

Mineral Industry Surveys

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IRON AND STEEL SCRAP IN MAY 2022

In May 2022, purchased steel scrap receipts increased by 3%, recirculating scrap production increased by 15%, and iron and steel scrap consumption was essentially unchanged compared with those in April 2022. Stocks of purchased and home scrap increased by 5% from those at the end of April 2022. In May 2022, pig iron production increased by 13%, and consumption increased by 11% from those in April 2022. Direct-reduced iron receipts increased slightly and consumption increased 10% from April 2022 (table 1, fig. 1).

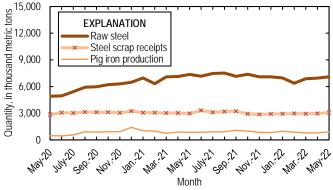


Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from May 2020 through May 2022. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in May 2022 increased 3% from those in April 2022 (fig. 2, table 4). Mexico was the leading destinations for exports, accounting for 19% of the total tonnage, followed by Vietnam (14%) and Turkey (13%) (table 4). Los Angeles, CA, was the leading U.S. Customs district by tonnage of exports, accounting for 16% of the total, followed by New York, NY, (12%) and San Francisco, CA, (10%) (table 5).

Imports of iron and steel scrap in May 2022 increased by 20% from those in April 2022 (fig. 2, table 7). Canada was the leading country of origin, accounting for 72% of the total tonnage of imports, followed by Mexico (12%) and the

Netherlands (9%) (table 7). Detroit, MI, was the leading U.S. Customs district by tonnage of imports, accounting for 44% of the total, followed by Seattle, WA, (17%) and Charleston, SC, (9%) (table 8).

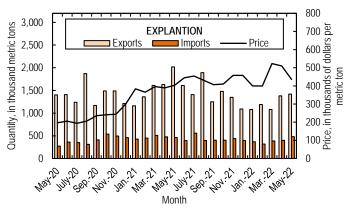


Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from May 2020 through May 2022. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for May, as calculated from the American Iron and Steel Institute's monthly production data, was 229,000 metric tons, essentially unchanged from that in April 2022 and decreased 3% from that in May 2021. Raw steel production capability utilization was 81.1% in May 2022, down from 81.9% in April 2022 and up from 81.0% in May 2021 (table 10).

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

(Thousand metric tons)

	May	January–May ³
Scrap:		
Receipts:		
From outside sources	3,080	14,900
From other own company plants	162	847
Production:		
Recirculating scrap	327	1,590
Obsolete scrap	10	52
Consumption (by type of furnace):		
Blast furnace	105	534
Basic oxygen process	274	1,390
Electric furnace	3,040	15,000
Other	84	315
Total consumption	3,500	17,200
Shipments	34	176
Stocks, end of period	4,000	4,000
Pig iron (includes hot metal):		
Receipts	128	737
Production	903	4,350
Consumption	1,050	5,100
Stocks, end of period	467	467
Direct-reduced iron: ⁴		
Receipts	247	1,130
Consumption	284	1,260
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. May 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 MAY 2022^{1, 2}

		May		January–May 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	16	W	69	W	78
Cut structural and plate	247	W	295	345	1,250	153	1,460
No. 1 heavy melting steel	280	48	335	215	1,400	234	1,670
No. 2 heavy melting steel	335	26	381	254	1,690	130	1,940
No. 1 and electric furnace bundles	102		102	115	520		534
No. 2 and all other bundles	73	W	77	37	338	W	350
Electric furnace 1 foot and under (not bundles)	W	W	W	W	W	W	W
Railroad rails	18	7	19	97	92	W	93
Turnings and borings	139	W	139	207	679	W	691
Slag scrap	27	21	50	76	137	104	248
Shredded and fragmentized	958	W	1,020	1,530	4,590	W	4,910
No. 1 busheling	377	W	378	395	1,640	W	1,760
Steel cans (post consumer)	W	W	W	W	W	W	W
All other carbon steel scrap	188	107	307	188	925	525	1,510
Stainless steel scrap	47	27	73	35	271	133	409
Alloy steel scrap	23	8	31	51	116	42	157
Ingot mold and stool scrap	W	W	3	2	W	W	14
Machinery and cupola cast iron	5		5	W	W		W
Cast iron borings	12	W	12	4	60	W	62
Other iron scrap	61	10	50	72	265	43	254
Other mixed scrap	161	W	195	60	789	31	1,010
Total	3,080	327	3,500	4,000	14,900	1,590	17,200

