

Mineral Industry Surveys

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IRON AND STEEL SCRAP IN MAY 2021

In May 2021, purchased steel scrap receipts, recirculating scrap production, and iron and steel scrap consumption each decreased slightly as compared with April. Stocks of purchased and home scrap decreased slightly from those at the end of April. In May, pig iron production decreased by 5% and consumption decreased by 3% from that in April (table 1, fig. 1). Direct-reduced iron receipts were essentially unchanged and consumption increased by 5%.

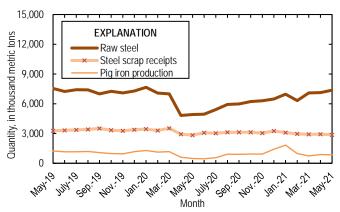


Figure 1. Monthly domestic production of raw steel, receipts of iron and steel scrap, and production of pig iron from May 2019 through May 2021. Sources: U.S. Geological Survey and American Iron and Steel Institute.

Exports of iron and steel scrap in May increased by 24% from those in April (fig. 2). Mexico was the leading destination for exports, accounting for 16% of the total tonnage, followed by Turkey and Vietnam (14% each) (table 4). New York, NY, was the leading U.S. Customs district by tonnage of exports, accounting for 15% of the total, followed by San Francisco, CA, and Los Angeles, CA (12% each) (table 5).

Imports of iron and steel scrap in May decreased by 3% from those in April (fig. 2). Canada was the leading country of origin, accounting for 59% of the total tonnage of imports, followed by Mexico (11%) and the United Kingdom (10%) (table 7). Detroit,

MI, was the leading U.S. Customs district by tonnage of imports, accounting for 28% of the total, followed by New Orleans, LA, and Seattle, WA (17% each) (table 8).

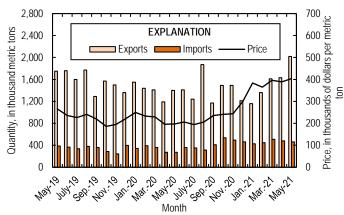


Figure 2. Monthly domestic imports and exports of iron and steel scrap and price for No. 1 heavy melting steel scrap from May 2019 through May 2021. Sources: U.S. Census Bureau and Fastmarkets AMM.

The daily average domestic raw steel production for May, as calculated from the American Iron and Steel Institute's monthly production data, was 238,000 metric tons, essentially unchanged from that in April 2021 and a 50% increase from those in May 2020. Raw steel production capability utilization was 81.0% in May, up from 80.8% in April and 54.6% in May 2020 (table 10).

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TABLE 1 IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS FOR STEEL PRODUCERS, IN MAY $2021^{1,2}$

(Thousand metric tons)

	May	January–May ³
Scrap:		
Receipts:		
From outside sources	2,860	14,700
From other own company plants	204	953
Production:		
Recirculating scrap	290	1,530
Obsolete scrap	12	52
Consumption (by type of furnace):		
Blast furnace	120	608
Basic oxygen process	263	1,500
Electric furnace	2,860	14,400
Other	97	461
Total consumption	3,340	16,900
Shipments	36	254
Stocks, end of period	3,590	3,590
Pig iron (includes hot metal):		
Receipts	167	827
Production	844	4,480
Consumption	1,020	5,250
Stocks, end of period	341	341
Direct-reduced iron: ⁴		
Receipts	253	1,320
Consumption	231	1,160
Stocks, end of period	359	359

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 2021 data are based on surveys, representing 55% 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 2021 1,2

(Thousand metric tons)

