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Iron and Steel Scrap
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FERROUS SCRAP IN JANUARY 1962 (Final Data - in short tons)

The domestic use of ferrous scrap for all purposes in January 1962 was 44 percent greater than for the comparable month of 1961, and the largest quantity used since March 1960, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The total charge of scrap and pig iron (13,526,482 short tons) was 7 percent greater than during December 1961 and consisted of 48 percent scrap and 52 percent pig iron compared with 49 percent scrap and 51 percent pig iron in December.

With the increase in steel production in January, the use of scrap in steelmaking furnaces (open-hearth, basic oxygen converter, Bessemer, and electric) rose 7 percent over December and totaled 5,141,297 tons. The total metallics used in steel furnaces (11,522,953 tons) consisted of 45 percent scrap and 55 percent pig iron, unchanged from December. Scrap made up 40 percent of the open-hearth charge in January compared with 41 percent during the preceding month.

Table 1 - Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, August 1961 through January 1962, in short 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/}
Aug. 1961---	3,465,564	2,157,250	5,622,814	5,580,084	5,875,804	8,568,556	3,044,886
Sept. 1961---	3,516,244	2,167,415	5,683,659	5,583,907	6,105,067	8,674,114	2,999,194
Oct. 1961---	3,657,882	2,492,680	6,150,562	5,851,410	6,326,653	8,966,563	3,057,454
Nov. 1961---	3,532,610	2,265,468	5,798,078	5,654,854	6,051,427	9,108,178	3,147,332
Dec. 1961---	3,663,591	2,155,195	5,818,786	6,190,024	6,425,409	8,741,245	3,183,115
Jan. 1962---	3,941,306	2,273,133	6,214,439	6,530,872	6,995,610	8,456,211	3,101,075

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

^{2/} Excludes 198,721 short tons of scrap shipped, transferred, or otherwise disposed of during month.

Prepared by James E. Larkin and James C.O. Harris, June 1, 1962, under the supervision of F.J. Cserenyak, Chief, Branch of Ferrous Metals, Division of Minerals.

The use of scrap by gray iron foundries during January was slightly higher than during December and totaled 888,592 tons. Pig iron consumed by this industry was 3 percent greater than during the preceding month.

Domestic stocks of ferrous scrap held by consumers on January 31 totaled 8,456,211 tons, and were equivalent to a 40-day supply at the January daily consumption rate. Pig iron stocks held by consumers and suppliers at the end of January were 3 percent lower than on December 31.

Home scrap produced plus purchased scrap received totaled 6,214,439 tons, 7 percent more than the preceding month. Net purchased scrap received by consumers totaled 2,273,133 tons, 5 percent more than during December. Of the purchases, 84 percent was received from dealers and 16 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, August 1961 through January 1962
in short tons

Date	Home scrap produced			Purchased scrap received (net) ^{1/}		
	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
Aug. 1961---	2,985,094	101,059	379,411	1,597,250	112,175	447,825
Sept 1961---	3,040,029	97,157	379,058	1,609,390	123,185	434,840
Oct. 1961---	3,123,176	104,627	430,079	1,838,565	129,988	524,127
Nov. 1961---	2,999,159	98,986	434,465	1,641,305	115,969	508,194
Dec. 1961---	3,132,014	97,673	433,904	1,579,067	120,247	455,881
Jan. 1962---	3,413,247	102,582	425,477	1,677,953	110,615	484,565

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

Table 3 - Stocks, production, receipts, consumption and shipments of ferrous scrap by grades, January 1962, in short tons