(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 MAY 2022^{1,2}

(Thousand metric tons)

		May		January–May 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	217	51	275	1,090	227	1,370	
North Central:							
Illinois and Indiana	372	77	477	1,870	383	2,400	
Iowa, Minnesota, Nebraska,							
Wisconsin	220	6	239	1,130	33	1,220	
Michigan	38	5	43	190	23	216	
Ohio	382	68	436	1,850	345	2,150	
Total	1,010	156	1,190	5,030	784	5,980	
South Atlantic:							
Georgia, North Carolina,							
South Carolina	280	W	299	1,260	W	1,390	
Virginia, West Virginia	112	W	109	529	W	577	
Total	393	19	408	1,780	83	1,970	
South Central:							
Alabama, Kentucky,							
Mississippi, Tennessee	673	45	763	3,290	219	3,660	
Arkansas and Texas	483	37	532	2,200	185	2,580	
Total	1,160	82	1,300	5,500	404	6,240	
Mountain and Pacific:							
California, Colorado,							
Oregon, Utah, Washington	303	19	329	1,500	95	1,670	
Grand total	3,080	327	3,500	14,900	1,590	17,200	

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 MAY $2022^{1,2}$

(Thousand	l metric	tons	and	thousand	dollars)
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	Ma	у	January–May ³		
Region and country or locality	Quantity	Value	Quantity	Value	
Australia			33	15,700	
Bangladesh	154	89,800	667	322,000	
Belgium	3	1,820	11	7,240	
Brazil	1	323	2	1,190	
Canada	61	24,900	220	87,700	
China	17	6,490	75	28,200	
Ecuador	33	22,400	102	55,200	
Egypt	32	15,000	187	87,000	
Germany	17	902	21	3,940	
Greece	66	40,000	194	99,600	
Hong Kong	1	1,200	7	8,270	
India	56	51,100	210	180,000	
Indonesia	2	1,420	7	5,520	
Italy	(4)	163	3	1,720	
Japan	2	1,940	25	11,800	
Korea, Republic of	60	36,500	257	141,000	
Kuwait	45	19,700	45	19,700	
Malaysia	17	21,200	91	90,600	
Mexico	267	98,200	1,090	402,000	
Pakistan	34	23,100	224	132,000	
Peru	34	18,300	210	108,000	
Philippines	2	2,240	15	17,400	
Switzerland	33	20,300	33	20,300	
Taiwan	91	42,700	454	212,000	
Thailand	16	14,600	53	53,500	
Turkey	177	98,800	1,520	726,000	
United Arab Emirates	1	648	4	2,790	
Vietnam	192	93,600	382	187,000	
Other ⁵	2	2,890	10	14,600	
Total	1,420	750,000	6,150	3,040,000	

-- Zero.

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

²Includes 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.

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 AND
SELECTED CUSTOMS DISTRICT, IN MAY 2022^{1, 2}

(Thousand metric tons and thousand dollars)

