



# MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES  
WASHINGTON 25, D. C.



Stewart L. Udall, Secretary

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Iron and Steel Scrap,  
Monthly

## IRON AND STEEL SCRAP IN AUGUST 1962 (Final Data)

The combined domestic use of iron and steel scrap and pig iron for all purposes during August rose 16 percent over July, but was 14 percent less than for the comparable month of 1961, according to the Bureau of Mines, U.S. Department of the Interior. Iron and steel scrap used for all purposes in August was 17 percent greater than during July. The use of pig iron in August was 14 percent greater than during the preceding month. The total charge of scrap and pig iron (9,723,913 short tons) consisted of 51 percent scrap and 49 percent pig iron, compared with 50 percent scrap and pig iron, respectively, in July.

The use of scrap in steelmaking furnaces (open-hearth, basic oxygen converter, Bessemer, and electric) totaled 3,716,215 short tons, an increase of 19 percent over July. The total metallics used in steel furnaces (8,057,386 tons) consisted of 46 percent scrap and 54 percent pig iron during August compared with 45 percent scrap and 55 percent pig iron during July. Scrap made up 41 percent of the open-hearth charge in August compared with 40 percent during the preceding month. Electric furnaces utilized 857,930 tons of scrap during August, an increase of 27 percent over July.

Table 1 - Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, March 1962 through August 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/
Mar.-----	4,279,945	2,524,689	6,804,634	6,776,985	7,198,212	8,533,894	2,949,166
Apr.-----	3,833,895	2,243,624	6,077,519	5,924,107	6,392,330	8,688,953	3,079,236
May -----	3,418,985	2,128,073	5,547,058	5,167,141	5,303,678	9,067,777	3,276,474
June-----	3,058,076	1,879,506	4,937,582	4,862,067	4,605,230	9,196,234	3,344,915
July-----	2,640,218	1,684,545	4,324,763	4,243,238	4,167,342	9,276,425	3,442,819
Aug.-----	3,045,790	2,1844,693	4,890,483	4,967,006	4,756,907	9,198,977	3,367,594

1/ Suppliers' stocks included with consumers' stocks.

2/ Excludes 170,644 short tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and James C.O. Harris, November 30, 1962 under the supervision of F.J. Cservenyak, Chief, Branch of Ferrous Metals, Division of Minerals.

The use of scrap by gray iron foundries during August totaled 810,768 short tons, an increase of 8 percent over the preceding month. Pig iron consumed by this industry was 12 percent greater than during July.

U.S. consumers' stocks of ferrous scrap totaled 9,198,977 tons on August 31, a slight decrease from the end of the preceding month, and were equivalent to a 57-day supply at the August daily consumption rate. Pig iron stocks held by consumers and suppliers were 2 percent less than on July 31.

Home scrap produced plus purchased scrap received totaled 4,890,483 tons, an increase of 13 percent over the preceding month. Net purchased scrap received by consumers was 10 percent greater than during July. Of the total purchased, 81 percent was received from dealers and 19 percent from other sources, compared with 83 percent and 17 percent, respectively, during July. (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, March 1962 through August 1962, in short tons

Date	Home scrap produced			Purchased scrap received (net) 1/		
	Mfgrs. of steel ingots and castings	Mfgrs. of steel castings	Iron foundries and miscellaneous users	Mfgrs. of steel ingots and castings	Mfgrs. of steel castings	Iron foundries and miscellaneous users
Mar.-----	3,701,732	121,947	456,266	1,827,265	151,735	545,689
Apr.-----	3,287,024	109,686	437,185	1,559,372	156,518	527,734
May -----	2,845,838	119,495	453,652	1,411,901	172,453	543,719
June-----	2,490,911	116,972	450,193	1,183,169	160,129	536,208
July-----	2,198,219	85,517	356,482	1,149,325	108,574	426,646
Aug.-----	2,546,648	108,464	390,678	1,213,855	139,590	491,248

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

Table 3 - Consumer stocks, production, receipts, consumption and shipments of ferrous scrap  
by grades, August 1962, in short tons

