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FERROUS SCRAP IN MAY 1959

Combined domestic consumption of ferrous scrap and pig iron in steelmaking furnaces during May 1959 reached an all-time high and was slightly greater than in March 1959, the previous record month, according to the Bureau of Mines, United States Department of the Interior. Ferrous scrap consumed in steelmaking furnaces (open-hearth, Bessemer, basic oxygen, and electric) increased 1 percent over the preceding month and was 77 percent higher than for May 1958. Pig iron used in these furnaces during May was at an all-time high exceeding by 1 percent the previous record month of March 1959. Total steel-furnace melt (11,417,452 gross tons), consisted of 46 percent scrap and 54 percent pig iron, unchanged from April.

Table 1 - Summary of production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, December 1958 to May 1959, in gross tons

Date	Scrap for consumption			Consumption		Consumers' stocks at end of month	
	Home scrap produced	Purchased scrap received (net)	Total	Scrap	Pig iron	Scrap	Pig iron ^{1/}
Dec. 1958----	3,019,900	2,218,407	5,238,307	4,973,670	5,319,991	8,565,714	3,539,526
Jan. 1959----	3,139,909	1,996,185	5,136,094	5,375,042	5,609,509	8,330,913	3,477,606
Feb. 1959----	3,250,026	2,263,986	5,514,012	5,657,873	5,627,953	8,197,032	3,296,182
Mar. 1959----	3,869,752	2,861,674	6,731,426	6,677,499	6,798,053	8,242,936	3,171,999
Apr. 1959----	3,919,279	2,755,886	6,675,165	6,644,905	6,652,916	8,275,777	3,095,256
May 1959----	3,922,048	2,639,821 ^{2/}	6,561,869	6,642,572	6,867,857	8,199,281	3,118,025

^{1/} Suppliers' stocks included with consumers' stocks.

^{2/} Excludes 210,951 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and James C. O. Harris, Aug. 10, 1959, under the supervision of H.G. Iverson, Chief, Branch of Ferrous Metals and Ferroalloys, Division of Minerals.

Total domestic consumption of ferrous scrap for all purposes in May was slightly less than in April but was 72 percent greater than in May 1958. The use of pig iron during May ran 3 percent over the preceding month and was the highest monthly tonnage ever consumed, exceeding March 1959, the previous record month.

The use of scrap by gray iron foundries during May totaled 868,661 gross tons, a 5 percent decrease from the 911,313 tons used during April. Pig iron consumed by this industry totaled 358,192 tons, a drop of 2 percent from the preceding month.

Domestic stocks of ferrous scrap and pig iron held by consumers at the end of May totaled 11,317,306 gross tons, a slight decrease from those held at the end of the preceding month. Stocks of ferrous scrap were equivalent to a 38-day supply at the May daily consumption rate and totaled 8,199,281 tons, a decrease of 1 percent from the end of April, but 1 percent greater than stocks held on May 31, 1958. Pig iron stocks held by consumers and suppliers, totaled 3,118,025 tons, an increase of 1 percent over those held on April 30, but 11 percent less than the tonnage held at the end of May 1958.

Home scrap produced, plus purchased scrap received, totaled 6,561,869 tons during May, 2 percent less than during April; home scrap produced accounted for 3,922,048 tons, a slight increase over April. Net purchased scrap received totaled 2,639,821 tons, a decrease of 4 percent from April. Of the purchases, 84 percent was obtained from dealers and 16 percent from other sources. Purchased scrap received represents a net figure computed by deducting scrap shipped, transferred, or otherwise disposed of by consumers from total scrap received from dealers and all others during the month.

Table 2 - Production and receipts of ferrous scrap by major consuming industries plants, in gross tons

Date	Home scrap produced			Purchased scrap received (net) ^{1/}		
	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users
Jan. 1959----	2,674,204	85,213	380,492	1,490,357	90,383	415,445
Feb. 1959----	2,771,238	89,710	389,078	1,719,644	110,442	433,900
Mar. 1959----	3,324,913	105,496	439,343	2,218,698	129,608	513,368
Apr. 1959----	3,356,592	110,091	452,596	2,085,713	140,694	529,479
May 1959----	3,386,717	105,144	430,187	1,999,324	152,144	488,353

^{1/} Excludes scrap shipped, transferred or otherwise disposed of during the month.

