April 21, 2022, at https://www.spglobal.com/commodityinsights/en/market-insights/latestnews/energy-transition/020922-chinas-steel-output-caps-to-continue-in-2022despite-easing-emissions-timelines.)

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TABLE 1 IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS FOR STEEL PRODUCERS, IN FEBRUARY 2022^{1,2}

(Thousand metric tons)

	February	January–February ³
Scrap:		<u> </u>
Receipts:		
From outside sources	2,990	5,960
From other own company plants	165	323
Production:		
Recirculating scrap	314	638
Obsolete scrap	10	23
Consumption (by type of furnace):		
Blast furnace	108	220
Basic oxygen process	271	548
Electric furnace	2,990	5,940
Other	47	116
Total consumption	3,420	6,830
Shipments	34	70
Stocks, end of period	4,140	4,140
Pig iron (includes hot metal):		
Receipts	138	291
Production	877	1,850
Consumption	1,030	2,160
Stocks, end of period	406	406
Direct-reduced iron: ⁴		
Receipts	204	438
Consumption	241	459
Stocks, end of period	244	244

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

²Includes manufacturers of raw steel that also produce steel castings. February 2022 data are based on surveys, representing 53% of scrap consumption during this month, and estimates for nonrespondents of this survey.

³May include revisions to previously published data.

⁴Includes 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 FEBRUARY 2022^{1, 2}

		February			January–February ³		
	Receipts of scrap	Production of		Ending	Receipts of scrap	Production of	
Item	from outside sources	recirculating scrap	Consumption ⁴	stocks	from outside sources	recirculating scrap	Consumption ⁴
Carbon steel:			•				•
Low-phosphorus plate and punchings	14	W	18	W	28	W	33
Cut structural and plate	243	W	282	371	498	60	574
No. 1 heavy melting steel	285	43	336	219	571	99	678
No. 2 heavy melting steel	328	25	377	260	655	51	753
No. 1 and electric furnace bundles	112		108	125	217		217
No. 2 and all other bundles	68	W	70	42	133	W	137
Electric furnace 1 foot and under (not bundles)	W	W	W	W	W	W	W
Railroad rails	18	7	19	97	37	W	37
Turnings and borings	126	W	138	194	262	W	277
Slag scrap	25	20	49	71	51	40	98
Shredded and fragmentized	926	W	970	1,660	1,850	W	1,930
No. 1 busheling	333	W	341	399	648	W	677
Steel cans (post consumer)	W	W	W	W	W	W	W
All other carbon steel scrap	195	103	310	191	385	207	613
Stainless steel scrap	56	27	84	37	112	53	168
Alloy steel scrap	23	8	31	51	46	17	63
Ingot mold and stool scrap	W	W	3	2	W	W	6
Machinery and cupola cast iron	4		4	W	W		W
Cast iron borings	13	W	13	4	25	W	27
Motor blocks				W	W		W
Other iron scrap	53	9	51	57	106	21	105
Other mixed scrap	154	W	201	48	306	15	400
Total	2,990	314	3,420	4,140	5,960	638	6,830

(Thousand metric tons)

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

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

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

³May include revisions to previously published data.

⁴Includes 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 FEBRUARY 2022^{1,2}

(Thousand metric tons)

		February		J	anuary-February 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
Region and State						
Mid-Atlantic and New England,						
New Jersey, New York,						
Pennsylvania	236	42	283	474	83	567
North Central:						
Illinois and Indiana	356	76	469	722	152	942
Iowa, Minnesota, Nebraska,						
Wisconsin	219	6	237	431	14	463
Michigan	38	5	43	76	9	86
Ohio	377	73	443	770	160	902
Total	991	160	1,190	2,000	334	2,390
South Atlantic:						
Georgia, North Carolina,						
South Carolina	242	W	262	497	W	546
Virginia, West Virginia	102	W	116	199	W	230
Total	346	19	378	695	34	777
South Central:						
Alabama, Kentucky,						
Mississippi, Tennessee	666	40	736	1,320	77	1,420
Arkansas and Texas	454	34	494	881	72	1,000
Total	1,120	74	1,230	2,200	148	2,420
Mountain and Pacific:						
California, Colorado,						
Oregon, Utah, Washington	298	19	334	593	38	667
Grand total	2,990	314	3,420	5,960	638	6,830

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

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

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

³May include revisions to previously published data.

