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Stewart L. Udall, Secretary

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Iron and Steel Scrap,
Monthly

IRON AND STEEL SCRAP IN APRIL 1963 (Final Data)

The domestic use of iron and steel scrap for all purposes during April 1963 rose 6 percent over March, and was the largest quantity consumed since March 1960, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The use of pig iron in April was 5 percent higher than the preceding month. The total charge of iron and steel scrap and pig iron (14,111,038 short tons) during April consisted of 51 percent scrap and 49 percent pig iron, unchanged from March.

The use of iron and steel scrap in steelmaking furnaces, (basic oxygen converter, Bessemer, open-hearth, and electric) totaled 5,611,515 short tons, a rise of 6 percent over the previous month, and the largest quantity used since March 1960. The total metallics used in steel furnaces (11,929,154 short tons) consisted of 47 percent scrap and 53 percent pig iron, unchanged from March. Scrap made up 43 percent of the open-hearth charge in April, compared with 42 percent during March. Electric furnaces utilized 1,194,585 tons of scrap during April, a slight increase over March.

Table 1 - Production, receipts, consumption, and consumers' stocks of iron and steel scrap and pig iron, November 1962 through April 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/}
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
Apr. 1963--	4,214,990	2,861,213	7,076,203	7,206,827	6,905,211	7,785,282	2,747,285

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

^{2/} Excludes 223,620 short tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and Joseph H. Bilbrey, Jr., September 9, 1963 under the supervision of F. J. Cservenyak, Division of Minerals.

Iron and steel scrap used by gray iron foundries during April totaled 1,006,226 short tons, a slight increase over March. Pig iron consumed by this industry was 6 percent greater than during the preceding month.

U.S. consumers' stocks of iron and steel scrap totaled 7,785,282 tons on April 30, and were equivalent to a 32-day supply at the April daily consumption rate. Pig iron stocks held by consumers and suppliers were 4 percent smaller than at the end of March.

Home scrap produced plus purchased scrap received totaled 7,076,203 tons, an increase of 9 percent over March. Net purchased scrap received by consumers was 8 percent greater than during the preceding month. Of the total purchased, 83 percent was received from dealers and 17 percent from other sources, compared with 82 percent and 18 percent, respectively, in March. (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, November 1962 through April 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
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
April-----	3,626,668	115,390	472,932	2,121,055	138,393	601,765

^{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, April 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:	6,192,822	3,203,316		2,499,667	5,653,037	158,409	6,084,359
Carbon-----	381,730	201,911		43,608	246,135	6,326	374,788
Alloy, excludes stainless-----	139,419	44,428		20,743	69,661	939	133,690
Stainless-----	1,201,935	765,335		520,815	1,237,694	57,946	1,192,445
Cast iron, includes borings-----							
Total-----	7,915,906	4,214,990		3,084,833	7,206,827	223,620	7,785,282

^{1/} Revised.

^{2/} Purchased scrap received from dealers and all others.

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

	Source of scrap			Total
	Recirculating 1/	Obsolete 2/	Other, including slag	
Manufacturers of steel ingots and castings-----	3,232,489	262,981	131,198	3,626,668
Manufacturers of steel castings-----	114,993	386	11	115,390
Iron foundries and miscellaneous users-----	470,176	2,203	553	472,932
Total-----	3,817,658	265,570	131,762	4,214,990

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 April 1963, and consumption year to date, by grades, in short tons

Grades of scrap	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total consumption year to date
Steel scrap, excludes rerolling rails:				
Carbon-----	5,118,206	217,960	316,871	5,653,037
Alloy, excludes stainless-----	224,367	11,251	10,517	246,135
Stainless-----	66,041	2,812	1,108	69,961
Cast iron, includes borings-----	502,049	29,775	705,870	1,237,694
Total-----	5,910,663	261,798	1,034,366	7,206,827

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
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
Apr. 30, 1963-	6,562,890	376,200	846,192	7,785,282	2,327,813	390,597
					28,875	2,747,285

Table 7 - Consumers receipts and total consumption of iron and steel scrap,
by grades, during April 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-----	175,789	59,447	235,236	272,794
Cut structurals and plate-----	40,913	4,326	45,239	64,074
Steel car wheels-----	6,314	5,357	11,671	13,004
No. 1 heavy melting-----	492,278	99,513	591,791	2,581,030
No. 1 and electric furnace bundles-----	447,618	117,683	565,301	670,888
No. 2 and all other bundles-----	461,582	15,234	476,816	556,337
Turnings and borings-----	212,675	33,470	246,145	280,940
Slag scrap (Fe content)-----	30,996	9,602	40,598	204,524
All other carbon steel scrap-----	247,168	93,569	340,737	1,029,206
Alloy steel, excludes stainless-----	32,036	14,558	46,594	274,800
Stainless steel-----	17,854	2,275	20,129	67,629
Cast iron: Borings-----	53,212	18,686	71,898	136,023
All other cast iron scrap-----	334,716	57,962	392,678	1,055,578
Total-----	2,553,151	531,682	3,084,833	7,206,827