Table 3 - Scrap produced, received, and consumed during May, stocks at consumers plants May 31, 1959, and consumption year-to-date, by grades, in gross tons

Grades of scrap	Home scrap produced	Purchased scrap received		Total scrap consumed	Scrap stocks May 31	Consumption Year-to-date
		From dealers*	From others*			
No. 1 heavy melting steel-----	1,692,142	428,450	82,863	2,302,456	2,472,307	10,545,012
No. 2 heavy melting steel-----	172,852	273,726	31,426	464,508	766,548	2,171,151
No. 1 and electric furnace bundles-----	90,682	366,855	104,865	517,143	785,134	2,524,709
No. 2 and all other bundles-----	25,279	317,409	28,764	367,528	859,820	1,753,421
Low phosphorous scrap-----	100,615	201,700	33,292	350,228	495,528	1,666,581
Cast iron scrap other than borings-----	555,303	314,848	58,271	906,796	1,014,930	4,357,798
Turnings and/or borings, alloy free-----	48,808	215,216	30,510	288,331	209,839	1,299,636
Rerolling rails-----	-	18,516	25,748	43,515	143,994	211,943
Scrap rails-----	5,442	22,623	1,029	27,148	62,080	135,698
High speed steel-----	2,020	1,113	302	3,232	4,901	14,125
Stainless steel-----	47,562	21,808	4,272	71,830	102,336	323,897
All other alloy iron and steel-----	162,343	32,074	12,265	197,552	273,167	944,404
All other prepared scrap-----	624,097	136,414	35,080	874,964	561,569	4,041,433
Unprepared scrap-----	394,903	41,605	9,728	227,341	447,128	1,008,083
Total (all grades)-----	3,922,048	2,392,357	458,415	6,642,572	8,199,281	30,997,891

* Includes 210,951 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

Table 4 - Stocks of ferrous scrap and pig iron on hand at major consuming industries plants, at end of month, in gross tons

Date	Scrap stocks			Pig iron stocks		
	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel-laneous users	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel-laneous users
Dec. 31, 1958-----	7,357,904	410,187	797,623	3,048,913	36,491	454,122
Jan. 31, 1959-----	7,172,318	387,775	770,820	3,022,110	36,084	419,412
Feb. 28, 1959-----	7,062,756	378,494	755,782	2,827,861	37,816	430,505
Mar. 31, 1959-----	7,091,280	366,923	784,733	2,668,774	38,125	465,100
Apr. 30, 1959-----	7,123,652	358,332	793,793	2,522,156	41,060	532,040
May 31, 1959-----	7,040,759	360,989	797,533	2,460,951	50,356	606,718
						3,539,526
						3,477,606
						3,296,182
						3,171,999
						3,095,256
						3,118,025

DEALERS, BROKERS, AND AUTOMOBILE WRECKERS FOR MAY 1959

The 899 identical companies reporting for April and May indicated that at the end of May, stocks of ferrous scrap in their yards had decreased 4 percent from the end of April. During May, receipts and shipments decreased 12 and 13 percent, respectively. Receipts in May were 31 percent less than shipments. Of the scrap handled during May, six grades (No. 1 and No. 2 heavy melting steel, No. 1 and electric furnace bundles, No. 2 and all other bundles, low phosphorous and cast iron scrap other than borings) represented 69 percent of the total shipments and 44 percent of the stocks on May 31. Unprepared scrap stocks held in dealers and automobile wreckers yards at the end of May constituted 45 percent of the stock total.

Table 5 - Dealers, brokers, and automobile wreckers, receipts, shipments, and stocks of ferrous scrap, for May 1959, in gross tons

Grades of scrap	Receipts during month		Shipments ¹ during month		Stocks	
	May 1959	Change from previous month (percent)	To domestic consumers	For export	May 31 1959	Change from end of previous month (percent)
No. 1 heavy melting steel-----	45,898	-31	117,624	23,249	124,484	-11
No. 2 heavy melting steel-----	56,482	-10	87,278	28,652	136,407	-9
No. 1 and electric furnace bundles-----	8,593	-9	43,338	2,900	17,751	-15
No. 2 and all other bundles-----	44,870	-9	96,829	14,268	177,477	-4
Low phosphorous scrap-----	12,662	-19	34,413	-	32,285	<u>3</u> / ₋₂
Cast iron scrap other than borings-----	43,328	-17	78,036	3,020	64,398	<u>2</u> / ₊₃
Turnings and/or borings, alloy free-----	19,284	<u>2</u> / ₋₃₃	34,971	146	62,362	<u>2</u> / ₊₃
Rerolling rails-----	1,430	-33	9,519	-	11,178	+4
Scrap rails-----	2,892	+14	3,587	-	17,649	+13
Highspeed steel-----	59	+46	327	-	98	-15
Stainless steel-----	4,619	+3	6,178	-	5,191	+84
All other alloy iron and steel-----	2,095	+140	5,641	-	2,282	-7
All other prepared scrap-----	10,026	-35	43,782	18,077	45,575	-1
Unprepared scrap-----	275,119	-9	107,727	6,025	572,513	-4
Total (all grades)-----	527,357	-12	669,250	96,337	1,269,650	-4