⁴Includes 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 FEBRUARY 2022^{1, 2}

(Thousand metric tons and thousand dollars)
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Quantity (4) 178 1	Value 30 79,600	January–Fe Quantity 33 344	Value 15,600
178 1	79,600		15,600
1	,	211	
	1.050	544	143,000
20	1,370	4	2,230
28	11,300	55	21,400
2	1,940	9	6,310
		32	15,200
35	15,000	99	44,000
1	480	2	1,340
28	13,200	69	31,600
1	1,300	2	2,370
29	31,000	74	53,900
1	214	4	1,700
18	1,980	19	3,000
75	36,900	106	54,600
10	13,400	32	37,700
168	61,600	280	111,000
49	28,900	107	55,400
28	13,400	68	31,300
3	3,830	7	8,630
123	57,100	193	89,200
8	8,490	16	16,600
360	161,000	660	296,000
1	376	1	593
1	384	1	475
39	18,100	51	23,400
2	3,240	4	5,500
1,190	564,000	2,270	1,070,000
	35 1 28 1 29 1 18 75 10 168 49 28 3 123 8 360 1 1 39 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

-- Zero.

¹Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

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

TABLE 5U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION ANDSELECTED CUSTOMS DISTRICT, IN FEBRUARY 2022^{1, 2}

(Thousand metric tons and thousand dollars)

	Febru	ary	January–February ³		
Region and customs district	Quantity	Value	Quantity	Value	
Canada–United States border:					
Buffalo, NY	5	3,940	11	7,290	
Detroit, MI	- 11	4,480	18	8,830	
Duluth, MN	(4)	364	2	671	
Ogdensburg, NY	1	473	2	856	
Pembina, ND	2	686	3	1,080	
Other	6	1,080	14	2,270	
Total	25	11,000	51	21,000	
East coast:					
Baltimore, MD	82	41,900	127	53,800	
Boston, MA	119	51,700	164	72,500	
Charleston, SC	6	5,090	11	9,450	
Miami, FL	32	16,000	74	31,200	
New York City, NY	159	76,500	386	191,000	
Norfolk, VA	33	24,400	73	51,700	
Philadelphia, PA	15	7,070	138	62,400	
Portland, ME	12	5,500	13	5,990	
Providence, RI	- 38	15,900	58	25,400	
Savannah, GA	15	11,900	30	23,500	
St. Albans, VT	- 1	477	3	813	
Wilmington, NC			(4)	35	
Total	512	256,000	1,080	527,000	
Gulf coast and Mexico-United States					
border (includes Caribbean territories):					
Houston-Galveston, TX	69	35,000	93	50,500	
Laredo, TX	47	18,500	92	37,800	
Mobile, AL	- 1	585	1	1,140	
New Orleans, LA	1	756	2	2,030	
San Juan, PR	33	14,900	36	15,700	
Tampa, FL	56	17,400	61	19,700	
Other	(4)	117	(4)	235	
Total	206	87,200	285	127,000	
West coast and Hawaii:					
Columbia–Snake, OR	- 69	32,600	71	33,300	
Honolulu, HI, and Anchorage, AK	- 29	12,500	31	13,800	
Los Angeles, CA	174	85,800	371	182,000	
San Diego, CA	- 18	6,160	35	12,200	
San Francisco, CA	- 139	63,400	264	124,000	
Seattle, WA	16	9,100	86	31,800	
Total	445	210,000	857	397,000	
Grand total	1,190	564,000	2,270	1,070,000	

-- Zero.