Grades of scrap	Stocks at beginning of month <u>1/</u>	Home scrap produced	Purchased scrap received		Consumption	Shipments	Stocks at end of month <u>2/</u>
			From dealers	From others			
No. 1 heavy melting steel-----	2,684,766	1,676,993	364,427	76,560	2,273,200		2,563,890
No. 2 heavy melting steel-----	815,754	144,550	161,568	23,510	363,985		794,599
No. 1 and electric furnace bundles-----	903,015	97,521	402,595	85,919	584,891		904,288
No. 2 and all other bundles-----	647,942	58,701	208,729	38,439	341,703	22,738	608,209
Low phosphorus scrap-----	532,840	117,769	236,716	28,634	390,946		514,517
Cast iron scrap, other than borings-----	1,052,156	561,723	289,162	35,373	895,953		986,443
Turnings and/or borings alloy free-----	264,685	46,432	171,551	32,489	260,509	18,943	235,705
Rerolling rails-----	143,743	182	13,425	17,216	29,785	786	143,995
Scrap rails-----	52,583	3,427	21,299	369	28,519	833	48,326
High speed steel-----	3,789	1,905	1,364	296	3,130	51	4,173
Stainless steel-----	135,480	43,377	13,732	1,806	66,488	962	126,945
All other alloy iron and steel-----	331,150	204,379	17,445	10,550	229,283	4,027	330,214
All other prepared scrap-----	722,243	609,869	151,576	27,925	834,116		735,970
Unprepared scrap-----	482,498	374,478	31,628	7,551	228,364	150,381	458,937
Total-----	8,772,644	3,941,306	2,085,217	386,637	6,530,872	198,721	8,456,211

1/ Revised

2/ Stocks of ferrous scrap held by consumers.

Table 4 - Consumption of ferrous scrap at major consuming industries' plants during January 1962, by grades, in short tons

Grades of scrap	Mfgrs. of steel ingots and castings	Mfgrs. of steel castings	Iron foundries and miscellaneous users	Total scrap consumed
No. 1 heavy melting steel-----	2,216,295	25,638	31,267	2,273,200
No. 2 heavy melting steel-----	346,336	1,435	16,214	363,985
No. 1 and electric furnace bundles-----	563,380	4,805	16,706	584,891
No. 2 and all other bundles-----	329,371	6,354	5,978	341,703
Low phosphorus scrap-----	187,222	111,471	92,253	390,946
Cast iron scrap, other than borings-----	356,072	15,590	524,291	895,953
Turnings and/or borings, alloy free-----	191,943	3,051	65,515	260,509
Rerolling rails-----	8,301	-	21,484	29,785
Scrap rails-----	4,036	2,205	22,278	28,519
High speed steel-----	3,069	-	61	3,130
Stainless steel-----	62,897	2,374	1,217	66,488
All other alloy iron and steel-----	208,256	11,914	9,113	229,283
All other prepared scrap-----	720,365	39,582	74,169	834,116
Unprepared scrap-----	157,685	19,215	51,464	228,364
Total	5,355,228	243,634	932,010	6,530,872

Table 5 - Stocks of ferrous scrap and pig iron on hand at major consuming industries' plants, at end of month, in short tons

	Scrap stocks						Pig iron stocks					
Date	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total	Mfgs. of steel ingots and castings	Total	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total			
Aug. 31, 1961-----	7,324,218	399,087	845,251	8,568,556	2,603,743	32,071	409,072	3,044,886				
Sept. 30, 1961-----	7,425,650	398,114	850,350	8,674,114	2,547,892	32,706	418,596	2,999,194				
Oct. 31, 1961-----	7,713,838	399,470	853,255	8,966,563	2,585,908	34,500	437,046	3,057,454				
Nov. 30, 1961-----	7,861,853	392,270	854,055	9,108,178	2,680,652	34,501	432,179	3,147,332				
Dec. 31, 1961-----	7,529,861	383,792	827,592	8,741,245	2,715,271	33,584	434,260	3,183,115				
Jan. 31, 1962-----	7,295,888	356,407	803,916	8,456,211	2,662,040	34,076	404,959	3,101,075				

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in January totaled 6,530,872 short tons which was at an average daily rate of 210,673 tons or 20 percent greater than for the year 1961.

In January, open-hearth furnaces used 60 percent of the total scrap, and 83 percent of the pig iron, unchanged from December; electric furnaces in January used 8 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 72 percent. During 1961, these percentages were 8 and 71 percent, respectively. Blast furnaces used 5 percent of the total scrap; the corresponding percentage for the year 1961 was 6.