¹/ Includes shipments from yards, and direct shipments by dealers and brokers from other than yard operations.
²/ Less than 1 percent decrease.
³/ Less than 1 percent increase.

CONSUMPTION OF FERROUS SCRAP AND PIG IRON

Consumption of scrap in May totaled 6,642,572 gross tons which was at an average daily rate of 214,277 tons or 55 percent greater than for the year 1958.

In May, open-hearth furnaces used 61 percent of the total scrap, and 84 percent of the pig iron, the same percentages as during April; electric furnaces in May used 8 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 73 percent. During 1958, these percentages were 7 and 73, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1958 was 5.

During May, steelmaking furnaces (open-hearth, Bessemer, basic oxygen process, and electric) accounted for 78 percent of the total scrap, and 90 percent of the pig iron consumed, compared with 77 and 90 percent, respectively, during April. In 1958, steelmaking furnaces used 76 percent of the total scrap, and 90 percent of the pig iron. The remainder was used in iron-making furnaces, principally the cupola. Consumption by type of furnace during May is shown in the following table:

Table 6 - Consumption of ferrous scrap and pig iron by manufacturers of ingots, steel castings and iron foundries during May 1959, by type of furnace, in gross tons

Type of furnace or equipment	Steel ingots and castings 1/		Steel castings 2/		Iron foundries and miscellaneous users		Total	
	Scrap		Scrap		Scrap		Scrap	
	Pig iron		Pig iron		Pig iron		Pig iron	
Open-hearth-----	4,030,752	5,777,711	49,882	7,277	-	-	4,080,634	5,784,988
Basic oxygen process-----	70,870	193,992	-	-	-	-	70,870	193,992
Bessemer-----	25,266	190,359	701	52	179	26	26,146	190,437
Electric 3/-----	877,346	35,709	137,857	3,103	14,370	2,000	1,029,573	40,812
Total steelmaking furnaces-----	5,004,234	6,197,771	188,440	10,432	14,549	2,026	5,207,223	6,210,229
Cupola-----	64,550	43,865	43,120	1,892	760,991	312,435	868,661	358,192
Air-----	2,648	967	24,747	4,408	71,861	15,049	99,256	20,424
Blast 4/-----	380,302	-	-	-	-	-	380,302	-
Direct casting-----	-	157,555	-	-	-	121,457	-	279,012
Ferro-alloy-----	-	-	-	-	24,270	-	24,270	-
Miscellaneous-----	16,969	-	-	-	45,891	-	62,860	-
Total May 1959-----	5,468,703	6,400,158	256,307	16,732	917,562	450,967	6,642,572	6,867,857
Total April 1959-----	5,409,522	6,177,722	260,939	16,486	974,444	458,708	6,644,905	6,652,916
Total March 1959-----	5,504,795	6,340,149	247,534	15,299	925,170	442,605	6,677,499	6,798,053
Total February 1959-----	4,611,586	5,216,578	210,810	12,947	835,477	398,428	5,657,873	5,627,953
Total January 1959-----	4,351,939	5,208,421	201,285	11,981	821,818	389,107	5,375,042	5,609,509
Total December 1958-----	3,984,747	4,938,658	196,342	11,982	792,581	369,351	4,973,670	5,319,991

1/ Includes only those castings made by companies producing steel ingots.

2/ Excludes companies that produce both steel castings and steel ingots.

3/ Includes crucible furnaces.

4/ Includes consumption in all blast furnaces producing pig iron.