¹Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats, and other vessels for scrapping. Export valuation is on a free-alongside-ship basis.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

TABLE 6 U.S. EXPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE, IN FEBRUARY $2022^{1,2}$

(Thousand metric tons and thousand dollars)

	Febru	ary	January–F	ebruary ³	
Item	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	441	198,000	833	377,000	
No. 2 heavy melting steel	54	26,500	124	60,600	
No. 1 bundles	5	1,910	45	8,110	
No. 2 bundles	3	561	16	1,920	
Shredded steel scrap	484	218,000	903	400,000	
Borings, shovelings, and turnings	6	1,720	13	4,020	
Cut plate and structural	73	33,500	119	55,500	
Tinned iron or steel	10	2,790	15	4,180	
Remelting scrap ingots	(4)	153	2	1,160	
Cast iron	50	20,800	79	42,500	
Other iron and steel	4	895	7	1,540	
Total carbon steel and cast iron	1,130	505,000	2,160	957,000	
Stainless steel	18	29,600	33	55,300	
Other alloy steel	40	29,400	81	60,200	
Total stainless and alloy steel	58	59,000	115	115,000	
Total carbon, stainless, alloy steel, and cast iron	1,190	564,000	2,270	1,070,000	
Ships, boats, and other vessels for					
breaking up (for scrapping)	(4)	35	(4)	50	
Used rails	(4)	708	(4)	792	
Used rails for rerolling and other uses	(4)	44	(4)	44	
Total scrap exports	1,190	565,000	2,270	1,070,000	
Exports of manufactured ferrous products,					
Pig iron $<$ or $= 0.5\%$ phosphorus	(4)	197	(4)	304	
Pig iron > or = 0.5% phosphorus	(4)	4	(4)	4	
Total pig iron	(4)	201	(4)	308	
Direct-reduced iron (DRI)	3	213	4	289	
Granules for abrasive cleaning and other uses	1	2,390	3	5,110	
Powders of alloy steel	1	6,050	2	11,900	
Other ferrous powders	4	7,460	10	14,700	
Total DRI, granules, powders	10	16,100	19	32,100	
Grand total	1,200	581,000	2,290	1,110,000	

¹Export valuation is on a free-alongside-ship basis.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

TABLE 7

U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP BY SELECTED COUNTRY OR LOCALITY, IN FEBRUARY $2022^{1,2}$

(Thousand metric tons and thousand dollars)

Febru	ary	January–February ³		
Quantity	Value	Quantity	Value	
243	123,000	478	246,000	
1	166	2	350	
(4)	104	1	300	
2	78	4	197	
47	30,700	95	60,700	
		39	20,800	
25	14,900	67	36,300	
2	1,040	3	1,840	
320	170,000	688	366,000	
	Quantity 243 1 (4) 2 47 - 25 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	

-- Zero.

¹Includes 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.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

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

TABLE 8U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAPBY SELECTED CUSTOMS DISTRICT, IN FEBRUARY 2022^{1,2}

(Thousand metric tons and thousand dollars)

	Febru	ary	January–February ³		
Customs district	Quantity	Value	Quantity	Value	
Buffalo, NY	23	18,900	51	40,400	
Charleston, SC	(4)	101	81	42,400	
Chicago, IL	(4)	234	5	1,590	
Detroit, MI	136	75,100	261	146,000	
Duluth, MN	8	3,370	11	4,850	
El Paso, TX	4	1,980	9	4,360	
Great Falls, MT	1	523	2	677	
Houston-Galveston, TX	1	716	1	916	
Laredo, TX	31	21,800	61	41,600	
Miami, FL	1	343	3	746	
Mobile, AL	3	2,840	6	6,760	
New Orleans, LA	27	15,000	28	15,100	
Nogales, AZ	3	1,560	6	3,030	
Ogdensburg, NY	1	522	1	830	
Pembina, ND	13	6,250	28	14,200	
San Diego, CA	6	2,330	13	4,760	
Seattle, WA	60	18,200	116	36,300	
St. Albans, VT	1	422	2	864	
Other	(4)	204	1	788	
Total	320	170,000	688	366,000	

¹Includes 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.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

TABLE 9U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHERFERROUS PRODUCTS BY GRADE, IN FEBRUARY 2022^{1, 2}

(Thousand metric tons and thousand dollars)