		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
Carbon steel:			•				•
Low-phosphorus plate and punchings	14	W	15	W	69	W	76
Cut structural and plate	240	W	285	282	1,240	174	1,450
No. 1 heavy melting steel	232	38	274	149	1,190	180	1,380
No. 2 heavy melting steel	335	18	380	257	1,670	102	1,890
No. 1 and electric furnace bundles	96		105	121	536		535
No. 2 and all other bundles	63	W	65	27	344	W	349
Electric furnace 1 foot and under (not bundles)	W	W	W	W	W	W	W
Railroad rails	18	7	18	96	77	W	79
Turnings and borings	138	W	147	171	741	W	766
Slag scrap		23	50	99	162	188	284
Shredded and fragmentized	884	W	965	1,430	4,530	W	4,950
No. 1 busheling	322	W	338	268	1,690	W	1,790
Steel cans (post consumer)	W	W	W	W	W	W	W
All other carbon steel scrap	191	103	320	254	987	506	1,570
Stainless steel scrap	54	27	82	38	272	133	411
Alloy steel scrap	24	8	32	55	119	40	161
Ingot mold and stool scrap	W	W	3	2	W	W	16
Machinery and cupola cast iron			2	W	W		W
Cast iron borings	12	W	12	5	59	W	61
Motor blocks	W		W		W		W
Other iron scrap	58	15	60	73	246	53	273
Other mixed scrap	140	W	170	39	680	28	843
Total	2,860	290	3,340	3,590	14,700	1,530	16,900

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 $2021^{1.2}$

(Thousand metric tons)

		May		January–May ³		
	Receipts of scrap	Production of		Receipts of scrap	Production of	
	from outside sources	recirculating scrap	Consumption ⁴	from outside sources	recirculating scrap	Consumption ⁴
Region and State			•			•
Mid-Atlantic and New England:						
New Jersey, New York,						
Pennsylvania	233	40	287	1,180	200	1,420
North Central:						
Illinois and Indiana	395	74	500	1,920	370	2,410
Iowa, Minnesota, Nebraska,						
Wisconsin	215	7	231	1,130	51	1,210
Michigan	38	4	44	328	135	369
Ohio	393	83	472	1,860	345	2,170
Total	1,040	166	1,250	5,230	895	6,160
South Atlantic:						
Georgia, North Carolina,						
South Carolina	284	W	309	1,380	W	1,480
Virginia, West Virginia	99	W	117	487	W	581
Total	384	16	426	1,860	83	2,060
South Central:						
Alabama, Kentucky,						
Mississippi, Tennessee	485	27	562	2,820	151	3,270
Arkansas and Texas	420	23	487	2,090	119	2,430
Total	905	50	1,050	4,920	270	5,700
Mountain and Pacific:						
California, Colorado,						
Oregon, Utah, Washington	297	17	326	1,480	84	1,600
Grand total	2,860	290	3,340	14,700	1,530	16,900

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 $2021^{1,2}$

(Thousand metric tons and thousand dollars)

	Ma	y	January–May ³		
Region and country or locality	Quantity	Value	Quantity	Value	
Bangladesh	221	87,900	506	203,000	
Belgium	1	488	3	2,170	
Brazil	_ 2	830	94	35,600	
Canada	87	22,300	383	106,000	
Cayman Islands	(4)	181	1	867	
China	8	6,840	39	30,500	
Ecuador			97	41,400	
Egypt	73	30,100	292	114,000	
Germany	1	581	7	3,600	
Greece	27	11,000	92	37,900	
Guatemala	(4)	15	13	5,870	
Hong Kong	5	6,550	18	20,500	
India	56	38,300	284	146,000	
Indonesia	37	15,100	43	17,300	
Italy	31	13,200	99	43,200	
Japan	_ 2	1,830	8	8,660	
Korea, Republic of	53	22,200	220	92,300	
Kuwait			12	4,170	
Malaysia	245	59,100	742	229,000	
Mexico	329	78,300	1,410	446,000	
Netherlands	(4)	226	1	1,170	
Pakistan	52	30,400	260	141,000	
Peru			122	54,800	
Philippines	9	4,450	20	11,300	
Russia	1	374	1	1,100	
Saudi Arabia	45	18,100	45	18,100	
Singapore	(4)	10	2	744	
Spain	(4)	278	3	1,430	
Sweden	(4)	290	1	3,610	
Taiwan	156	55,200	625	240,000	
Thailand	19	14,700	138	87,500	
Turkey	285	116,000	1,500	589,000	
United Arab Emirates	_ 2	1,050	5	2,920	
United Kingdom	(4)	251	1	1,080	
Vietnam	280	114,000	680	274,000	
Other ⁵	1	1,120	3	2,720	
Total	2,020	751,000	7,770	3,020,000	

⁻⁻ 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.