Grades of scrap	Stocks at beginning of month 1/	Home scrap produced	Purchased scrap received			Shipments	Stocks at end of month
			From dealers	From others	Consumption		
No. 1 heavy melting steel-----	3,260,993	1,223,759	213,500	81,866	1,624,259		3,186,910
No. 2 heavy melting steel-----	653,139	118,853	137,279	38,125	314,601		626,342
No. 1 and electric furnace bundles-----	1,088,422	70,538	188,451	96,239	353,849		1,092,728
No. 2 and all other bundles-----	496,286	50,582	148,507	34,580	234,271	25,461	484,517
Low phosphorus scrap-----	540,343	105,871	212,268	19,790	314,653		554,797
Cast iron scrap, other than borings-----	1,091,303	479,738	322,945	25,755	794,881		1,091,863
Turnings and/or borings alloy free-----	202,053	42,433	135,729	30,356	198,653	13,912	198,006
Rerolling rails-----	114,765	198	11,044	14,118	29,223	792	110,110
Scrap rails-----	44,383	2,070	25,563	598	25,039	144	47,431
High speed steel-----	4,088	1,392	608	108	2,198	49	3,949
Stainless steel-----	136,074	28,476	17,888	1,802	47,769	1,623	134,848
All other alloy iron and steel-----	383,586	137,092	23,287	8,095	158,419	3,359	390,282
All other prepared scrap-----	756,117	485,050	165,798	15,570	709,785	125,304	752,462
Unprepared scrap-----	503,948	299,738	33,685	11,783	159,406		524,732
<b>Total-----</b>	<b>9,275,500</b>	<b>3,045,790</b>	<b>1,636,552</b>	<b>378,785</b>	<b>4,967,006</b>	<b>170,644</b>	<b>9,198,977</b>

1/ Revised

Table 4 - Consumption of ferrous scrap at major consuming industries' plants during August 1962,  
and consumption year-to-date, 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	Consumption year-to-date
No. 1 heavy melting steel-----	1,568,337	27,038	28,884	1,624,259	13,977,085
No. 2 heavy melting steel-----	299,246	1,235	14,120	314,601	2,897,759
No. 1 and electric furnace bundles-----	337,201	4,718	11,930	353,849	3,630,834
No. 2 and all other bundles-----	221,124	5,827	7,320	234,271	2,369,812
Low phosphorus scrap-----	128,738	108,886	77,029	314,653	2,818,054
Cast iron scrap, other than borings -----	268,838	16,694	509,349	794,881	6,743,202
Turnings and/or borings alloy free-----	138,714	3,903	56,036	198,653	1,956,386
Rerolling rails-----	8,271	-	20,952	29,223	243,659
Scrap rails-----	816	2,373	21,850	25,039	213,791
High speed steel-----	2,198	-	-	2,198	21,219
Stainless steel-----	43,242	2,272	2,255	47,769	445,326
All other alloy iron and steel-----	142,033	7,742	8,644	158,419	1,522,805
All other prepared scrap-----	604,031	40,094	65,660	709,785	6,242,544
Unprepared scrap-----	93,279	17,793	48,334	159,406	1,572,048
<b>Total-----</b>	<b>3,856,068</b>	<b>238,575</b>	<b>872,363</b>	<b>4,967,006</b>	<b>44,654,524</b>

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

Date	Scrap stocks			Pig iron stocks		
	Mfgrs. of steel ingots and castings	Mfgrs. of steel castings	Iron foundries and miscellaneous users	Total	Mfgrs. of steel ingots and castings	Iron foundries and miscellaneous users
Mar. 31-----	7,374,507	350,604	808,783	8,533,894	2,567,454	345,615
Apr. 30-----	7,509,642	364,167	815,144	8,688,953	2,682,084	360,157
May 31-----	7,870,370	383,368	814,039	9,067,777	2,871,561	368,884
June 30-----	7,975,498	393,117	827,619	9,196,234	2,927,946	382,641
July 31-----	8,029,200	404,056	843,169	9,276,425	3,006,019	401,403
Aug. 31-----	7,933,037	414,523	851,417	9,198,977	2,909,351	423,501
						3,367,303

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in August totaled 4,967,006 short tons which was at an average daily rate of 160,226 tons or 9 percent less than for the year 1961.