Table 7 - Consumers' production, receipts, consumption, and stocks of ferrous scrap, and consumption of pig iron in the United States, by State and Region, in gross tons

State and region	Scrap			Scrap stocks May 31, 1959	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	3,922,048	2,850,772 ^{1/}	6,642,572	8,199,281	6,867,857
New England, total-----	18,800	20,198	38,126	50,513	13,053
Connecticut-----	5,708	4,872	10,469	13,789	2,668
Maine and New Hampshire-----	579	919	1,314	1,494	328
Massachusetts-----	8,999	8,898	16,198	26,199	5,524
Rhode Island-----	2,835	5,082	8,698	7,681	3,990
Vermont-----	679	427	1,447	1,350	543
Middle Atlantic, total-----	1,166,250	751,099	1,846,100	2,305,468	2,161,577
New Jersey-----	15,814	39,945	52,514	67,527	14,393
New York-----	173,976	159,969	336,770	548,087	344,539
Pennsylvania (East) ^{2/} -----	242,012	195,691	422,426	649,370	474,998
Pennsylvania (West)-----	734,448	355,494	1,034,390	1,040,484	1,327,647
East North Central, total-----	1,876,644	1,239,735	3,094,492	3,377,886	3,135,478
Illinois-----	336,281	317,627	625,622	796,116	551,429
Indiana-----	477,149	259,837	713,545	988,937	853,289
Michigan-----	265,936	229,958	496,066	385,950	414,035
Ohio (East) ^{3/} -----	645,156	294,966	993,635	830,841	1,113,104
Ohio (West)-----	107,490	94,257	191,929	324,084	182,366
Wisconsin-----	44,632	43,090	73,695	51,958	21,255
West North Central, total-----	58,763	121,930	183,758	348,715	63,147
Iowa-----	12,262	20,430	35,183	32,048	7,762
Kansas and Nebraska-----	4,930	8,910	13,402	11,232	454
Minnesota-----	22,149	20,914	46,658	116,879	49,238
Missouri-----	19,422	71,676	88,515	188,556	5,693
South Atlantic, total-----	313,544	158,704	485,017	483,697	606,559
Delaware, District of Columbia, and Maryland-----	237,393	78,728	321,933	281,922	412,172
Florida and Georgia-----	6,799	15,712	30,328	9,916	1,046
North Carolina-----	1,938	3,743	5,104	4,074	1,879
South Carolina-----	1,235	536	2,309	2,677	1,237
Virginia and West Virginia-----	66,179	59,985	125,343	185,108	190,225
East South Central, total-----	195,002	200,392	364,473	443,939	427,177
Alabama-----	139,517	118,410	228,870	249,027	345,890
Kentucky, Mississippi, and Tennessee-----	55,485	81,982	135,603	194,912	81,287
West South Central, total-----	64,405	115,267	172,284	353,561	72,464
Arkansas, Louisiana, and Oklahoma-----	3,770	14,341	20,773	16,562	579
Texas-----	60,635	100,926	151,511	336,999	71,885
Rocky Mountain, total-----	104,227	79,333	173,672	235,532	211,551
Arizona and Nevada-----	1,363	6,675	6,613	18,083	14
Colorado and Utah-----	102,440	70,793	164,272	213,202	211,502
Idaho and Montana-----	424	1,865	2,787	4,247	35
Pacific Coast, total-----	124,413	164,114	284,650	599,970	176,851
California-----	114,248	131,575	237,355	461,668	176,547
Oregon-----	3,373	12,010	15,800	42,948	99
Washington-----	6,792	20,529	31,495	95,354	205

^{1/} Includes 210,951 gross tons that was shipped, transferred, or otherwise disposed of during the month.

^{2/} Pennsylvania is divided into East and West by the eastern boundary of the following counties: McKean, Cameron, Clearfield, Cambria, and Somerset.

^{3/} Ohio is divided into East and West by the eastern boundary of the following counties: Ottawa, Sandusky, Seneca, Crawford, Morrow, Delaware, Franklin, Pickaway, Ross, Pike, and Scioto.