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, April 1963, in short tons

District and State	Home scrap produced	Total purchased scrap received ^{1/}	Consumption by grades				Total scrap	Scrap stocks Apr. 30	Pig iron consumption
			Carbon steel (excludes re-rolling mills)	Alloy steel (excludes stainless)	Stainless steel	Cast iron (borings)			
New England:									
Connecticut, Massachusetts, Rhode Island-----	17,033	22,187	15,551	985	2,025	19,965	39,426	42,504	10,679
Maine, New Hampshire, Vermont-----	996	1,523	556	-	-	2,339	2,895	2,073	758
Total-----	18,034	23,710	16,107	985	2,025	22,304	41,321	44,582	11,437
Middle Atlantic:									
New Jersey-----	16,249	47,930	22,087	910	738	29,736	54,171	76,540	9,700
New York-----	199,428	104,848	270,015	7,872	5,955	51,207	335,049	561,871	405,253
Pennsylvania (East) ^{2/} -----	259,981	150,740	342,444	44,954	2,090	61,995	451,383	572,320	426,820
Pennsylvania (West)-----	660,131	295,123	702,890	65,288	30,045	120,108	918,331	1,193,196	1,273,431
Total-----	1,135,789	598,649	1,338,236	118,924	38,828	262,946	1,758,934	2,403,927	2,115,204
East North Central:									
Illinois-----	376,258	318,897	584,353	13,662	1,847	123,583	723,445	879,914	452,336
Indiana-----	530,350	287,639	725,328	9,633	1,587	98,659	825,207	622,446	913,910
Michigan-----	364,206	343,676	456,734	3,527	11,350	222,791	694,402	405,317	547,638
Ohio (East) ^{3/} -----	631,115	518,206	864,309	79,771	7,541	106,628	1,088,249	908,326	1,046,258
Ohio (West)-----	183,173	99,369	161,892	1,232	72	64,304	227,500	186,096	203,822
Wisconsin-----	48,615	37,606	40,408	427	218	37,350	78,403	54,072	15,947
Total-----	2,133,717	1,605,393	2,833,024	108,252	22,615	643,315	3,607,206	3,056,171	3,181,911
West North Central:									
Iowa-----	17,712	28,541	18,543	-	70	19,372	37,985	44,056	6,675
Kansas and Nebraska-----	3,903	8,740	8,885	-	-	2,813	11,700	12,690	477
Minnesota-----	24,812	23,165	41,492	1,275	120	11,751	53,947	57,089	45,657
Missouri-----	18,535	76,210	64,976	-	-	12,398	78,063	183,586	2,835
Total-----	64,962	136,656	133,896	1,275	190	46,334	181,695	297,421	55,644
South Atlantic:									
Delaware and Maryland-----	248,277	35,637	323,270	1,567	5,222	26,867	356,926	391,659	462,852
Florida and Georgia-----	10,539	31,671	34,876	-	-	2,310	37,186	70,280	922
North Carolina and South Carolina-----	3,484	8,207	775	630	19	8,986	10,321	9,929	4,066
Virginia and West Virginia-----	81,613	119,446	169,917	-	-	14,664	184,670	87,490	204,456
Total-----	343,913	194,961	528,938	2,197	5,241	52,827	599,103	559,358	672,296
East South Central:									
Alabama-----	145,506	116,358	185,728	4,486	4/	64,246	250,185	262,024	320,499
Kentucky, Mississippi, Tennessee-----	65,240	103,961	128,276	-	4/	33,623	166,528	193,307	76,231
Total-----	210,746	220,319	314,004	4,486	4/	97,869	416,713	455,331	396,730
West South Central:									
Arkansas, Louisiana, Oklahoma-----	5,505	10,443	14,259	-	-	3,369	17,628	26,978	735
Texas-----	69,411	75,775	113,614	2,843	4/	32,719	149,360	214,437	83,962
Total-----	74,916	86,218	127,873	2,843	4/	36,088	166,988	241,415	84,697
Rocky Mountain:									
Arizona, Colorado, Idaho, Montana, Nevada, Utah-----	94,028	62,814	136,744	4,118	-	30,043	170,905	197,811	219,323
Total-----	94,028	62,814	136,744	4,118	-	30,043	170,905	197,811	219,323
Pacific Coast:									
California and Hawaii-----	127,625	120,610	102,508	1,895	109	43,907	228,499	407,472	165,938
Oregon and Washington-----	11,260	35,503	41,727	1,260	415	45,463	121,794	121,794	2,031
Total-----	138,885	156,113	224,315	3,155	524	45,968	273,962	529,266	167,969
U.S. total-----	4,214,990	3,084,833	5,653,037	246,135	69,961	1,237,694	7,206,827	7,785,282	6,905,211

^{1/} Includes 223,620 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 April totaled 7,206,827 short tons which was at an average daily rate of 240,228 tons or 33 percent greater than for the year 1962.

