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Iron and Steel Scrap,
Monthly

IRON AND STEEL SCRAP IN NOVEMBER 1963 (Final Data)

Although total domestic consumption of iron and steel scrap for November 1963 dropped 4 percent, it still was 8 percent above that for November 1962, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. Consumption of pig iron remained nearly constant. The total metallics charge (11,558 thousand short tons) was 2 percent below October 1963 and consisted of 52 percent iron and steel scrap, with the remainder pig iron.

Steelmaking furnaces consumed 4,474 thousand short tons during November, which was 1 percent less than the open-hearth, electric, basic oxygen converter, and Bessemer furnaces consumed during October. Of the 9,564 thousand short tons of total metallics used in these steelmaking furnaces, 47 percent was iron and steel scrap. Scrap represented 42 percent of the open-hearth charge, while electric furnaces consumed 9 percent less scrap, 1,019 thousand short tons, than in October.

Table 1 - Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, June 1963 through November 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/}
June 1963	4,168,499	2,689,983	6,858,482	6,867,086	6,989,940	7,730,890	2,668,639
July 1963	3,731,562	2,226,542	5,958,104	5,681,168	5,909,026	8,011,055	2,781,851
Aug. 1963	3,404,164	2,106,721	5,510,885	5,424,861	5,270,301	8,096,917	2,803,604
Sept. 1963	3,363,384	2,130,682	5,494,066	5,572,716	5,224,259	8,012,650	2,811,216
Oct. 1963	3,670,250	2,516,120	6,186,370	6,196,853	5,603,144	8,001,876	2,812,965
Nov. 1963	3,512,890	2,384,813	5,897,703	5,970,622	5,587,378	7,962,246	2,826,844

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

^{2/} Excludes 268,491 short tons of scrap shipped, transferred, or otherwise disposed of during month.

Prepared May 25, 1964, by R. A. Whitman, Physical Scientist

The 1,032,925 short tons of iron and steel scrap used in gray iron foundries during November represented a 9 percent drop from October 1963 but 9 percent more than in November of the previous year. These foundries used 14 percent less pig iron than in October.

Total U.S. consumers' stocks of iron and steel scrap, 7,962,246 short tons, was down slightly from October. This represented a 40-day supply at the average rate of consumption for November. Pig iron stocks increased by less than 1 percent.

The 5,897,703 short tons of home scrap plus purchased scrap received was 5 percent less than October. Of the total scrap purchased, 79 percent was from dealers with the balance from other sources. (Purchased scrap 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, June 1963 through November 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	Iron foundries and miscel-laneous users	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel-laneous users	Iron foundries and miscel-laneous users
June-----	3,566,513	118,140	483,846	483,846	1,987,710	131,784	570,489	570,489
July-----	3,239,151	91,458	400,953	400,953	1,626,339	109,492	490,711	490,711
August-----	2,858,111	117,461	428,592	428,592	1,492,648	134,320	479,753	479,753
September-----	2,775,202	107,496	480,686	480,686	1,450,613	139,351	540,718	540,718
October-----	3,010,489	122,932	536,829	536,829	1,706,030	163,485	646,605	646,605
November-----	2,914,211	108,248	490,431	490,431	1,661,006	139,249	584,558	584,558
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, November 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
	6,137,791	382,447	2,572,223	2,126,552	4,573,441	182,035	6,081,090
Steel scrap, excludes rerolling rails:							
Carbon-----	382,447	128,417	179,526	41,787	205,409	9,489	388,862
Alloy, excludes stainless-----	128,417	36,868	36,868	22,869	60,694	4,887	122,573
Stainless-----	1,386,510	724,273	724,273	462,096	1,131,078	72,080	1,369,721
Cast iron, includes borings-----							
Total-----	8,035,165	3,512,890	2,653,304	5,970,622		268,491	7,962,246

1/ Revised.

2/ Purchased scrap received from dealers and all others.

