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Iron and Steel Scrap
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FERROUS SCRAP IN FIRST QUARTER 1961 AND MARCH 1961 (Final Data)

The domestic use of ferrous scrap for all purposes during the first quarter of 1961, was 38 percent lower than during the first three months of 1960, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The 12,434,241 gross tons of scrap used during the first quarter was the lowest consumption of this material for the same period since 1958. Ferrous scrap and pig iron consumed for all purposes during March rose 13 percent and 14 percent, respectively, over February. The scrap and pig iron charge totaled (8,580,061 gross tons) and the ratio of scrap to pig iron was 52 to 48, unchanged from February. March was the eighth consecutive month in which the use of scrap was greater than pig iron.

Table 1 - Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, October 1960 through March 1961, 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 <u>1/</u>
Oct.-----	2,526,189	1,844,982	4,371,171	4,375,871	4,017,508	8,493,946	3,267,072
Nov.-----	2,361,275	1,540,506	3,901,781	3,939,970	3,674,732	8,457,361	3,312,703
Dec.-----	2,150,118	1,384,986	3,535,104	3,738,385	3,426,941	8,260,560	3,366,456
Jan.-----	2,252,440	1,465,767	3,718,207	4,059,361	3,682,210	7,924,555	3,290,139
Feb.-----	2,237,002	1,435,988	3,672,990	3,925,802	3,612,759	7,670,148	3,224,271
Mar.-----	2,601,624	2,186,218	4,463,806	4,449,078	4,130,983	7,689,881	3,177,847

1/ Suppliers' stocks included with consumers' stocks.

2/ Excludes 167,115 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

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In line with increased steel production, the use of scrap in steelmaking furnaces (open-hearth, basic oxygen converter, Bessemer, and electric) rose 12 percent over the previous month and totaled 3,389,422 gross tons. Pig iron consumption in these furnaces totaled 3,676,917 tons, 14 percent more than in February. The total steel furnace melt (7,066,339 gross tons) consisted of 48 percent scrap and 52 percent pig iron. Electric furnaces used 710,749 gross tons of scrap during March, up 11 percent over February.

The use of scrap by gray iron foundries during March totaled 677,167 gross tons, a rise of 14 percent over the 593,810 tons used in February. Pig iron consumed by this industry was 251,524 gross tons, compared with 225,222 tons in February.

Domestic stocks of ferrous scrap held by consumers on March 31 were slightly higher than on February 28 and were equivalent to a 54-day supply at the March daily consumption rate. Pig iron stocks held by consumers and suppliers at the end of March were 1 percent lower than at the end of the preceding month.

Home scrap produced plus purchased scrap received, totaled 4,463,806 gross tons, an increase of 22 percent over the preceding month. Net purchased scrap received by consumers totaled 1,862,182 gross tons, 30 percent more than in February. Of the purchases 85 percent was received from dealers and 15 percent from other sources. (Purchased scrap received is 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, October 1960 through March 1961, 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
Oct.-----	2,105,664	81,879	338,646	1,274,090	110,198	460,694
Nov.-----	1,941,061	78,328	341,886	1,025,348	101,598	413,560
Dec.-----	1,747,148	78,335	324,635	933,298	110,197	341,491
Jan.-----	1,863,309	79,177	309,954	1,026,035	87,529	352,203
Feb.-----	1,870,674	78,203	288,125	1,032,689	88,264	315,035
Mar.-----	2,176,328	88,279	337,017	1,374,257	97,789	390,136

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

Table 3 - Scrap produced and received during March 1961, and stocks at consumers' plants, March 31, 1961, by grades, in gross tons

Grades of scrap	Home scrap produced	Purchased scrap received		Scrap stocks Mar. 31
		From dealers*	From others*	
No. 1 heavy melting steel-----	1,002,566	309,644	47,882	2,126,572
No. 2 heavy melting steel-----	145,657	205,502	31,599	662,634
No. 1 and electric furnace bundles-----	69,455	228,849	60,707	977,406
No. 2 and all other bundles-----	22,313	239,306	25,826	607,359
Low phosphorus scrap-----	89,243	159,541	17,913	579,213
Cast iron scrap, other than borings-----	395,038	246,298	24,625	960,141
Turnings and/or borings, alloy free-----	38,722	145,371	28,125	198,293
Rerolling rails-----	335	21,401	13,638	127,316
Scrap rails-----	1,932	19,498	175	46,044
High speed steel-----	1,070	766	158	5,238
Stainless steel-----	33,017	14,308	2,753	132,810
All other alloy iron and steel-----	126,093	19,077	9,442	309,888
All other prepared scrap-----	424,183	97,190	29,048	568,392
Unprepared scrap-----	252,000	22,156	8,499	388,575
Total-----	2,601,624	1,728,907	300,390	7,689,881

