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Stewart L. Udall, Secretary

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Iron and Steel Scrap,
Monthly

IRON AND STEEL SCRAP IN MARCH 1963 AND FIRST QUARTER 1963 (Final Data)

The domestic use of iron and steel scrap for all purposes increased 20 percent and the daily consumption rate of such scrap in March 1963 increased 9 percent over February, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The use of iron and steel scrap during the first quarter of 1963 was 7 percent less than during the first three months of 1962. The total charge of iron and steel scrap and pig iron (13,401,123 short tons) during March consisted of 51 percent scrap and 49 percent pig iron, unchanged from February.

The use of iron and steel scrap in steelmaking furnaces, (basic oxygen converter, Bessemer, open-hearth, and electric) totaled 5,269,387 short tons, a rise of 23 percent over February and the largest quantity used since March 1960. The total metallics used in steel furnaces (11,279,468 short tons) consisted of 47 percent scrap and 53 percent pig iron, unchanged from February. Scrap made up 42 percent of the open-hearth charge in March, unchanged from the previous month. Electric furnaces utilized 1,183,932 tons of scrap during March, an increase of 16 percent over the preceding month.

Table 1 - Production, receipts, consumption, and consumers' stocks of iron and steel scrap and pig iron, October 1962 through March 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 <u>1/</u>
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
Mar. 1963--	3,877,302	2,641,434	6,518,736	6,825,259	6,575,864	7,919,727	2,863,954

1/ Suppliers' stocks included with consumers' stocks.

2/ Excludes 233,621 short tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and Joseph H. Bilbrey, Jr., July 30, 1963, under the supervision of F.J. Cservenyak, Chief, Branch of Ferrous Metals, Division of Minerals.

Iron and steel scrap used by gray iron foundries during March totaled 995,328 short tons, an increase of 7 percent over the previous month. Pig iron consumed by this industry was 7 percent greater than during February.

U.S. Consumers' stocks of iron and steel scrap totaled 7,919,727 tons on March 31, and were equivalent to a 36-day supply at the March daily consumption rate. Pig iron stocks held by consumers and suppliers were 4 percent smaller than at the end of the preceding month.

Home produced plus purchased scrap received totaled 6,518,736 tons, an increase of 17 percent over the preceding month. Net purchased scrap received by consumers was 15 percent greater than during February. Of the total purchased, 82 percent was from dealers and 18 percent from other sources, unchanged from February. (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, October 1962 through March 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 miscel-laneous users	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel-laneous users
October-----	2,656,663	107,862	476,111	1,575,839	139,192	574,086
November-----	2,685,913	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
March-----	3,281,979	118,532	476,791	1,939,333	128,538	573,563

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, March 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-----	6,409,673	2,914,198	2,282,113	5,304,275	112,927	6,188,782
Alloy, excludes stainless-----	390,786	203,132	46,023	250,387	2,570	386,984
Stainless-----	138,032	41,520	19,950	59,449	1,598	138,455
Cast iron, includes borings-----	1,287,759	718,452	526,969	1,211,148	116,526	1,205,506
Total-----	8,226,250	3,877,302	2,875,055	6,825,259	233,621	7,919,727

1/ Revised.

2/ Purchased scrap received from dealers and all others.

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

	Source of scrap			Total
	Recirculating 1/	Obsolete 2/	Other, including slag	
Manufacturers of steel ingots and castings	2,947,787	227,377	106,815	3,281,979
Manufacturers of steel castings	117,838	682	12	118,532
Iron foundries and miscellaneous users	474,181	2,132	478	476,791
Total	3,539,806	230,191	107,305	3,877,302

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 March 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	4,773,849	216,396	314,030	5,304,275	13,907,857
Alloy (excludes stainless)	228,327	10,329	11,731	250,387	707,451
Stainless	54,910	2,634	1,905	59,449	167,058
Cast iron, includes borings	480,465	27,329	703,354	1,211,148	3,391,059
Total	5,537,551	256,688	1,031,020	6,825,259	18,173,425

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 miscel- laneous users	Total	Mfgs. of steel ingots and castings	Iron foundries and miscel- laneous users
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
Mar. 31, 1963-	6,733,830	383,319	802,578	7,919,727	2,439,705	395,565
					28,684	2,863,954

Table 7 - Consumers receipts and total consumption of iron and steel scrap,
by grades, during March 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-----	158,294	51,772	210,066	265,549
Cut structurals and plate-----	52,561	4,986	57,547	72,378
Steel car wheels-----	5,902	3,467	9,369	11,832
No. 1 heavy melting-----	442,988	93,637	536,625	2,374,587
No. 1 and electric furnace bundles-----	384,587	126,015	510,602	642,841
No. 2 and all other bundles-----	422,259	34,403	456,662	547,402
Turnings and borings-----	194,005	34,383	228,388	277,987
Slag scrap (Fe content)-----	19,624	6,793	26,417	169,898
All other carbon steel scrap-----	247,041	69,769	316,810	1,008,186
Alloy steel, excludes stainless-----	31,244	13,524	44,768	236,896
Stainless steel-----	16,774	3,267	20,041	60,249
Cast iron: Borings-----	56,359	19,779	76,138	147,758
All other cast iron scrap-----	331,535	50,087	381,622	1,009,696
Total-----	2,363,173	511,882	2,875,055	6,825,259