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

${\it TABLE 5} \\ {\it U.S. EXPORTS OF IRON AND STEEL SCRAP BY REGION AND SELECTED CUSTOMS DISTRICT, IN MAY 2021}^{1,2}$

(Thousand metric tons and thousand dollars)

	May		January-	-May ³
Region and customs district	Quantity	Value	Quantity	Value
Canada–United States border:				
Buffalo, NY	8	4,370	42	20,000
Chicago, IL	(4)	27	2	790
Detroit, MI	38	5,560	121	25,300
Duluth, MN		1,110	28	4,670
Great Falls, MT	2	717	10	3,370
Ogdensburg, NY	2	371	11	1,920
Pembina, ND		9,010	110	42,600
Other	9	1,110	55	6,250
Total	102	22,300	380	105,000
East coast:		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
Baltimore, MD	- 74	34,800	220	97,000
Boston, MA	127	53,800	597	244,000
Charleston, SC	12	8,810	62	41,200
Miami, FL	37	18,200	187	83,700
New York City, NY	301	102,000	1,340	478,000
Norfolk, VA	_ 22	21,400	150	88,700
Philadelphia, PA	- 92	37,300	495	190,000
Portland, ME	- 2	556	38	15,100
Providence, RI	- 61	24,000	178	68,000
Savannah, GA	- 17	13,000	78	49,900
St. Albans, VT	- 2	460	8	1,590
Wilmington, NC	(4)	197	1	826
Total	747	315,000	3,350	1,360,000
Gulf coast and Mexico–United States	747	313,000	3,330	1,300,000
border (includes Caribbean territories):				
El Paso, TX	21	8,450	107	42,600
	- 30	*	140	81,000
Houston–Galveston, TX	- 30 190	16,400	714	,
Laredo, TX	_	26,300		166,000
Mobile, AL	- 1	602	4 81	2,750
New Orleans, LA	- 6	3,570		21,700
Nogales, AZ	_ (4)	24	1	350
San Juan, PR	_ 16	5,850	77	27,100
Tampa, FL	119	22,400	279	92,000
Total	384	83,600	1,400	433,000
West coast and Hawaii:	=			
Columbia–Snake, OR	_ 105	43,100	350	149,000
Honolulu, HI, and Anchorage, AK	28	11,200	66	24,700
Los Angeles, CA	_ 250	107,000	1,040	465,000
San Diego, CA	23	7,970	116	37,700
San Francisco, CA	252	104,000	734	295,000
Seattle, WA	133	57,400	341	152,000
Total	791	330,000	2,640	1,120,000
Grand total	2,020	751,000	7,770	3,020,000

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 ½ unit.

${\bf TABLE~6} \\ {\bf U.S.~EXPORTS~OF~IRON~AND~STEEL~SCRAP~AND~OTHER} \\ {\bf FERROUS~PRODUCTS~BY~GRADE,~IN~MAY~2021}^{1,\,2}$

(Thousand metric tons and thousand dollars)