	Ma	у	January–May ³		
Region and customs district	Quantity	Value	Quantity	Value	
Canada–United States border:					
Buffalo, NY	9	8,200	39	26,800	
Detroit, MI	44	11,300	112	41,500	
Duluth, MN	- 1	470	23	1,940	
Ogdensburg, NY	2	513	10	2,970	
Pembina, ND	6	2,370	16	6,090	
Other	10	1,420	41	6,190	
Total	73	24,300	241	85,500	
East coast:					
Baltimore, MD	83	44,900	292	150,000	
Boston, MA	42	26,500	371	175,000	
Charleston, SC	7	5,440	29	25,100	
Miami, FL	55	26,600	189	90,100	
New York City, NY	170	110,000	904	507,000	
Norfolk, VA	64	42,500	238	163,000	
Philadelphia, PA	45	19,900	432	208,000	
Portland, ME	2	791	30	16,000	
Providence, RI	49	29,800	187	91,400	
Savannah, GA	- 18	14,500	81	64,100	
St. Albans, VT	2	470	8	2,470	
Wilmington, NC			(4)	45	
Total	538	321,000	2,760	1,490,000	
Gulf coast and Mexico-United States	_				
border (includes Caribbean territories):					
El Paso, TX	1	729	2	1,010	
Houston-Galveston, TX	58	37,100	252	144,000	
Laredo, TX	140	31,400	500	131,000	
Mobile, AL	(4)	478	3	2,360	
New Orleans, LA	(4)	537	4	3,260	
San Juan, PR	9	4,380	71	34,500	
Tampa, FL	41	23,100	186	70,000	
Other	(4)	72	1	333	
Total	250	97,900	1,020	387,000	
West coast and Hawaii:					
Columbia–Snake, OR	93	52,600	267	140,000	
Honolulu, HI, and Anchorage, AK	2	1,210	38	17,500	
Los Angeles, CA	224	118,000	914	464,000	
San Diego, CA	17	6,910	88	34,600	
San Francisco, CA	142	82,200	604	312,000	
Seattle, WA	76	45,600	217	110,000	
Total	555	307,000	2,130	1,080,000	
Grand total	1,420	750,000	6,150	3,040,000	

-- Zero.

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

²Includes 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.

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 MAY 2022^{1, 2}

(Thousand metric tons and thousand dollars)

	Ma	у	January–May ³		
Item	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	539	252,000	2,350	1,100,000	
No. 2 heavy melting steel	65	33,600	321	164,000	
No. 1 bundles	7	2,480	71	18,000	
No. 2 bundles	(4)	28	17	2,020	
Shredded steel scrap	537	303,000	2,190	1,080,000	
Borings, shovelings, and turnings	2	667	19	6,160	
Cut plate and structural	56	30,100	311	156,000	
Tinned iron or steel	8	1,320	41	9,620	
Remelting scrap ingots	1	438	3	1,930	
Cast iron	76	47,000	316	177,000	
Other iron and steel	5	966	20	4,460	
Total carbon steel and cast iron	1,300	672,000	5,650	2,710,000	
Stainless steel	59	38,600	136	155,000	
Other alloy steel	62	39,400	358	173,000	
Total stainless and alloy steel	122	78,000	494	328,000	
Total carbon, stainless, alloy steel, and cast iron	1,420	750,000	6,150	3,040,000	
Ships, boats, and other vessels for					
breaking up (for scrapping)	(4)	5	1	105	
Used rails	(4)	406	1	1,710	
Used rails for rerolling and other uses	(4)	326	(4)	401	
Total scrap exports	1,420	751,000	6,150	3,050,000	
Exports of manufactured ferrous products,					
Pig iron $<$ or $= 0.5\%$ phosphorus	1	771	2	1,220	
Pig iron > or = 0.5% phosphorus	(4)	10	(4)	10	
Pig iron alloy			(4)	8	
Total pig iron	1	781	2	1,240	
Direct-reduced iron (DRI)	1	118	7	674	
Granules for abrasive cleaning and other uses	2	3,160	8	14,900	
Powders of alloy steel	2	8,900	6	34,700	
Other ferrous powders	9	9,160	28	39,400	
Total DRI, granules, powders	13	21,300	49	89,600	
Grand total	1,430	773,000	6,200	3,140,000	

-- Zero.

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

²Export valuation is on a free-alongside-ship basis. 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 MAY $2022^{1,2}$

(Thousand	l metric	tons	and	thousand	dollars)
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	Ma	у	January–May ³		
Country or locality	Quantity	Value	Quantity	Value	
Canada	347	224,000	1,460	858,000	
Cayman Islands	1	150	5	826	
China	(4)	247	1	679	
Colombia	1	2,050	2	3,580	
Germany	(4)	121	2	769	
Japan	2	143	9	568	
Mexico	58	48,200	288	202,000	
Netherlands	44	26,400	83	47,300	
Spain	25	15,000	25	15,100	
Sweden	(4)	104	67	36,500	
United Kingdom	1	311	1	425	
Other ⁵	2	4,700	8	10,000	
Total	481	321,000	1,950	1,180,000	

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

²Includes 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.