* Includes 167,115 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

DEALERS, BROKERS, AUTOMOBILE WRECKERS FOR MARCH 1961

The 722 identical companies reporting for February and March indicated that at the end of March, stocks of ferrous scrap in their yards had increased 5 percent over February 28. During March, receipts and shipments each increased 51 percent and 24 percent, respectively, over the previous month. Receipts in March were 10 percent greater than shipments. Of the scrap handled during March, six grades (No. 1 and No. 2 heavy melting steel, No. 1 and electric furnace bundles, No. 2 and all other bundles, low phosphorus and cast iron scrap, other than borings) represented 80 percent of the total shipments and 50 percent of the stocks on hand March 31. Unprepared scrap stocks held in dealers' and automobile wreckers' yards at the end of March constituted 37 percent of the total stocks.

Table 6 - Dealers, brokers, and automobile wreckers, receipts, shipments, and stocks of ferrous scrap, for March 1961, in gross tons

Grades of scrap	Receipts during month		Shipments ¹ during month		Stocks	
	March	Change from previous month (percent)	To domestic consumers	For export	March 31	Change from end of previous month (percent)
No. 1 heavy melting steel-----	108,276	+ 53	84,692	64,261	206,404	+ 33
No. 2 heavy melting steel-----	82,856	+ 46	61,290	45,519	126,527	+ 6
No. 1 and electric furnace bundles-----	30,301	+ 61	54,168	5,769	57,958	+ 9
No. 2 and all other bundles-----	84,594	+ 26	76,338	35,129	160,692	+ 5
Low phosphorus scrap-----	11,043	+ 30	27,540	183	22,814	- 4
Cast iron scrap, other than borings-----	61,227	+ 71	66,366	4,416	96,906	+ 10
Turnings and/or borings, alloy free-----	27,661	+ 57	36,989	119	76,606	- 3
Rerolling rails-----	1,041	- 38	3,003	-	6,970	+ 4
Scrap rails-----	4,764	+ 6	3,871	301	23,097	+ 2
Highspeed steel-----	37	+ 32	29	-	241	- 13
Stainless steel-----	2,601	+ 18	2,061	101	6,693	- 8
All other alloy iron and steel-----	18,049	+993	19,958	234	3,350	- 5
All other prepared scrap-----	20,843	+ 46	19,573	1,007	58,151	- 25
Unprepared scrap-----	264,974	+ 51	32,483	9,885	489,067	+ 1
Total-----	718,267	+ 51	488,361	166,924	1,335,476	+ 5

¹/ Includes shipments from yards and direct shipments by dealers and brokers from other than yard operations.

CONSUMPTION OF FERROUS SCRAP AND PIG IRON

Consumption of scrap in March totaled 4,449,078 gross tons which was at an average daily rate of 143,519 tons or 11 percent less than for the year 1960.

In March, open-hearth furnaces used 58 percent of the total scrap and 81 percent of the pig iron compared with 58 and 82 percent, respectively, in February; electric furnaces in March used 9 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 69 percent. During 1960, these percentages were 8 and 71 percent, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1960 was 5.

During March, steelmaking furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 76 percent of the total scrap and 89 percent of the pig iron consumed, compared with 77 and 89 percent, respectively, during February. In 1960, 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 March is shown in the following table:

Table 7 - Consumption of ferrous scrap and pig iron by manufacturers of ingots, steel castings and iron foundries during March 1961, 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	Pig iron	Scrap	Pig iron	Scrap	Pig iron	Scrap	Pig iron
Open-hearth-----	2,542,488	3,353,569	33,526	5,613	-	-	2,576,014	3,359,182
Basic oxygen converter 3/-----	92,492	223,383	-	-	-	-	92,492	223,383
Bessemer converter-----	9,236	75,606	753	43	178	57	10,167	75,706
Electric 4/-----	577,570	14,543	118,230	2,115	14,949	1,988	710,749	18,646
Total steelmaking furnaces-----	3,221,786	3,667,101	152,509	7,771	15,127	2,045	3,389,422	3,676,917
Cupola-----	35,901	17,007	23,067	1,677	618,649	232,840	677,617	251,524
Alr-----	1,918	761	17,197	3,017	54,429	10,144	73,544	13,922
Blast 5/-----	247,244	-	-	-	-	-	247,244	-
Direct casting-----	-	125,730	-	-	-	62,890	-	188,620
Ferro-alloy-----	-	-	-	-	13,583	-	13,583	-
Miscellaneous-----	14,628	-	-	-	33,040	-	47,668	-
Total March 1961-----	3,521,477	3,810,599	192,773	12,465	734,828	307,919	4,449,078	4,130,983
Total February 1961-----	3,119,149	3,346,504	176,976	11,758	629,677	254,497	3,925,802	3,612,759
Total January 1961-----	3,197,461	3,408,412	180,924	11,767	680,976	262,031	4,059,361	3,682,210
Total December 1960-----	2,865,141	3,166,273	183,705	12,789	689,539	247,879	3,738,385	3,426,941
Total November 1960-----	3,017,200	3,378,315	180,743	13,126	742,027	283,291	3,939,970	3,674,732
Total October 1960-----	3,418,122	3,691,420	181,658	13,927	776,091	312,161	4,375,871	4,017,508

- 1/ Includes only those castings made by companies producing steel ingots.
- 2/ Excludes companies that produce both steel castings and steel ingots.
- 3/ Includes scrap and pig iron processed in metallurgical blast cupola and used in oxygen converter.
- 4/ Includes crucible furnaces.
- 5/ Includes consumption in all blast furnaces producing pig iron.

Table 8 - Consumers' production, receipts, consumption, and stocks of ferrous scrap, and consumption of pig iron in the United States, by State and Region, March 1961, in gross tons

State and region	Scrap			Scrap stocks Mar. 31	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	2,601,624	1/2,029,297	4,449,078	7,689,881	4,130,983
New England, total-----	19,307	18,059	37,058	52,563	10,848
Connecticut-----	5,408	6,128	10,271	12,117	2,013
Maine and New Hampshire-----	657	670	1,403	1,109	381
Massachusetts-----	9,589	8,567	18,312	30,423	5,726
Rhode Island-----	2,774	1,874	5,139	8,215	2,046
Vermont-----	879	820	1,933	699	682
Middle Atlantic, total-----	715,844	461,768	1,107,824	2,115,705	1,178,641
New Jersey-----	14,358	27,163	43,293	51,892	9,680
New York-----	98,498	67,701	165,707	433,093	180,695
Pennsylvania (East) 2/-----	168,051	151,891	313,506	515,446	297,622
Pennsylvania (West)-----	434,937	215,013	585,318	1,115,274	690,644
East North Central, total-----	1,196,427	892,738	2,033,521	3,415,291	1,838,814
Illinois-----	233,778	258,227	492,321	886,174	310,560
Indiana-----	329,389	174,245	508,672	774,461	605,330
Michigan-----	181,534	137,223	328,610	376,304	294,656
Ohio (East) 3/-----	328,754	234,271	510,005	869,249	500,830
Ohio (West)-----	86,893	61,486	136,192	466,493	113,216
Wisconsin-----	36,079	27,286	57,721	42,610	14,222
West North Central, total-----	48,062	97,143	146,368	298,204	34,663
Iowa-----	15,281	21,073	36,840	25,141	7,096
Kansas and Nebraska-----	3,748	8,042	11,542	12,414	408
Minnesota-----	14,703	16,726	33,948	59,033	25,352
Missouri-----	14,330	51,302	64,038	201,616	1,807
South Atlantic, total-----	221,665	180,888	391,671	334,803	402,193
Delaware and Maryland-----	158,923	69,379	226,624	160,996	260,365
Florida and Georgia-----	7,037	13,101	27,212	18,674	822
North Carolina-----	2,244	2,862	4,847	3,659	2,081
South Carolina-----	1,049	1,637	2,416	5,861	1,181
Virginia and West Virginia-----	52,412	93,909	130,572	145,613	137,744
East South Central, total-----	144,870	151,959	265,760	452,818	285,267
Alabama-----	104,329	85,354	173,917	272,714	227,131
Kentucky, Mississippi, and Tennessee-----	40,541	66,605	91,843	180,104	58,136
West South Central, total-----	76,138	77,336	128,014	280,776	62,564
Arkansas, Louisiana, and Oklahoma-----	3,156	10,208	12,244	26,944	563
Texas-----	72,982	67,128	115,770	253,832	62,001
Rocky Mountain, total-----	87,865	49,917	151,096	268,914	167,586
Arizona and Nevada-----	1,861	4,212	6,732	13,337	6
Colorado, Idaho, Montana, and Utah-----	86,004	45,705	144,364	255,577	167,580
Pacific Coast, total-----	91,446	99,489	187,766	470,807	150,407
California-----	83,396	76,368	154,682	356,819	150,103
Oregon-----	3,065	9,166	14,203	23,674	132
Washington-----	4,985	13,955	18,881	90,314	172