During January, steel-making furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 79 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 78 and 91 percent, respectively, during December. In 1961, steel-making furnaces used 77 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 January 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 January 1962, by type of furnace, in short 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-----	3,849,674	5,832,204	50,104	8,205	-	-	3,899,778	5,840,409
Basic oxygen converter 3/-----	152,417	420,557	-	-	-	-	152,417	420,557
Bessemer converter-----	10,125	85,473	888	14	58	20	11,071	85,507
Electric 4/-----	913,990	30,199	149,250	2,804	14,791	2,180	1,078,031	35,183
Total steelmaking furnaces-----	4,926,206	6,368,433	200,242	11,023	14,849	2,200	5,141,297	6,381,656
Cupola-----	85,515	27,837	23,508	1,222	779,569	273,904	888,592	302,963
Air-----	3,359	1,290	19,884	4,245	80,218	12,233	103,461	17,768
Blast 5/-----	328,585	-	-	-	-	-	328,585	-
Direct casting-----	-	172,358	-	-	-	120,865	-	293,223
Ferro-alloy-----	-	-	-	-	23,852	-	23,852	-
Miscellaneous-----	11,563	-	-	-	33,522	-	45,085	-
Total January 1962-----	5,355,228	6,569,918	243,634	16,490	932,010	409,202	6,530,872	6,995,610
Total December 1961-----	5,042,643	6,037,764	228,467	15,180	918,914	372,465	6,190,024	6,425,409
Total November 1961-----	4,491,402	5,657,020	223,097	15,471	940,355	378,936	5,654,854	6,051,427
Total October 1961-----	4,673,804	5,896,910	235,848	15,855	941,758	417,888	5,851,410	6,326,653
Total September 1961-----	4,550,020	5,720,945	222,020	15,886	811,867	368,236	5,583,907	6,105,067
Total August 1961-----	4,507,063	5,483,485	220,728	14,464	852,293	377,855	5,580,084	5,875,804

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 7 - Consumers' production, receipts, consumption, and stocks of ferrous scrap, and consumption of pig iron in the United States, by State and Region, January 1962, in short tons

State and Region	Scrap			Scrap stocks Jan. 31	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	3,941,306	1,247,854	6,530,872	8,456,211	6,995,610
New England, total-----	19,944	24,060	42,841	51,874	12,558
Connecticut-----	6,845	7,477	13,608	12,714	2,832
Maine and New Hampshire-----	498	458	1,136	1,522	223
Massachusetts-----	7,444	10,373	16,309	28,179	4,893
Rhode Island-----	4,186	4,760	9,484	8,383	3,856
Vermont-----	971	992	2,304	1,076	754
Middle Atlantic, total-----	1,145,130	560,211	1,721,963	2,468,552	2,143,405
New Jersey-----	18,266	39,202	61,015	76,011	11,183
New York-----	186,946	97,178	344,072	560,832	382,520
Pennsylvania (East) ^{2/} -----	261,775	123,590	400,347	573,095	464,438
Pennsylvania (West)-----	678,143	300,241	916,529	1,258,614	1,285,264
East North Central, total-----	1,968,023	1,238,647	3,237,389	3,510,449	3,178,668
Illinois-----	337,671	235,401	633,863	917,916	537,167
Indiana-----	497,721	227,576	777,384	777,805	863,349
Michigan-----	346,824	267,521	605,587	421,418	493,086
Ohio (East) ^{3/} -----	600,757	399,484	941,222	1,008,847	1,058,018
Ohio (West)-----	144,474	77,270	210,039	330,652	211,444
Wisconsin-----	40,576	31,395	69,294	53,811	15,604
West North Central, total-----	51,247	67,073	147,496	328,112	48,811
Iowa-----	12,749	23,977	35,786	28,125	5,709
Kansas and Nebraska-----	4,065	8,639	13,986	14,264	509
Minnesota-----	20,289	10,502	38,516	113,931	40,100
Missouri-----	14,144	23,955	59,208	171,792	2,493
South Atlantic, total-----	330,136	159,739	522,605	335,767	697,854
Delaware and Maryland-----	248,276	55,436	336,183	156,085	482,942
Florida and Georgia-----	6,549	36,734	37,428	37,195	1,026
North Carolina-----	1,534	4,921	5,552	2,909	2,698
South Carolina-----	1,351	2,099	2,863	6,465	1,385
Virginia and West Virginia-----	72,426	60,549	140,579	133,113	209,803
East South Central, total-----	172,851	197,855	351,574	596,091	399,278
Alabama-----	110,016	92,819	197,289	370,026	314,444
Kentucky, Mississippi, and Tennessee-----	62,835	105,036	154,285	226,065	84,834
West South Central, total-----	39,913	64,833	125,571	385,115	82,025
Arkansas, Louisiana, and Oklahoma-----	4,231	8,149	13,902	22,880	635
Texas-----	35,682	56,684	111,669	362,235	81,390
Rocky Mountain, total-----	89,661	38,024	137,010	265,486	224,259
Arizona and Nevada-----	1,695	5,010	5,962	14,757	10
Colorado, Idaho, Montana and Utah-----	87,966	33,014	131,048	250,729	224,249
Pacific Coast, total-----	124,401	121,412	244,423	514,765	208,752
California-----	114,935	96,440	212,986	409,179	207,549
Oregon and Washington-----	9,466	24,972	31,437	105,586	1,203