	May	y	January–May ³	
Item	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	552	230,000	2,220	890,000
No. 2 heavy melting steel	65	28,700	299	131,000
No. 1 bundles		3,710	153	22,200
No. 2 bundles	4	382	11	1,420
Shredded steel scrap	613	248,000	2,320	962,000
Borings, shovelings and turnings	1	374	6	2,030
Cut plate and structural	56	23,500	264	110,000
Tinned iron or steel	7	3,960	42	17,400
Remelting scrap ingots	(4)	48	17	799
Cast iron	383	56,600	969	228,000
Other iron and steel	204	89,300	985	386,000
Total carbon steel and cast iron	1,900	684,000	7,290	2,750,000
Stainless steel	22	25,800	93	108,000
Other alloy steel	106	40,700	387	163,000
Total stainless and alloy steel	128	66,600	480	271,000
Total carbon, stainless, alloy steel and cast iron	2,020	751,000	7,770	3,020,000
Ships, boats, and other vessels for				
breaking up (for scrapping)			(4)	11
Used rails	(4)	179	1	2,240
Used rails for rerolling and other uses	(4)	3	(4)	51
Total scrap exports	2,020	751,000	7,780	3,020,000
Exports of manufactured ferrous products,				
Pig iron $<$ or $= 0.5\%$ phosphorus	(4)	110	2	1,480
Pig iron $>$ or $= 0.5\%$ phosphorus	(4)	10	(4)	19
Total pig iron	(4)	120	3	1,500
Direct-reduced iron (DRI)	2	201	6	376
Spongy iron products, not DRI	31	14,400	105	43,400
Granules for abrasive cleaning and other uses		2,810	8	13,700
Powders of alloy steel	1	8,800	8	34,900
Other ferrous powders	6	9,760	35	46,300
Total DRI, granules, powders	42	36,000	162	139,000
Grand total	2,070	787,000	7,940	3,160,000

⁻⁻ Zero.

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 ½ unit.

TABLE 7 U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP BY SELECTED COUNTRY OR LOCALITY, IN MAY $2021^{1,2}$

(Thousand metric tons and thousand dollars)

	Ma	y	January–May ³		
Country or locality	Quantity	Value	Quantity	Value	
Belgium	(4)	8	48	15,100	
Canada	272	125,000	1,540	649,000	
Cayman Islands	(4)	67	2	411	
China	(4)	390	5	1,180	
Colombia	(4)	424	2	2,120	
Czechia	(4)	7	2	2,630	
Dominican Republic	(4)	219	1	637	
Ecuador	(4)	209	1	928	
Estonia	(4)	34	2	2,080	
Germany	9	4,350	37	10,600	
India			1	348	
Japan	(4)	89	20	470	
Malaysia			1	162	
Mexico	51	28,700	225	122,000	
Netherlands	29	14,000	150	66,500	
Poland	12	5,820	39	22,200	
Russia	(4)	62	1	2,200	
Singapore			3	374	
Spain	12	5,830	28	10,800	
Sweden	30	15,100	74	35,800	
United Kingdom	44	23,500	139	67,700	
Other ⁵	1	721	4	3,000	
Total	463	224,000	2,330	1,020,000	

⁻⁻ 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 ½ unit.

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

TABLE 8 $\mbox{U.s. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP BY SELECTED CUSTOMS DISTRICT, IN MAY <math display="inline">2021^{1,2} \mbox{}$

(Thousand metric tons and thousand dollars)

	May	y	January–May ³		
Customs district	Quantity	Value	Quantity	Value	
Baltimore, MD			2	1,990	
Buffalo, NY	30	18,800	175	102,000	
Charleston, SC	30	14,100	189	85,100	
Chicago, IL	(4)	76	10	2,090	
Cleveland, OH	(4)	456	13	1,880	
Detroit, MI	128	69,300	808	374,000	
Duluth, MN	15	5,890	73	28,200	
El Paso, TX	5	2,130	20	7,770	
Great Falls, MT	1	301	6	1,510	
Houston-Galveston, TX	1	1,030	9	6,190	
Laredo, TX	34	19,800	148	84,600	
Miami, FL	1	361	5	1,750	
Minneapolis, MN			1	149	
Mobile, AL	34	18,800	94	60,400	
New Orleans, LA	78	39,400	284	107,000	
New York City, NY	(4)	34	1	1,480	
Nogales, AZ	4	1,600	11	3,940	
Ogdensburg, NY	1	1,030	7	4,640	
Pembina, ND	19	8,530	88	38,000	
Portland, ME	1	231	1	557	
San Diego, CA	5	1,460	23	7,280	
Seattle, WA	- 77	20,500	350	92,800	
St. Albans, VT	1	275	7	2,390	
Other	(4)	149	1	735	
Total	463	224,000	2,330	1,020,000	

⁻⁻ 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 ½ unit.