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

	Source of scrap			Total
	Recirculating 1/	Obsolete 2/	Other, including slag	
Manufacturers of steel ingots and castings-----	2,613,813	200,187	100,211	2,914,211
Manufacturers of steel castings-----	107,989	230	29	108,248
Iron foundries and miscellaneous users-----	485,944	4,297	190	490,431
Total-----	3,207,746	204,714	100,430	3,512,890

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 November 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-----	4,013,485	210,017	349,939	4,573,441
Alloy, excludes stainless-----	186,287	9,740	9,382	205,409
Stainless-----	56,199	2,027	2,468	60,694
Cast iron, includes borings-----	411,861	27,490	691,727	1,131,078
Total-----	4,667,832	249,274	1,053,516	5,970,622

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		
	Mfrs. of steel ingots and castings	Mfrs. of Iron foundries and miscel-laneous users	Total	Mfrs. of steel ingots and castings	Mfrs. of Iron foundries and miscel-laneous users	Total
June 30, 1963	6,531,778	844,785	7,330,890	2,245,252	395,978	2,668,639
July 31, 1963	6,793,061	867,673	8,011,055	2,348,188	404,891	2,781,851
Aug. 31, 1963	6,917,675	837,828	8,096,917	2,390,642	385,069	2,803,604
Sept. 30, 1963	6,834,025	843,553	8,012,650	2,385,316	398,456	2,811,216
Oct. 31, 1963	6,801,303	856,146	8,001,876	2,380,230	406,600	2,812,965
Nov. 30, 1963	6,741,883	876,335	7,962,246	2,372,531	428,718	2,826,844

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, November 1953, in short tons.

District and State	Reme scrap produced	Total purchased scrap received ^{1/}	Consumption by grades				Total scrap	Scrap stocks October 31	Pig iron consumption
			Carbon steel (excludes re-rolling rails)	Alloy steel (excludes stainless)	Stainless steel	Cast iron (includes borings)			
New England:									
Connecticut, Massachusetts, Rhode Island	15,871	21,801	13,279	-	1,966	19,905	36,047	43,634	9,686
Maine, New Hampshire, Vermont	2,047	1,642	1,540	-	-	1,633	2,133	2,616	577
Total	16,918	23,443	13,819	897	1,966	21,538	38,180	46,250	10,263
Middle Atlantic:									
New Jersey	16,581	48,888	32,518	758	361	30,695	64,332	66,708	9,937
New York	165,816	97,549	193,648	5,714	4,393	47,060	280,815	548,964	334,968
Pennsylvania (East) ^{2/}	219,242	170,429	295,191	41,396	2,091	53,165	391,843	598,457	388,796
Pennsylvania (West)	535,165	223,074	565,272	62,992	24,394	90,462	734,120	1,317,579	912,743
Total	936,804	539,940	1,086,629	110,860	31,239	221,382	1,450,110	2,531,708	1,646,444
East North Central:									
Illinois	337,524	345,572	514,602	13,621	4,088	133,069	665,380	898,062	358,033
Indiana	426,242	269,247	611,034	6,427	1,222	77,942	696,625	790,128	773,423
Michigan	348,659	331,242	418,222	3,619	6,520	206,922	635,283	459,312	564,903
Ohio (East) ^{3/}	464,345	327,050	622,709	52,425	9,124	90,527	775,185	761,125	738,663
Ohio (West)	153,740	76,725	112,214	1,849	93	54,195	167,751	274,640	176,414
Wisconsin	46,776	36,086	37,062	287	199	35,933	73,481	53,007	13,867
Total	1,777,286	1,387,922	2,315,843	77,628	21,246	598,988	3,013,705	3,196,274	2,625,303
West North Central:									
Iowa	17,976	27,170	24,925	-	-	18,875	43,899	40,967	4,673
Kansas and Nebraska	4,226	7,396	8,207	-	203	2,910	11,117	13,166	480
Minnesota	18,761	17,474	24,637	994	-	10,746	35,875	72,664	33,455
Missouri	20,019	63,929	68,170	-	-	11,544	80,320	187,970	3,111
Total	60,982	116,039	125,939	994	203	44,075	171,211	314,767	41,719
South Atlantic:									
Delaware and Maryland	194,429	29,235	216,840	2,127	1/	24,286	248,067	295,138	373,654
Florida and Georgia	11,715	26,187	29,364	-	-	2,968	32,332	55,055	1,103
North Carolina and South Carolina	2,992	8,265	582	661	1/	7,847	9,309	9,148	3,740
Virginia and West Virginia	68,092	97,252	124,598	-	-	17,896	142,605	137,999	145,372
Total	277,188	160,939	371,384	2,788	1/	52,997	432,313	497,340	523,869
East South Central:									
Alabama	98,867	99,494	144,283	1,030	1/	64,984	210,312	292,182	235,762
Kentucky, Mississippi, Tennessee	57,491	71,021	100,030	3,719	1/	30,412	134,525	216,527	93,043
Total	156,358	170,515	244,313	4,749	1/	95,396	344,837	508,709	328,805
West South Central:									
Arkansas, Louisiana, Oklahoma	4,854	12,404	13,470	6	-	3,664	17,140	31,324	623
Texas	62,516	67,948	84,295	1,740	1/	36,142	122,265	189,928	78,975
Total	67,370	80,352	97,765	1,746	1/	39,806	139,405	221,252	79,598
Rocky Mountain:									
Arizona, Colorado, Idaho, Montana, Nevada, Utah	88,249	66,657	110,137	3,072	-	22,774	135,983	210,352	173,292
Total	88,249	66,657	110,137	3,072	-	22,774	135,983	210,352	173,292
Pacific Coast:									
California and Hawaii	121,876	79,661	172,982	1,638	171	30,637	205,428	328,805	156,995
Oregon and Washington	9,859	27,746	34,630	1,037	258	3,425	39,350	106,789	1,070
Total	131,735	107,407	207,612	2,675	429	34,062	244,778	435,594	158,065
U.S. Total	3,512,890	2,653,304	4,573,441	205,409	60,694	1,131,078	5,970,622	7,962,246	5,987,378