	Febru	ary	January–February ³		
Item	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	11	3,760	24	8,970	
No. 2 heavy melting steel	9	3,040	19	6,990	
No. 1 bundles	85	47,400	199	110,000	
No. 2 bundles	6	2,310	9	3,730	
Shredded steel scrap	47	18,200	90	38,300	
Borings, shovelings, and turnings	4	1,710	8	3,050	
Cut plate and structural	8	2,470	19	6,850	
Tinned iron or steel	16	7,280	35	16,000	
Remelting scrap ingots	(4)	148	(4)	369	
Cast iron	9	3,410	22	8,250	
Other iron and steel	60	23,800	129	51,300	
Total carbon steel and cast iron	255	113,000	554	254,000	
Stainless steel	20	35,500	40	66,100	
Other alloy steel	44	21,400	94	46,400	
Total stainless and alloy steel	64	56,800	134	112,000	
Total carbon, stainless, alloy steel, and cast iron	320	170,000	688	366,000	
Ships, boats, and other vessels for					
breaking up (for scrapping)					
Used rails	1	230	1	230	
Used rails, nonalloyed			59	27	
Total scrap imports	321	171,000	747	366,000	
Imports of manufactured ferrous products:					
Pig iron > or = 0.5% phosphorus	388	212,000	1,030	553,000	
Alloy pig iron			(4)	66	
Total pig iron	388	212,000	1,030	553,000	
Direct-reduced iron (DRI)	289	90,400	589	208,000	
Spongy iron products, not DRI	(4)	231	(4)	1,350	
Granules for abrasive cleaning and other uses	2,110	4,280	4,170	7,900	
Powders of alloy steel	4,650	9,190	8,800	18,000	
Other ferrous powders	3	6,380	7	14,000	
Total DRI, granules, powders	7,050	110,000	13,600	250,000	
Grand total	7,750	493,000	15,300	1,170,000	

-- Zero.

¹Import valuation is on a Customs basis.

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

³May include revisions to previously published data.

⁴Less than ¹/₂ unit.

TABLE 10 U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION, AND CONTINUOUS CAST STEEL PRODUCTION $^{\rm I}$

	-	Raw steel production, thousand metric tons		Raw steel capability utilization, percent		cast steel
		Year		Year		Year
Period	Monthly	to date ²	Monthly	to date ²	Monthly	to date ²
2021:						
February	6,320	13,300	76.8	76.7	99.8	99.8
March	7,100	20,400	78.0	77.1	99.8	99.8
April	7,130	27,500	80.8	78.0	99.8	99.8
May	7,370	34,900	81.0	78.7	99.8	99.8
June	7,170	42,100	83.0	79.4	99.8	99.8
July	7,480	49,500	84.4	80.1	99.8	99.8
August	7,520	57,100	84.8	80.7	99.8	99.8
September	7,150	64,200	83.3	81.0	99.8	99.8
October	7,380	71,600	83.2	81.2	99.8	99.8
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

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.

Source: American Iron and Steel Institute.

TABLE 11 COMPOSITE PRICES FOR STEEL SCRAP AND PIG IRON

	Steel Sc	rap ¹	Pig Iron ²	
Period	\$/lt	\$/t	\$/lt	\$/t
2021:				
February	371.23	365.37	508.08	500.06
March	401.96	395.61	423.17	416.49
April	394.84	388.60	479.13	471.56
May	410.08	403.60	568.14	559.17
June	452.46	445.31	568.14	559.17
July	461.67	454.38	500.00	492.10
August	438.33	431.41	581.71	572.52
September	413.33	406.80	631.97	621.99
October	416.67	410.09	621.36	611.55
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

¹Prices are for No. 1 heavy melting steel scrap. Source: Fastmarket-AMM.

²Prices 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) CONSUMPTION¹

	Receipts o	of scrap				
Period	from outside sources Year		Pig iron production Year		DRI consumption	
					Year	
	Monthly	to date	Monthly	to date	Monthly	to date
2021: ²						
February	3,060	6,200	986	2,010	204	453
March	3,030	9,240	735	2,750	260	713
April	3,030	12,300	888	3,630	220	933
May	2,980	15,200	844	4,480	231	1,160
June	3,310	18,600	875	5,350	236	1,400
July	3,100	21,700	897	6,250	214	1,610
August	3,190	24,800	924	7,170	248	1,860
September	3,230	28,100	1,080	8,250	258	2,120
October	2,930	31,000	990	9,240	237	2,360
November	2,860	33,900	851	10,100	235	2,590
December	2,920	36,800	836	10,900	262	2,850
2022:						
January	2,970 ^r	2,970 ^r	970	970	217 ^r	217 ^r
February	2,990	5,960	877	1,850	241	459

(Thousand metric tons)

^rRevised.

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.