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Stewart L. Udall, Secretary

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Iron and Steel Scrap,
Monthly

IRON AND STEEL SCRAP IN FEBRUARY 1963 (Final Data)

The domestic use of iron and steel scrap for all purposes during February 1963 was slightly less than during January. However, with fewer working days in February, the daily consumption rate of iron and steel scrap increased 10 percent over the previous month, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The use of pig iron in February was 5 percent lower than the preceding month. The total charge of iron and steel scrap and pig iron (11,080,976 short tons) consisted of 51 percent scrap and 49 percent pig iron, compared with 50 percent each of scrap and pig iron in January.

The use of iron and steel scrap in steelmaking furnaces, (basic oxygen converter, Bessemer, open-hearth, and electric) totaled 4,296,580 short tons, a slight increase over January and the largest quantity used since April 1962. The total metallics used in steel furnaces (9,199,681 short tons) consisted of 47 percent scrap and 53 percent pig iron, compared with 46 percent scrap and 54 percent pig iron during January. Scrap made up 42 percent of the open-hearth charge in February, compared with 40 percent in January. Electric furnaces utilized 1,016,627 tons of scrap during February, a decrease of 2 percent from the preceding month.

Table 1 - Production, receipts, consumption, and consumers' stocks of iron and steel scrap and pig iron, September 1962 through February 1963, 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/}
Sept. 1962--	2,984,759	1,721,329	4,706,088	5,024,769	4,824,504	8,883,964	3,265,605
Oct. 1962--	3,240,636	2,289,117	5,529,753	5,509,179	5,212,634	8,916,418	3,150,370
Nov. 1962--	3,252,014	2,163,102	5,415,116	5,517,022	5,206,730	8,806,508	3,075,020
Dec. 1962--	3,138,301	2,113,016	5,251,317	5,454,253	5,356,383	8,592,426	3,124,846
Jan. 1963--	3,346,813	2,168,912	5,515,725	5,680,355	5,676,501	8,306,842	3,039,859
Feb. 1963--	3,291,984	2,295,198	5,587,182	5,667,811	5,413,165	8,225,442	2,969,274

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

^{2/} Excludes 199,717 short tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and Joseph H. Bilbrey, Jr., June 21, 1963 under the supervision of F.J. Cservenyak, Chief, Branch of Ferrous Metals, Division of Minerals.

The use of scrap by gray iron foundries during February totaled 929,678 short tons, a small increase over the previous month. Pig iron consumed by this industry was 5 percent less than during January.

U.S. consumers' stocks of iron and steel scrap totaled 8,255,442 tons on February 28, and were equivalent to a 41-day supply at the February daily consumption rate. Pig iron stocks held by consumers and suppliers were 2 percent less than at the end of the preceding month.

Home scrap produced plus purchased scrap received during February totaled 5,587,182 tons, an increase of 1 percent over the quantity received during January. Net purchased scrap received by consumers was 6 percent greater than during January. Of the total purchased 82 percent was from dealers and 18 percent from other sources, compared with 81 percent from dealers and 19 percent from other sources during the previous month. (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 iron and steel scrap by major consuming industries plants, September 1962 through February 1963, 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 miscellaneous users	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users
September-----	2,458,374	102,693	423,692	1,115,247	123,501	482,581
October-----	2,656,663	107,862	476,111	1,575,839	139,192	574,086
November-----	2,885,913	102,105	463,996	1,492,501	131,832	538,769
December-----	2,617,979	92,592	427,730	1,493,073	118,393	501,550
January-----	2,780,711	111,802	454,300	1,535,047	117,703	516,162
February-----	2,733,179	106,476	452,329	1,670,211	116,828	508,159

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

Table 3- Consumer stocks, production, receipts, consumption and shipments of iron and steel scrap, by grades, February 1963, in short tons