In August, open-hearth furnaces used 55 percent of the total scrap, and 82 percent of the pig iron compared with 52 and 81 percent, respectively, in July; electric furnaces in August used 9 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 68 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 August, steel-making 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 92 percent, respectively, during July. 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 August 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 August 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-----	2,676,665	3,899,491	43,607	6,846	-	-	2,720,272	3,906,337
Basic oxygen converter 3/-----	133,052	364,770	-	-	-	-	133,052	364,770
Bessemer converter-----	3,705	45,715	1,141	8	115	40	4,961	45,703
Electric 4/-----	699,979	19,398	144,925	2,505	13,026	2,398	857,930	24,201
Total steelmaking furnaces-----	3,513,401	4,329,374	189,673	9,359	13,141	2,438	3,716,215	4,341,171
Cupola-----	67,290	16,715	25,559	984	717,919	241,113	810,768	258,812
Air-----	1,851	792	23,343	2,845	84,148	11,076	109,342	14,713
Blast 5/-----	262,145	88,680	-	-	-	-	262,145	-
Direct castings-----	-	-	-	-	53,531	-	53,531	142,211
Ferro-alloy-----	-	-	-	-	22,338	-	22,338	-
Miscellaneous-----	11,381	-	-	-	34,817	-	46,198	-
Total Aug. 1962-----	3,856,068	4,435,561	238,575	13,188	872,363	308,158	4,967,006	4,756,907
Total July 1962-----	3,294,268	3,905,462	179,743	11,930	769,227	249,950	4,243,238	4,167,342
Total June 1962-----	3,619,384	4,239,459	268,671	17,007	974,012	348,764	4,862,067	4,605,230
Total May 1962-----	3,895,401	4,940,045	273,885	17,473	997,855	346,160	5,167,141	5,303,678
Total Apr. 1962-----	4,710,246	6,022,193	254,025	16,328	959,836	353,809	5,924,107	6,392,230
Total Mar. 1962-----	5,493,878	6,762,170	273,584	17,980	1,009,523	418,062	6,776,985	7,198,212

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, August 1962, in short tons

State and Region	Scrap			Scrap stocks August 31	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	3,045,790	1/2,015,337	4,967,006	9,198,977	4,756,907
New England, total-----	17,554	20,232	35,754	52,468	11,340
Connecticut-----	5,901	6,167	11,354	14,421	2,522
Maine and New Hampshire-----	430	927	1,196	1,490	171
Massachusetts-----	6,496	7,731	13,144	24,643	4,668
Rhode Island-----	3,819	4,369	8,004	10,440	3,299
Vermont-----	908	1,038	2,056	1,474	680
Middle Atlantic, total-----	796,137	395,863	1,213,269	2,891,031	1,343,953
New Jersey-----	13,410	31,542	50,734	64,365	7,714
New York-----	119,968	78,984	212,421	701,842	205,847
Pennsylvania (East) 2/-----	201,238	121,441	362,560	679,443	335,472
Pennsylvania (West)-----	461,521	163,896	587,554	1,445,381	794,920
East North Central, total-----	1,491,724	983,023	2,460,558	3,709,380	2,198,100
Illinois-----	282,562	304,428	581,208	862,512	374,526
Indiana-----	393,198	144,070	569,495	941,055	668,134
Michigan-----	248,691	211,890	422,648	464,556	348,951
Ohio (East) 3/-----	424,664	239,947	667,352	996,147	665,896
Ohio (West)-----	101,624	44,141	146,930	395,135	124,861
Wisconsin-----	40,985	38,547	72,925	49,975	15,732
West North Central, total-----	46,786	87,464	140,403	332,560	41,626
Iowa-----	10,010	14,934	28,259	35,460	4,754
Kansas and Nebraska-----	3,006	9,964	9,951	18,655	399
Minnesota-----	18,006	23,534	35,266	84,701	33,947
Missouri-----	15,764	39,032	66,927	193,744	2,526
South Atlantic, total-----	265,199	150,856	332,932	553,416	500,095
Delaware and Maryland-----	191,174	27,681	166,699	377,870	361,831
Florida and Georgia-----	7,295	33,697	34,617	28,287	1,018
North Carolina-----	1,925	5,578	6,196	4,536	2,303
South Carolina-----	1,620	1,670	3,968	4,949	1,490
Virginia and West Virginia-----	63,185	82,230	121,452	137,774	133,453
East South Central, total-----	169,458	178,444	336,392	595,642	311,532
Alabama-----	121,436	115,400	225,984	397,936	249,427
Kentucky, Mississippi, and Tennessee-----	48,022	63,044	110,408	197,706	62,105
West South Central, total-----	59,908	63,066	134,449	318,016	62,826
Arkansas, Louisiana, and Oklahoma-----	3,695	4,364	8,550	30,818	774
Texas-----	56,213	58,702	125,899	287,198	62,052
Rocky Mountain, total-----	71,360	32,777	95,534	240,415	156,212
Arizona and Nevada-----	1,275	5,730	6,363	11,941	4
Colorado, Idaho, Montana, and Utah-----	70,085	27,047	89,171	228,474	156,208
Pacific Coast, total-----	127,664	103,612	217,715	506,049	131,223
California and Hawaii-----	118,658	76,357	181,298	402,626	130,990
Oregon and Washington-----	9,006	27,255	36,417	103,423	233