$\label{thm:continuous} TABLE~9$ U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE, IN MAY $2021^{1,2}$

(Thousand metric tons and thousand dollars)

	Ma	у	January–May ³	
Item	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	16	4,630	85	24,800
No. 2 heavy melting steel	11	3,840	47	15,000
No. 1 bundles	160	82,000	763	355,000
No. 2 bundles	10	3,670	38	14,400
Shredded steel scrap	35	11,100	224	70,900
Borings, shovelings and turnings	7	2,230	43	14,600
Cut plate and structural	18	6,450	110	37,300
Tinned iron or steel	15	6,650	99	41,900
Remelting scrap ingots	(4)	362	1	607
Cast iron	8	2,830	57	18,500
Other iron and steel	103	42,200	428	142,000
Total carbon steel and cast iron	383	166,000	1,900	735,000
Stainless steel	22	31,300	121	154,000
Other alloy steel	58	27,100	310	127,000
Total stainless and alloy steel	81	58,400	431	281,000
Total carbon, stainless, alloy steel and cast iron	463	224,000	2,330	1,020,000
Ships, boats, and other vessels for				
breaking up (for scrapping)	(4)	27	5	634
Used rails	(4)	6	(4)	124
Used rails for rerolling and other uses			1	997
Used rails other	(4)	93	(4)	899
Total scrap imports	463	224,000	2,330	1,020,000
Imports of manufactured ferrous products:				
Pig iron < or = 0.5% phosphorus	(4)	159	(4)	329
Pig iron > or = 0.5% phosphorus	626	340,000	2,350	1,160,000
Alloy pig iron	(4)	109	(4)	419
Total pig iron	626	340,000	2,350	1,160,000
Direct-reduced iron (DRI)	250	100,000	1,460	509,000
Spongy iron products, not DRI	(4)	559	1	1,340
Granules for abrasive cleaning and other uses		3,370	13	15,800
Powders of alloy steel		12,300	26	49,600
Other ferrous powders	4	7,120	18	34,200
Total DRI, granules, powders	261	124,000	1,520	609,000
Grand total	1,350	688,000	6,200	2,790,000

⁻⁻ 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 ½ unit.

 ${\it TABLE~10}\\ {\it U.S.~RAW~STEEL~PRODUCTION,~RAW~STEEL~CAPABILITY~UTILIZATION,}\\ {\it AND~CONTINUOUS~CAST~STEEL~PRODUCTION}^1$

		Raw steel production, thousand metric tons		Raw steel capability utilization, percent		cast steel , percent
		Year		Year		Year
Period	Monthly	to date ²	Monthly	to date ²	Monthly	to date ²
2020:						
May	4,910	31,500	54.6	69.9	99.7	99.7
June	4,950	36,400	56.8	67.8	99.7	99.7
July	5,420	41,800	60.3	66.7	99.7	99.7
August	5,930	47,800	65.9	66.6	99.8	99.8
September	5,980	53,700	68.6	66.8	99.8	99.9
October	6,220	60,000	70.1	67.1	99.8	99.8
November	6,300	66,300	73.3	67.7	99.8	99.8
December	6,480	72,700	72.9	68.1	99.8	99.8
2021:						
January	6,970	6,970	76.6	76.6	99.8	99.8
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

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

Source: American Iron and Steel Institute.

²May include revisions to previously published data.

TABLE 11 COMPOSITE PRICES FOR STEEL SCRAP AND PIG IRON

	Steel Sc	rap ¹	Pig Iron ²		
Period	\$/lt	\$/t	\$/1t	\$/t	
2020:					
May	199.84	196.68	324.28	319.16	
June	208.85	205.55	304.40	299.59	
July	197.12	194.01	304.40	299.59	
August	209.05	205.75	327.75	322.57	
September	240.24	236.45	272.50	268.20	
October	244.48	240.62	272.50	268.20	
November	248.28	244.36	333.35	328.09	
December	304.43	299.62	333.35	328.09	
Average, January–December	231.28	227.62	313.73	308.78	
2021:					
January	390.18	384.02	537.00	528.52	
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	

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

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

²Prices are Brazilian basic pig iron, free on board, New Orleans, LA. Source: U.S. Census