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, March 1963, in short tons

District and State	Home scrap produced	Total purchased scrap received 1/	Consumption by grades					Scrap stocks Mar. 31	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-----	17,831	23,314	16,152	840	1,723	20,022	38,737	42,361	11,619
Maine, New Hampshire, Vermont-----	999	1,441	462	-	-	2,111	2,573	2,516	587
Total-----	18,830	24,755	16,614	840	1,723	22,133	41,310	44,877	12,206
Middle Atlantic:									
New Jersey-----	17,218	50,317	25,501	793	755	29,265	56,314	68,654	9,086
New York-----	182,935	98,025	234,614	6,468	5,312	50,538	296,932	596,622	354,539
Pennsylvania (East) 2/-----	247,507	164,201	283,244	45,127	2,394	58,061	388,826	615,472	436,052
Pennsylvania (West)-----	579,452	300,205	682,485	71,655	25,240	122,634	902,014	1,192,062	1,149,058
Total-----	1,027,112	612,748	1,225,844	124,043	33,701	260,498	1,644,086	2,472,310	1,948,735
East North Central:									
Illinois-----	365,363	362,257	592,255	18,520	1,567	121,923	734,265	929,268	436,466
Indiana-----	521,603	266,613	714,469	7,511	1,456	80,472	803,908	644,401	943,031
Michigan-----	353,327	321,902	467,955	3,010	7,148	229,592	700,505	396,972	549,367
Ohio (East) 3/-----	558,548	381,559	796,968	72,954	5,472	99,968	975,362	839,220	961,994
Ohio (West)-----	151,315	75,188	146,775	1,032	19	63,429	211,255	188,907	200,191
Wisconsin-----	48,012	37,351	39,383	409	190	38,544	78,526	54,178	15,283
Total-----	1,998,168	1,444,870	2,757,805	104,236	15,852	633,928	3,511,821	3,052,946	3,111,332
West North Central:									
Iowa-----	20,070	30,526	23,703	-	-	24,857	48,560	35,942	6,594
Kansas and Nebraska-----	3,306	5,712	7,408	-	-	2,615	10,025	11,966	445
Minnesota-----	18,803	13,973	25,096	790	101	11,564	36,912	64,752	37,747
Missouri-----	17,254	63,434	65,546	-	-	11,846	79,029	166,679	2,773
Total-----	59,433	113,645	121,753	790	101	50,882	173,526	279,339	47,559
South Atlantic:									
Delaware and Maryland-----	207,003	37,228	267,030	1,557	6,269	25,599	300,455	483,320	410,385
Florida and Georgia-----	8,706	38,515	33,728	-	-	2,432	36,160	65,346	1,074
North Carolina and South Carolina-----	3,811	6,276	817	727	-	9,680	11,106	8,022	4,433
Virginia and West Virginia-----	85,131	85,374	160,841	-	-	16,802	177,761	71,766	210,036
Total-----	304,651	167,393	462,416	2,284	6,269	54,513	525,482	628,454	625,928
East South Central:									
Alabama-----	130,996	107,789	165,966	-	4/	53,463	222,868	262,695	294,444
Kentucky, Mississippi, Tennessee-----	55,923	101,521	105,636	8,595	4/	31,051	142,836	195,036	81,037
Total-----	186,919	209,310	271,602	8,595	4/	84,514	365,704	457,731	375,481
West South Central:									
Arkansas, Louisiana, Oklahoma-----	4,740	7,823	12,159	-	-	3,204	15,363	29,294	748
Texas-----	63,507	81,035	106,114	2,872	4/	33,684	142,899	220,203	74,649
Total-----	68,247	88,858	118,273	2,872	4/	36,888	158,262	249,497	75,397
Rocky Mountain:									
Arizona, Colorado, Idaho, Montana, Nevada, Utah-----	85,596	65,527	117,297	3,528	-	30,911	151,736	216,287	211,042
Total-----	85,596	65,527	117,297	3,528	-	30,911	151,736	216,287	211,042
Pacific Coast:									
California and Hawaii-----	116,782	119,552	175,489	1,859	129	34,824	212,301	397,436	166,823
Oregon and Washington-----	11,564	28,397	37,182	1,340	452	2,057	41,031	120,350	1,361
Total-----	128,346	147,949	212,671	3,199	581	36,881	253,332	517,786	168,184
U.S. total-----	3,877,302	2,875,055	5,304,275	250,387	59,449	1,211,148	6,825,259	7,919,727	6,575,864

1/ Includes 233,621 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 March totaled 6,825,259 short tons which was at an average daily rate of 220,170 tons or 21 percent greater than for the year 1962.

In March, open-hearth furnaces used 56 percent of the total scrap, and 80 percent of the pig iron compared with 54 and 79 percent, respectively, in February; electric furnaces in March used 9 percent of the combined total of iron and steel scrap and pig iron charged to all furnaces, with open-hearth using 68 percent. During 1962, these percentages were 8 and 69 percent, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1962 was 6.