Table 8 - Consumption of ferrous scrap and pig iron in open-hearth furnaces in the United States, by State and Region, in gross tons

State and Region	Consumption during May 1959		
	Total scrap	Pig iron	Total charge
United States, total-----	4,080,634	5,784,988	9,865,622
New England and Middle Atlantic, total----	1,337,232	1,891,226	3,228,458
Massachusetts, New Jersey, and Rhode Island-----	23,033	6,445	29,478
New York-----	257,622	331,665	589,287
Pennsylvania (East)-----	310,070	431,041	741,111
Pennsylvania (West)-----	746,507	1,122,075	1,868,582
East North Central, total-----	1,813,156	2,581,177	4,394,333
Illinois-----	327,062	442,241	769,303
Indiana-----	627,455	828,182	1,455,637
Michigan and Wisconsin-----	167,902	266,164	434,066
Ohio (East)-----	599,861	877,907	1,477,768
Ohio (West)-----	90,876	166,683	257,559
West North Central, total-----	64,177	48,458	112,635
Minnesota and Missouri-----	64,177	48,458	112,635
South Atlantic, total-----	369,470	587,192	956,662
Delaware, Maryland, and West Virginia----	369,470	587,192	956,662
East and West South Central, total-----	231,534	383,567	615,101
Alabama, Kentucky, Tennessee, and Texas----	231,534	383,567	615,101
Rocky Mountain and Pacific Coast, total----	265,065	293,368	558,433
California, Colorado, and Utah-----	265,065	293,368	558,433

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 375,164 gross tons in May and 269,014 tons in April. During June 1959, the Office of Export Supply, United States Department of Commerce, issued scrap export licenses for 298,683 gross tons. Exports of pig iron during May totaled 88 tons and 925 tons in April. Imports of scrap totaled 30,593 gross tons in May compared with 19,484 tons in April. Imports of pig iron totaled 74,610 gross tons in May and 34,740 tons in April. In addition, to the foregoing imports of pig iron during May, there was 1,181 tons of sponge iron, valued at \$149,823, imported, of which 99 tons came from Canada and 1,082 tons from Sweden.

Table 9 - Imports 2/ of ferrous scrap into the United States,
by countries
(U. S. Department of Commerce)

Country	May 1959		Jan. through May 1959	
	Gross tons	Value	Gross tons	Value
Canada-----	20,684	\$781,098	78,744	\$3,048,581
Cuba-----	313	3,973	1,188	18,477
France-----	2,050	134,350	2,138	154,775
Japan-----	-	-	65	24,336
United Kingdom-----	2,591	125,498	7,901	359,684
West Germany-----	-	-	3,463	238,808
All others-----	4,955	271,066	10,682	637,487
Total-----	30,593	\$1,315,985	104,181	\$4,482,148

Table 10 - Exports 2/ of ferrous scrap from the United States, by countries
(U. S. Department of Commerce)

Country	May 1959		Jan. through May 1959	
	Gross tons	Value	Gross tons	Value
Argentina-----	158	\$17,205	1,184	\$84,853
Canada-----	68,987	2,874,522	193,827	7,933,368
Greece-----	221	44,100	991	166,638
Italy-----	9,234	245,284	40,576	1,219,142
Japan-----	238,336	8,652,201	882,430	31,720,948
Mexico-----	30,779	1,127,912	125,472	4,690,094
Nicaragua-----	520	18,180	1,917	66,927
Spain-----	11,615	487,995	53,147	2,124,645
Taiwan-----	11,903	340,472	21,352	714,722
All others-----	3,411	197,099	14,186	770,238
Total-----	375,164	\$14,004,970	1,335,082	\$49,491,575

Table 11 - Exports 2/ of ferrous scrap from the United States, by grades
(U. S. Department of Commerce)

	May 1959		Jan. through May 1959	
	Gross tons	Value	Gross tons	Value
No. 1 heavy melting steel scrap-----	139,009	\$5,414,990	495,249	\$19,482,062
No. 2 heavy melting steel scrap-----	94,811	3,357,462	369,304	13,177,563
No. 1 baled sheet melting scrap-----	9,403	416,219	51,567	2,160,493
No. 2 baled sheet melting scrap-----	50,409	1,276,238	189,798	4,845,623
Borings, shoveling, and turnings-----	6,712	171,812	27,730	701,162
Iron scrap-----	46,401	1,936,134	145,156	5,941,475
Rerolling material-----	4,344	333,106	7,960	604,704
All other scrap 3/-----	24,075	1,099,009	48,318	2,578,493
Total-----	375,164	\$14,004,970	1,335,082	\$49,491,575

1/ To conform with other data in this report foreign trade data include tin plate scrap.

2/ Preliminary data subject to revision. Value may differ widely because of variations in quality, classes, and grade combinations.

3/ Includes terne plate, tin plate, circles, cobbles, strip, and scroll shear butts.