Grades of scrap	Stocks at beginning of month 1/	Home scrap produced	Purchased scrap received 2/	Consumption	Shipments	Stocks at end of month
Steel scrap, excludes rerolling rails:						
Carbon-----	6,423,610	2,432,749	1,937,741	4,296,605	91,239	6,406,256
Alloy, excludes stainless-----	412,154	170,272	55,134	231,694	8,070	397,796
Stainless-----	138,266	33,359	21,052	52,954	1,676	138,047
Cast iron, includes borings-----	1,332,041	655,604	480,988	1,086,558	98,732	1,283,343
Total-----	8,306,071	3,291,984	2,494,915	5,667,811	199,717	8,225,442

1/ Revised.

2/ Purchased scrap received from dealers and all others.

Table 4 - Home scrap produced by source, by type of manufacturers, during February 1963, in short tons

	Source of scrap		
	Recirculating 1/	Obsolete 2/	Other, including slag
Manufacturers of steel ingots and castings-----	2,440,681	201,156	91,342
Manufacturers of steel castings-----	105,989	475	12
Iron foundries and miscellaneous users-----	450,044	1,909	376
Total-----	2,996,714	203,540	91,730
			3,291,984

1/ Includes home, plant, or recycled iron and steel scrap.

2/ Includes molds, stools, machinery, and buildings; excludes rerolling rails.

Table 5 - Consumption of iron and steel scrap at major consuming industries' plants during February 1963, and consumption year to date, by grades, in short tons

Grades of scrap (excludes rerolling rails)	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total consumption	Total consumption year to date
Steel scrap:					
Carbon-----	3,803,550	200,266	292,789	4,296,605	8,603,582
Alloy (excludes stainless)-----	211,268	10,296	10,130	231,694	457,064
Stainless-----	49,079	2,526	1,349	52,954	107,609
Cast iron, includes borings-----	394,144	28,034	664,380	1,086,558	2,179,911
Total-----	4,458,041	241,122	968,648	5,667,811	11,348,166

Table 6 - Stocks of iron and steel scrap and pig iron on hand at major consuming industries' plants, at end of month, in short tons

Date	Scrap stocks			Pig iron stocks		
	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users	Total	Mfgs. of steel ingots and castings	Iron foundries and miscellaneous users
Sept. 30, 1962	7,627,423	418,548	837,993	8,883,964	2,812,759	420,011
Oct. 31, 1962	7,634,911	431,045	850,462	8,916,418	2,691,582	428,171
Nov. 30, 1962	7,520,898	435,993	849,617	8,806,508	2,603,829	441,713
Dec. 31, 1962	7,300,562	426,736	865,128	8,592,426	2,648,683	448,649
Jan. 31, 1963	7,108,086	411,601	787,155	8,306,842	2,580,474	431,225
Feb. 28, 1963	7,051,730	392,505	781,207	8,225,442	2,536,648	405,253
					27,373	3,265,605
						3,150,370
						3,075,020
						3,124,846
						3,039,859
						2,969,274

Table 7 - Consumers receipts and total consumption of iron and steel scrap, by grades, during February 1963, in short tons

Grades of scrap (excludes rerolling rails)	Receipts during the month			Total consumption
	From dealers	From others	Total	
Carbon steel:				
Low phosphorus plate and punchings	156,354	29,194	185,548	244,106
Cut structurals and plate	50,608	4,046	54,654	70,919
Steel car wheels	3,351	3,563	6,914	11,479
No. 1 heavy melting	339,992	84,707	424,699	1,721,857
No. 1 and electric furnace bundles	383,191	102,570	485,761	508,101
No. 2 and all other bundles	353,425	34,481	387,906	486,821
Turnings and borings	178,102	19,498	197,600	218,886
Slag scrap (Fe content)	17,347	7,135	24,482	146,014
All other carbon steel scrap	190,950	68,918	259,868	978,886
Alloy steel, excludes stainless	22,521	11,883	34,404	205,063
Stainless steel	18,308	2,794	21,102	52,805
Cast iron: Borings	55,276	21,899	77,175	120,978
All other cast iron scrap	278,876	55,926	334,802	901,896
Total	2,048,301	446,614	2,494,915	5,667,811