1/ Includes 170,644 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 August 1962		
	Total scrap	Pig iron	Total charge
United States, total-----	2,720,272	3,906,337	6,626,609
New England and Middle Atlantic, total-----	799,576	1,158,417	1,957,993
New Jersey and Rhode Island-----	18,014	3,472	21,486
New York-----	143,375	194,590	337,965
Pennsylvania(East)-----	242,920	307,529	550,449
Pennsylvania(West)-----	395,267	652,826	1,048,093
East North Central, total-----	1,383,056	1,814,171	3,197,227
Illinois-----	285,172	290,299	575,471
Indiana-----	494,896	647,349	1,142,245
Michigan and Wisconsin-----	175,247	237,709	412,956
Ohio(East)-----	351,219	526,639	877,858
Ohio(West)-----	76,522	112,175	188,697
West North Central, total-----	24,490	30,845	55,335
Minnesota and Missouri-----	24,490	30,845	55,335
South Atlantic, total-----	225,004	485,315	710,319
Delaware, Maryland, and West Virginia-----	225,004	485,315	710,319
East and West South Central, total-----	158,278	269,227	427,505
Alabama, Kentucky, and Texas-----	158,278	269,227	427,505
Rocky Mountain and Pacific Coast, total-----	129,868	148,362	278,230
California, Colorado, and Utah-----	129,868	148,362	278,230

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 461,000 short tons in August compared with 312,664 tons in July. During September 1962, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 396,297 short tons. Exports of pig iron during August totaled 19,377 tons and 11,166 tons in July. Imports of scrap totaled 15,319 short tons in August compared with 14,029 tons in July. Of the scrap imported during August, 15,157 short tons came from Canada and 162 tons from other sources. Imports of pig iron totaled 95,397 short tons in August and 39,268 tons in July. In addition to the foregoing imports of pig iron during August, there were 307 tons of sponge iron, valued at \$41,463, imported, all from Canada.

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

Country	August 1962		Jan. through Aug. 1962	
	Short tons	Value	Short tons	Value
Canada-----	36,806	\$1,033,359	253,298	\$7,666,833
France-----	1,153	38,425	14,228	753,726
Italy-----	176,715	4,108,769	926,563	23,734,188
Japan-----	196,609	5,844,954	1,729,920	57,917,601
Mexico-----	24,488	682,377	189,687	5,741,952
Spain-----	-	-	36,764	1,171,657
Taiwan-----	12,432	337,520	66,116	2,299,710
West Germany-----	10,657	282,298	28,454	1,257,636
Yugoslavia-----	-	-	37,475	1,290,442
All others-----	2,140	77,959	59,896	1,908,154
Total-----	461,000	\$12,405,661	3,342,401	\$103,741,899

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

Grades of scrap	August 1962		Jan. through Aug. 1962	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	158,777	\$4,524,491	1,102,489	\$38,598,810
No. 2 heavy melting steel scrap-----	101,987	2,453,030	631,702	18,687,053
No. 1 baled sheet melting scrap-----	49,582	1,404,577	287,422	9,393,556
No. 2 baled sheet melting scrap-----	72,165	1,555,542	767,807	17,695,140
Borings, shovelings, and turnings-----	13,951	238,389	86,665	2,080,892
Iron scrap-----	19,269	516,265	196,401	5,905,821
Rerolling material-----	14,838	745,613	66,907	3,629,217
All other scrap 3/-----	30,431	967,754	203,008	7,751,410
Total-----	461,000	\$12,405,661	3,342,401	\$103,741,899

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.