1/ Includes 167,115 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 9 - 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 March 1961		
	Total scrap	Pig iron	Total charge
United States, total-----	2,576,014	3,359,182	5,935,196
New England and Middle Atlantic, total----	699,739	991,957	1,691,696
New Jersey and Rhode Island-----	13,218	2,402	15,620
New York-----	103,371	170,937	274,308
Pennsylvania (East)-----	213,741	267,554	481,295
Pennsylvania (West)-----	369,409	551,064	920,473
East North Central, total-----	1,194,832	1,485,004	2,679,836
Illinois-----	248,246	224,007	472,253
Indiana-----	453,750	587,955	1,041,705
Michigan and Wisconsin-----	133,206	165,021	298,227
Ohio (East)-----	279,844	406,704	686,548
Ohio (West)-----	79,786	101,317	181,103
West North Central, total-----	39,613	22,441	62,054
Minnesota and Missouri-----	39,613	22,441	62,054
South Atlantic, total-----	299,499	388,718	688,217
Delaware, Maryland, and West Virginia----	299,499	388,718	688,217
East and West South Central, total-----	148,879	250,122	399,001
Alabama, Kentucky, Tennessee, and Texas-----	148,879	250,122	399,001
Rocky Mountain and Pacific Coast, total----	193,452	220,940	414,392
California, Colorado, and Utah-----	193,452	220,940	414,392

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 696,486 gross tons in March. During April 1961, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 1,265,478 gross tons. Exports of pig iron during March totaled 11,788 tons and 13,014 tons in February. Imports of scrap totaled 18,107 gross tons in March compared with 12,269 tons in February. Of the scrap imported during March, 17,913 gross tons came from Canada and 194 tons from other sources. Imports of pig iron totaled 746 gross tons in March and 1,067 tons in February. In addition to the foregoing imports of pig iron during March, there were 520 tons of sponge iron, valued at \$98,127, imported, of which 126 tons came from Canada and 394 tons from Sweden.

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

Country	March 1961		Jan. through Mar. 1961 <u>3/</u>	
	Gross tons	Value	Gross tons	Value
Canada-----	6,838	\$306,168	<u>3/</u>	<u>3/</u>
Italy-----	86,201	2,631,183	<u>3/</u>	<u>3/</u>
Japan-----	456,388	17,567,574	<u>3/</u>	<u>3/</u>
Mexico-----	38,980	1,379,277	<u>3/</u>	<u>3/</u>
West Germany-----	44,029	1,458,968	<u>3/</u>	<u>3/</u>
All others-----	64,050	2,568,087	<u>3/</u>	<u>3/</u>
Total-----	696,486	\$25,911,257	<u>3/</u>	<u>3/</u>

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

Grades of scrap	March 1961		Jan. through Mar. 1961 <u>3/</u>	
	Gross tons	Value	Gross tons	Value
No. 1 heavy melting steel scrap---	262,747	\$10,263,344	<u>3/</u>	<u>3/</u>
No. 2 heavy melting steel scrap---	112,387	4,067,583	<u>3/</u>	<u>3/</u>
No. 1 baled sheet melting scrap---	28,967	1,090,972	<u>3/</u>	<u>3/</u>
No. 2 baled sheet melting scrap---	124,243	3,361,152	<u>3/</u>	<u>3/</u>
Borings, shoveling, and turnings---	9,848	280,964	<u>3/</u>	<u>3/</u>
Iron scrap-----	67,687	2,816,683	<u>3/</u>	<u>3/</u>
Rerolling material-----	16,351	1,064,988	<u>3/</u>	<u>3/</u>
All other scrap <u>4/</u> -----	74,256	2,965,571	<u>3/</u>	<u>3/</u>
Total-----	696,486	\$25,911,257	<u>3/</u>	<u>3/</u>

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/ Export data for February and total for January through March are not shown because revisions for February have not been received from the Bureau of the Census.

4/ Include tin plate andterne plate scrap.