Table 8 - Consumers' production, receipts, consumption and stocks of iron and steel scrap, and consumption of pig iron in the United States, by districts and States, February 1963, in short tons

District and State	Home scrap produced	Total purchased scrap received 1/	Consumption by grades					Scrap stocks Feb. 28	Pig iron consumption
			Carbon steel (excludes re-rolling rails)	Alloy steel (excludes stainless)	Stainless steel	Cast iron (includes bearings)	Total scrap		
New England:									
Connecticut, Massachusetts, Rhode Island	15,539	20,187	13,956	804	1,926	18,210	34,996	40,926	10,662
Maine, New Hampshire, Vermont	973	1,188	419	-	-	1,745	2,164	2,732	580
Total	16,512	21,375	14,375	804	1,926	19,955	37,060	43,658	11,242
Middle Atlantic:									
New Jersey	14,875	35,216	22,369	936	693	25,997	49,995	59,184	9,003
New York	145,777	75,578	183,586	7,984	4,309	44,524	240,402	618,745	266,149
Pennsylvania (East) 2/	199,879	128,742	244,476	39,085	2,064	39,086	324,711	602,452	382,425
Pennsylvania (West)	499,905	253,436	543,394	56,288	22,398	97,882	719,962	1,235,640	870,177
Total	860,436	492,972	993,825	104,293	29,463	207,489	1,335,070	2,516,021	1,527,754
East North Central:									
Illinois	314,966	357,901	495,876	13,617	1,663	126,353	637,509	949,167	376,966
Indiana	428,285	212,383	591,771	7,244	1,188	65,896	666,099	681,627	806,220
Michigan	315,409	320,557	386,455	3,283	7,028	232,538	629,304	435,133	510,507
Ohio (East) 3/	452,476	280,852	595,967	84,909	4,234	78,109	763,219	903,303	758,036
Ohio (West)	145,270	77,208	113,423	1,103	35	59,293	173,854	201,496	174,940
Wisconsin	45,393	34,358	35,964	437	228	35,509	72,139	56,095	14,685
Total	1,701,799	1,283,259	2,219,456	110,593	14,376	597,698	2,942,123	3,226,801	2,641,354
West North Central:									
Iowa	18,398	27,237	22,717	-	-	21,412	44,275	34,885	7,942
Kansas and Nebraska	2,859	4,279	6,303	-	-	8,729	15,039	15,039	493
Minnesota	19,400	12,198	23,221	782	266	11,920	35,452	67,687	34,655
Missouri	15,291	60,634	52,191	-	-	11,163	63,936	163,975	2,251
Total	55,948	104,348	104,432	782	266	46,912	152,392	281,586	45,341
South Atlantic:									
Delaware and Maryland	167,081	30,099	143,224	1,229	5,452	17,466	167,371	556,194	350,665
Florida and Georgia	7,016	31,149	23,205	-	-	2,381	25,586	54,422	1,036
North Carolina and South Carolina	3,329	5,915	730	-	-	8,817	9,994	8,504	4,081
Virginia and West Virginia	71,787	80,283	143,525	580	-	14,067	157,725	79,416	181,820
Total	249,213	147,446	310,684	1,809	5,452	42,731	360,676	698,536	537,552
East South Central:									
Alabama	109,734	93,495	152,189	-	4/	48,231	200,970	258,461	239,650
Kentucky, Mississippi, Tennessee	48,703	89,813	95,402	4,857	4/	30,030	130,716	186,119	68,242
Total	158,437	183,308	247,591	4,857	4/	78,261	331,686	444,580	307,892
West South Central:									
Arkansas, Louisiana, Oklahoma	4,819	7,973	9,452	-	-	2,824	12,276	32,730	717
Texas	63,406	62,358	105,654	2,564	4/	30,694	138,927	222,498	38,441
Total	68,225	70,331	115,106	2,564	4/	33,518	151,203	255,218	39,158
Rocky Mountain:									
Arizona, Colorado, Idaho, Montana, Nevada, Utah	76,693	60,570	108,040	3,351	-	29,426	140,817	217,870	167,171
Total	76,693	60,570	108,040	3,351	-	29,426	140,817	217,870	167,171
Pacific Coast:									
California and Hawaii	95,624	103,688	151,114	1,378	121	28,470	181,083	419,578	135,502
Oregon and Washington	9,097	27,618	31,982	1,263	358	2,098	35,701	121,594	199
Total	104,721	131,306	183,096	2,641	479	30,568	216,784	541,172	135,701
U.S. total	3,291,984	2,494,915	4,296,605	231,694	52,954	1,086,558	5,667,811	8,225,442	5,413,165