During March, steel-making furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 77 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 76 and 91 percent, respectively, during February. 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 March is shown in the following table:

Table 9 - Consumption of iron and steel scrap and pig iron by type of manufacturers and furnaces during March 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/	225,090	590,178	-	-	-	-	225,090	590,178
Bessemer converters	13,518	144,342	1,136	10	93	8	14,747	144,360
Open-hearth furnaces	3,794,304	5,255,014	51,314	5,535	-	-	3,845,618	5,260,549
Electric furnaces 4/	1,017,672	10,118	152,845	2,547	13,415	2,329	1,183,932	14,994
Total steelmaking furnaces	5,050,584	5,999,652	205,295	8,092	13,508	2,337	5,269,387	6,010,081
Blast furnaces 5/	399,750	-	-	-	-	-	399,750	-
Cupola furnaces	78,838	19,839	25,799	1,133	890,691	272,605	995,328	293,577
Air furnaces	3,032	1,191	25,594	4,655	87,466	11,133	116,092	16,979
Direct castings	-	206,075	-	-	-	49,152	-	255,227
Ferroalloy	-	-	-	-	26,387	-	26,387	-
Miscellaneous	5,347	-	-	-	12,968	-	18,315	-
Total Mar. 1963	5,537,551	6,226,757	256,688	13,880	1,031,020	335,227	6,825,259	6,575,864
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

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 March 1963		
	Total scrap	Pig iron	Total charge
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	23,801	4,565	28,366
New York-----	206,760	333,418	540,178
Pennsylvania (East)-----	251,013	391,474	642,487
Pennsylvania (West)-----	593,644	891,759	1,485,403
Total-----	1,075,218	1,621,216	2,696,434
East North Central:			
Illinois-----	368,199	359,687	727,886
Indiana-----	722,035	919,579	1,641,614
Michigan and Wisconsin-----	264,206	246,140	510,346
Ohio (East)-----	495,199	740,348	1,235,547
Ohio (West)-----	119,578	186,771	306,349
Total-----	1,969,217	2,452,525	4,421,742
West North Central:			
Minnesota and Missouri-----	24,958	34,516	59,474
Total-----	24,958	34,516	59,474
South Atlantic:			
Delaware, Maryland, West Virginia-----	403,755	611,218	1,014,973
Total-----	403,755	611,218	1,014,973
East and West South Central:			
Alabama, Kentucky, Texas-----	198,227	342,402	540,629
Total-----	198,227	342,402	540,629
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	174,243	198,672	372,915
Total-----	174,243	198,672	372,915
United States, total-----	3,845,618	5,260,549	9,106,167

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 425,279 short tons in March compared with 556,038 tons in February. During April 1963, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 405,625 short tons. Exports of pig iron during March totaled 3,736 tons and 56,677 tons in February. Imports of scrap totaled 18,038 short tons in March compared with 13,157 tons in February. Of the scrap imported during March, 17,484 short tons came from Canada and 554 tons from other sources. Imports of pig iron totaled 11,628 short tons in March and 29,938 tons in February. In addition to the foregoing imports of pig iron during March, there were 652 tons of sponge iron, valued at \$100,715, imported, of which 351 tons came from Canada and 301 tons from Sweden.

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

Country	March 1963		Jan. through Mar. 1963	
	Short tons	Value	Short tons	Value
Argentina-----	8,313	\$254,636	10,180	\$311,878
Canada-----	22,583	549,379	73,451	2,085,059
France-----	6,419	182,503	6,419	182,503
Hong Kong-----	9,856	510,794	17,692	898,429
Italy-----	122,215	2,329,398	289,778	6,144,266
Japan-----	214,009	6,210,217	609,636	16,877,108
Korea-----	-	-	117	3,200
Mexico-----	20,994	536,421	75,534	2,071,133
Nicaragua-----	699	23,752	3,436	112,919
Spain-----	-	-	8,524	159,177
Taiwan-----	18,722	638,622	29,953	971,961
All others-----	1,469	71,116	2,024	96,406
Total-----	425,279	\$11,306,838	1,126,744	\$29,914,039

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

Grades of scrap	March 1963		Jan. through Mar. 1963	
	Short tons	Value	Short tons	Value
No. 1 heavymelting steel scrap --	177,883	\$5,188,245	445,324	\$12,619,493
No. 2 heavymelting steel scrap --	62,470	1,451,108	202,652	4,832,346
No. 1 baled sheetmelting scrap--	33,418	789,959	87,639	2,195,372
No. 2 baled sheetmelting scrap--	86,386	1,769,910	213,931	4,574,298
Borings, shovelings, and turnings	7,016	114,366	27,797	655,842
Iron scrap-----	22,950	506,119	57,395	1,424,970
Rerolling material-----	11,810	546,122	39,073	1,822,265
All other scrap 3/-----	23,346	941,009	52,933	1,789,453
Total-----	425,279	\$11,306,838	1,126,744	\$29,914,039

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.