^{1/} Includes 268,491 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 November totaled 5,970,622 short tons which was at an average daily rate of 199,021 tons or 10 percent greater than for the year 1962.

In November, open-hearth furnaces used 53 percent of the total scrap, and 78 percent of the pig iron compared with 51 and 77 percent, respectively, in October; electric furnaces in November used 9 percent of the combined total of iron and steel scrap and pig iron charged to all furnaces, with open-hearth using 65 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 November, steelmaking furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 75 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 73 and 90 percent, respectively, during October. 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 November is shown in the following table:

Table 9 - Consumption of iron and steel scrap and pig iron by type of manufacturers and furnaces during November 1963, in short tons

Type of furnace or equipment	Steel 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/	261,834	633,923	-	-	-	-	261,834	633,923
Bessemer converters	8,322	94,330	1,083	2	98	15	9,503	94,347
Open-hearth furnaces	3,132,515	4,341,307	51,409	6,167	-	-	3,183,924	4,347,474
Electric furnaces 4/	849,482	9,931	155,839	2,608	13,340	2,235	1,018,661	14,774
Total steelmaking furnaces	4,252,153	5,079,491	208,331	8,777	13,438	2,250	4,473,922	5,090,518
Blast furnaces 5/	312,666	-	-	-	-	-	312,666	-
Cupola furnaces	91,448	22,487	27,129	984	914,348	268,429	1,032,925	291,900
Air furnaces	3,191	919	13,814	2,789	83,433	9,032	100,438	12,740
Direct castings	-	165,159	-	-	-	27,061	-	192,220
Ferroalloys	-	-	-	-	30,876	-	30,876	-
Miscellaneous	8,374	-	-	-	11,421	-	19,795	-
Total Nov. 1963	4,667,832	5,268,056	249,274	12,550	1,053,516	306,772	5,970,622	5,587,378
Total Oct. 1963	4,747,051	5,236,351	278,040	14,239	1,171,762	352,554	6,196,853	5,603,144
Total Sept. 1963	4,307,535	4,893,974	247,117	13,802	1,018,064	316,483	5,572,716	5,224,259
Total Aug. 1963	4,224,262	4,944,146	261,726	14,667	938,873	311,488	5,424,861	5,270,301
Total July 1963	4,604,903	5,601,664	206,253	12,547	870,012	294,815	5,681,168	5,909,026
Total June 1963	5,566,896	6,631,354	264,246	15,025	1,035,944	343,561	6,867,086	6,989,940