1/ Includes 199,717 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.

4/ Figures withheld to avoid disclosing individual company confidential data; included in U.S. total.

CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON

Consumption of scrap in February totaled 5,667,811 short tons which was at an average daily rate of 202,422 tons or 10 percent greater than for the year 1962.

In February, open-hearth furnaces used 54 percent of the total scrap, and 79 percent of the pig iron compared with 53 and 79 percent, respectively, in January; electric furnaces in February used 9 percent of the combined total of iron and steel scrap and pig iron charged to all furnaces, with open-hearth using 66 percent. During 1962, these percentages were 8 and 69 percent, respectively. Blast furnaces used 5 percent of the total scrap; the corresponding percentage for the year 1962 was 6.

During February, steel-making furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 76 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 76 and 90 percent, respectively, during January. In 1962, steel-making furnaces used 75 percent of the total scrap, and 91 percent of the pig iron. The remainder was used in iron-making furnaces, principally the cupola. Consumption by type of furnace during February is shown in the following table:

Table 9 - Consumption of iron and steel scrap and pig iron by type of manufacturers and furnaces during February 1963, 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
Basic oxygen converters 3/----	206,233	515,862	-	-	-	-	206,233	515,862
Bessemer converters-----	9,322	92,194	1,012	10	101	16	10,435	92,220
Open-hearth furnaces-----	3,016,378	4,274,419	46,907	6,431	-	-	3,063,285	4,280,850
Electric furnaces 4/-----	860,245	9,273	142,603	2,440	13,779	2,456	1,016,627	14,169
Total steemaking furnaces --	4,092,178	4,891,748	190,522	8,881	13,880	2,472	4,296,580	4,903,101
Blast furnaces 5/-----	299,503	-	-	-	-	-	299,503	-
Cupola furnaces-----	61,018	19,577	25,763	2,021	842,897	251,846	929,678	273,444
Air furnaces-----	3,060	1,224	24,837	2,857	78,249	10,018	106,146	14,099
Direct castings-----	-	181,024	-	-	-	41,497	-	222,521
Ferroalloy-----	-	-	-	-	22,481	-	22,481	-
Miscellaneous-----	2,282	-	-	-	11,141	-	13,423	-
Total Feb. 1963-----	4,458,041	5,093,573	241,122	13,759	968,648	305,833	5,667,811	5,413,165
Total Jan. 1963-----	4,463,668	5,327,556	245,722	13,891	970,965	335,054	5,680,355	5,676,501
Total Dec. 1962-----	4,316,913	5,008,720	220,193	12,658	917,147	335,005	5,454,253	5,356,383
Total Nov. 1962-----	4,290,868	4,841,460	229,091	12,358	997,063	352,912	5,517,022	5,206,730
Total Oct. 1962-----	4,234,912	4,810,963	235,007	14,415	1,039,260	387,256	5,509,179	5,212,634
Total Sept. 1962-----	3,879,900	4,483,134	223,545	12,160	921,324	329,210	5,024,769	4,824,504