^{1/} Includes 198,721 short 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 short tons

State and region	Consumption during January 1962		
	Total scrap	Pig iron	Total charge
United States, total-----	3,899,778	5,840,409	9,740,187
New England and Middle Atlantic, total---	1,201,657	1,868,920	3,070,577
New Jersey, and Rhode Island-----	24,749	4,658	29,407
New York-----	252,594	367,574	620,168
Pennsylvania (East)-----	285,899	419,087	704,986
Pennsylvania (West)-----	638,415	1,077,601	1,716,016
East North Central, total-----	1,873,613	2,623,605	4,497,218
Illinois-----	320,140	424,388	744,528
Indiana-----	708,211	840,058	1,548,269
Michigan and Wisconsin-----	228,452	347,288	575,740
Ohio (East)-----	496,735	815,617	1,312,352
Ohio (West)-----	120,075	196,254	316,329
West North Central, total-----	444,494	37,055	81,549
Minnesota and Missouri-----	444,494	37,055	81,549
South Atlantic, total-----	401,742	678,328	1,080,070
Delaware, Maryland, and West Virginia---	401,742	678,328	1,080,070
East and West South Central, total-----	190,279	376,729	567,008
Alabama, Kentucky, and Texas-----	190,279	376,729	567,008
Rocky Mountain and Pacific Coast, total---	187,993	255,772	443,765
California, Colorado, and Utah-----	187,993	255,772	443,765

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 444,755 short tons in January compared with 503,657 tons in December. During February 1962, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 251,693 short tons. Exports of pig iron during January totaled 21,830 short tons and 25,890 short tons in December. Imports of scrap totaled 21,682 short tons in January compared with 23,729 tons in December. Of the scrap imported during January, 21,008 short tons came from Canada and 674 tons from other sources. Imports of pig iron totaled 4,608 short tons in January and 22,719 tons in December. In addition to the foregoing imports of pig iron during January, there were 548 tons of sponge iron, valued at \$86,472, imported, of which 327 tons came from Canada and 221 tons from Sweden.

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

Country	January 1962	
	Short tons	Value
Canada-----	12,940	\$379,865
France-----	11,751	620,051
Italy-----	48,577	1,476,059
Japan-----	314,259	12,556,612
Mexico-----	28,637	921,050
West Germany-----	1,677	131,565
Yugoslavia-----	19,244	663,485
All others-----	7,670	243,202
Total-----	444,755	\$16,991,889

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

Grades of scrap	January 1962	
	Short tons	Value
No. 1 heavy melting steel scrap----	202,239	\$8,431,544
No. 2 heavy melting steel scrap----	77,405	2,806,603
No. 1 baled sheet melting scrap----	13,521	511,402
No. 2 baled sheet melting scrap----	95,647	2,656,127
Borings, shovelings, and turnings--	12,347	322,101
Iron scrap-----	6,272	182,678
Rerolling material-----	21,039	1,143,232
All other scrap 3/-----	16,285	938,202
Total-----	444,755	\$16,991,889

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/ Include tin plate and terne plate scrap.