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, during November 1963, in short tons

District and State	Scrap	Pig iron	Total charge
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	25,549	4,312	29,861
New York-----	163,382	310,171	473,553
Pennsylvania (East)-----	248,981	344,070	593,051
Pennsylvania (West)-----	464,727	728,023	1,192,750
Total-----	902,639	1,386,576	2,289,215
East North Central:			
Illinois-----	351,692	303,675	655,367
Indiana-----	616,733	740,576	1,357,309
Michigan and Wisconsin-----	163,600	222,039	385,639
Ohio (East)-----	403,501	555,295	958,796
Ohio (West)-----	87,287	160,565	247,852
Total-----	1,622,813	1,982,150	3,604,963
West North Central:			
Minnesota and Missouri-----	24,238	30,347	54,585
Total-----	24,238	30,347	54,585
South Atlantic:			
Delaware, Maryland, West Virginia---	316,132	509,944	826,076
Total-----	316,132	509,944	826,076
East and West South Central:			
Alabama, Kentucky, Texas-----	168,247	267,662	435,909
Total-----	168,247	267,662	435,909
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	149,855	170,795	320,650
Total-----	149,855	170,795	320,650
United States, total-----	3,183,924	4,347,474	7,531,398

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 427,553 short tons in November compared with 551,643 tons in October. During December 1963, the Office of Export Supply, U. S. Department of Commerce, issued scrap export licenses for 539,824 short tons. Exports of pig iron during November totaled 4,636 tons and 7,888 tons in October. Imports of scrap totaled 14,658 short tons in November compared with 14,369 tons in October. Of the scrap imported during November, 14,311 short tons came from Canada and 347 tons from other sources. Imports of pig iron totaled 78,966 short tons in November and 109,374 tons in October. In addition to the foregoing imports of pig iron during November, there were 375 tons of sponge iron, valued at \$45,305, imported, all of which came from Canada.

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

Country	November 1963		Jan. through November 1963	
	Short tons	Value	Short tons	Value
Argentina-----	-	-	10,180	311,878
Canada-----	51,182	1,476,877	503,415	13,730,263
France-----	-	-	6,475	184,303
Hong Kong-----	39	908	20,063	972,738
Italy-----	33,085	927,971	946,439	20,645,846
Japan-----	260,380	8,110,195	3,579,258	99,679,383
Korea-----	10,955	336,434	54,290	2,073,060
Mexico-----	49,357	1,496,409	422,798	11,926,992
Nicaragua-----	736	23,002	14,140	461,859
Spain-----	8,500	179,884	24,783	523,802
Taiwan-----	2,541	102,609	125,817	4,089,933
All others-----	10,778	211,722	96,447	2,482,233
Total-----	427,553	12,866,011	5,804,105	157,082,290

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

Grades of scrap	November 1963		Jan. through November 1963	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap--	179,247	5,877,263	2,255,343	66,054,519
No. 2 heavy melting steel scrap--	92,523	2,577,734	1,050,479	26,576,056
No. 1 baled sheet melting scrap--	11,526	358,389	352,359	9,431,033
No. 2 baled sheet melting scrap--	73,681	1,679,388	1,123,724	23,892,839
Borings, shovelings, & turnings--	4,981	126,911	182,588	3,917,572
Iron scrap-----	30,716	1,026,692	327,698	8,868,414
Rerolling material-----	4,795	222,090	138,889	6,515,578
All other scrap 3/-----	30,084	997,544	373,025	11,826,279
Total-----	427,553	12,866,011	5,804,105	157,082,290

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.