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 10 - Consumption of iron and steel scrap and pig iron in open-hearth furnaces in the United States, by districts and States, in short tons

District and State	Consumption during February 1963		
	Total scrap	Pig iron	Total charge
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	20,005	3,816	23,821
New York-----	163,298	251,078	414,376
Pennsylvania (East)-----	202,051	346,616	548,667
Pennsylvania (West)-----	448,678	657,577	1,106,255
Total-----	834,032	1,259,087	2,093,119
East North Central:			
Illinois-----	314,529	310,284	624,813
Indiana-----	592,809	777,067	1,369,876
Michigan and Wisconsin-----	219,954	231,437	451,391
Ohio (East)-----	392,071	579,727	971,798
Ohio (West)-----	93,107	161,779	254,886
Total-----	1,612,470	2,060,294	3,672,764
West North Central:			
Minnesota and Missouri-----	22,022	31,307	53,329
Total-----	22,022	31,307	53,329
South Atlantic:			
Delaware, Maryland, West Virginia-----	256,631	523,887	780,518
Total-----	256,631	523,887	780,518
East and West South Central:			
Alabama, Kentucky, Texas-----	189,562	258,886	448,448
Total-----	189,562	258,886	448,448
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	148,568	147,389	295,957
Total-----	148,568	147,389	295,957
United States, total-----	3,063,285	4,280,850	7,344,135

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 556,038 short tons in February compared with 145,427 tons in January. During March 1963, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 559,104 short tons. Exports of pig iron during February totaled 56,677 tons and 11,782 tons in January. Imports of scrap totaled 13,157 short tons in February compared with 17,762 tons in January. Of the scrap imported during February, 12,622 short tons came from Canada and 535 tons from other sources. Imports of pig iron totaled 29,938 short tons in February and 4,873 tons in January. In addition to the foregoing imports of pig iron during February, there was 654 tons of sponge iron, valued at \$57,320, imported, all from Canada.

Table 11-Exports 2/ of iron and steel scrap from the United States, by countries
(U.S. Department of Commerce)

Country	February 1963		Jan. through Feb. 1963	
	Short tons	Value	Short tons	Value
Argentina-----	1,867	\$57,242	1,867	\$57,242
Canada-----	33,645	1,023,238	50,868	1,535,680
Hong Kong-----	7,836	387,635	7,836	387,635
Italy-----	124,184	2,751,421	167,563	3,814,868
Japan-----	326,731	8,359,016	395,627	10,666,891
Korea-----	117	3,200	117	3,200
Mexico-----	40,854	1,152,739	54,540	1,534,712
Nicaragua-----	1,909	63,276	2,737	89,167
Spain-----	8,524	159,177	8,524	159,177
Taiwan-----	10,080	299,970	11,231	333,339
All others-----	291	13,084	555	25,290
Total-----	556,038	\$14,269,998	701,465	\$18,607,201

Table 12 - Exports 2/ of iron and steel scrap from the United States, by grades
(U.S. Department of Commerce)

Grades of scrap	February 1963		Jan. through Feb. 1963	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-	216,003	\$5,889,490	267,441	\$7,431,248
No. 2 heavy melting steel scrap-	104,987	2,411,336	140,182	3,381,238
No. 1 baled sheet melting scrap-	41,331	1,067,443	54,221	1,405,413
No. 2 baled sheet melting scrap-	109,586	2,379,959	127,545	2,804,388
Borings, shovelings, and turnings-	20,231	526,754	20,781	541,476
Iron scrap-----	28,970	728,605	34,445	918,851
Rerolling material-----	15,637	701,310	27,263	1,276,143
All other scrap <u>3/</u> -----	19,293	565,101	29,587	848,444
Total-----	556,038	\$14,269,998	701,465	\$18,607,201

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 tin plate and terne plate scrap.