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 8 U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP BY SELECTED CUSTOMS DISTRICT, IN MAY $2022^{1,2}$

(Thousand metric tons and thousand dollars)

	Ma	ay	January-	-May ³
Customs district	Quantity	Value	Quantity	Value
Baltimore, MD	1	306	1	354
Buffalo, NY	22	26,200	130	127,000
Charleston, SC	44	26,600	126	69,300
Chicago, IL	(4)	102	6	1,960
Detroit, MI	211	146,000	848	534,000
Duluth, MN	8	4,000	36	16,800
El Paso, TX	5	2,540	23	11,600
Great Falls, MT	7	3,970	14	7,400
Houston-Galveston, TX	2	6,230	5	12,000
Laredo, TX	42	37,600	200	148,000
Miami, FL	2	625	8	2,300
Mobile, AL	2	4,190	18	21,800
New Orleans, LA	27	15,100	60	30,500
Nogales, AZ	2	653	13	6,470
Ogdensburg, NY	1	1,120	3	3,480
Pembina, ND	13	7,430	72	39,500
San Diego, CA	7	2,660	34	12,800
Seattle, WA	83	33,700	344	124,000
St. Albans, VT	3	1,220	8	3,540
Other	1	805	2	2,180
Total	481	321,000	1,950	1,180,000

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

²Includes 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.

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 MAY 2022^{1, 2}

(Thousand metric tons and thousand dollars)

Item	Ma	у	January–May ³		
	Quantity	Value	Quantity	Value	
No. 1 heavy melting steel	16	6,370	72	29,500	
No. 2 heavy melting steel	10	4,120	51	18,700	
No. 1 bundles	160	108,000	549	344,000	
No. 2 bundles	9	4,920	31	14,800	
Shredded steel scrap	68	39,800	259	127,000	
Borings, shovelings, and turnings	6	2,520	24	11,000	
Cut plate and structural	13	6,450	56	22,600	
Tinned iron or steel	17	9,240	96	48,300	
Remelting scrap ingots	(4)	180	1	632	
Cast iron	15	7,050	56	24,100	
Other iron and steel	79	40,700	357	161,000	
Total carbon steel and cast iron	393	229,000	1,550	802,000	
Stainless steel	26	56,400	119	226,000	
Other alloy steel	63	35,900	283	147,000	
Total stainless and alloy steel	89	92,300	402	373,000	
Total carbon, stainless, alloy steel, and cast iron	481	321,000	1,950	1,180,000	
Ships, boats, and other vessels for					
breaking up (for scrapping)			20	4,000	
Used rails	(4)	46	1	276	
Used rails, nonalloyed	1	38	(4)	75	
Used rails other	(4)	89	1	863	
Total scrap imports	483	322,000	1,980	1,180,000	
Imports of manufactured ferrous products:					
Pig iron > or = 0.5% phosphorus	300	195,000	1,870	1,040,000	
Alloy pig iron			(4)	69	
Total pig iron	300	195,000	1,870	1,040,000	
Direct-reduced iron (DRI)	254	95,000	1,560	526,000	
Spongy iron products, not DRI	(4)	632	1	3,060	
Granules for abrasive cleaning and other uses	1	2,960	9	19,400	
Powders of alloy steel	7	14,700	26	56,400	
Other ferrous powders	5	8,750	19	39,400	
Total DRI, granules, powders	267	122,000	1,610	645,000	
Grand total	1,050	638,000	5,460	2,870,000	

-- Zero.

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

²Import valuation is on a Customs basis.

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:						
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
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	80.50	99.74	99.7

¹Data 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 Sc	Pig Iron ²		
	\$/lt	\$/t	\$/lt	\$/t
2021:				
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
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

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 of	of scrap				
	from outside sources		Pig iron production		DRI consumption	
		Year		Year		Year
Period	Monthly	to date	Monthly	to date	Monthly	to date
2021: ²						
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	2,940 ^r	2,940 r	970	970	217	217
February	2,980 ^r	5,920 ^r	877	1,850	241	458
March	2,930 ^r	8,850 ^r	802	2,650	258	717
April	2,980 ^r	11,800 ^r	802	3,450	258	975
May	3,080	14,900	903	4,350	284	1,260

(Thousand metric tons)

^rRevised.

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

²May include revisions to previously published data.