In April, open-hearth furnaces used 58 percent of the total scrap, and 80 percent of the pig iron compared with 56 and 80 percent, respectively, in March; electric furnaces in April used 9 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 69 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 April, steelmaking furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 78 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 77 and 91 percent, respectively, during March. In 1962, steelmaking furnaces used 75 percent of the total scrap, and 91 percent of the pig iron. The remainder was used in ironmaking furnaces, principally the cupola. Consumption by type of furnace during April is shown in the following table:

Table 9 - Consumption of iron and steel scrap and pig iron by type of manufacturers and furnaces during April 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/	207,774	559,780	-	-	-	-	207,774	559,780
Bessemer converters	18,244	188,929	1,130	5	97	18	19,471	188,952
Open-hearth furnaces	4,135,436	5,541,290	54,249	6,349	-	-	4,189,685	5,547,639
Electric furnaces 4/	1,027,553	16,360	153,040	2,488	13,992	2,420	1,194,585	21,268
Total steelmaking furnaces	5,389,007	6,306,359	208,419	8,842	14,089	2,438	5,611,515	6,317,639
Blast furnaces 5/	427,867	-	-	-	-	-	427,867	-
Cupola furnaces	84,774	24,978	27,270	1,207	894,182	284,993	1,006,226	311,178
Air furnaces	3,266	1,235	26,109	4,349	86,382	11,154	115,757	16,738
Direct castings	-	205,170	-	-	-	54,486	-	259,656
Ferroalloy	-	-	-	-	26,483	-	26,483	-
Miscellaneous	5,749	-	-	-	13,230	-	18,979	-
Total Apr. 1963	5,910,663	6,537,742	261,798	14,398	1,034,366	353,071	7,206,827	6,905,211
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

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 April 1963		
	Total scrap	Pig iron	Total charge
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	19,855	3,995	23,850
New York-----	249,121	383,863	632,984
Pennsylvania (East)-----	312,011	379,883	691,894
Pennsylvania (West)-----	607,836	996,041	1,603,877
Total-----	1,188,823	1,763,782	2,952,605
East North Central:			
Illinois-----	369,169	377,348	746,517
Indiana-----	731,786	886,100	1,617,886
Michigan and Wisconsin-----	248,336	253,815	502,151
Ohio (East)-----	550,209	808,091	1,358,300
Ohio (West)-----	138,679	189,499	328,178
Total-----	2,038,179	2,514,853	4,553,032
West North Central:			
Minnesota and Missouri-----	39,674	42,217	81,891
Total-----	39,674	42,217	81,891
South Atlantic:			
Delaware, Maryland, West Virginia-----	466,484	657,761	1,124,245
Total-----	466,484	657,761	1,124,245
East and West South Central:			
Alabama, Kentucky, Texas-----	240,634	360,521	601,155
Total-----	240,634	360,521	601,155
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	215,891	208,505	424,396
Total-----	215,891	208,505	424,396
United States, total-----	4,189,685	5,547,639	9,737,324

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 458,887 short tons in April compared with 425,279 tons in March. During May 1963, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 829,539 short tons. Exports of pig iron during April totaled 12,910 tons and 3,736 tons in March. Imports of scrap totaled 16,710 short tons in April compared with 18,038 tons in March. Of the scrap imported during April, 16,596 short tons came from Canada and 114 tons from other sources. Imports of pig iron totaled 45,434 short tons in April and 11,628 tons in March. In addition to the foregoing imports of pig iron during April, there were 752 tons of sponge iron, valued at \$111,803, imported, of which 422 tons came from Canada and 330 tons from Sweden.

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

Country	April 1963		Jan. through April 1963	
	Short tons	Value	Short tons	Value
Argentina-----	-	-	10,180	\$311,878
Canada-----	42,240	\$1,116,238	115,691	3,201,297
France-----	-	-	6,419	182,503
Hong Kong-----	-	-	17,692	898,429
Italy-----	88,485	1,950,978	378,263	8,095,244
Japan-----	230,295	6,073,839	839,931	22,950,947
Korea-----	10,666	244,388	10,783	247,588
Mexico-----	56,124	1,520,900	131,658	3,592,033
Nicaragua-----	1,924	62,315	5,360	175,234
Spain-----	-	-	8,524	159,177
Taiwan-----	17,988	536,184	47,941	1,508,145
Venezuela-----	10,804	266,008	10,804	266,008
All others-----	361	14,937	2,385	111,343
Total-----	458,887	\$11,785,787	1,585,631	\$41,699,826

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

Grades of scrap	April 1963		Jan. through April 1963	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-	199,480	\$5,530,782	644,804	\$18,150,275
No. 2 heavy melting steel scrap-	82,133	1,926,625	284,785	6,758,971
No. 1 baled sheet melting scrap-	29,805	762,254	117,444	2,957,626
No. 2 baled sheet melting scrap-	89,363	1,864,017	303,294	6,438,315
Borings, shoveling, and turnings-	3,658	107,473	31,455	763,315
Iron scrap-----	20,225	508,920	77,620	1,933,890
Rerolling material-----	9,899	454,454	48,972	2,276,719
All other scrap 3/-----	24,324	631,262	77,257	2,420,715
Total-----	458,887	\$11,785,787	1,585,631	\$41,699,826

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.