



MINERAL INDUSTRY SURVEYS

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



Stewart L. Udall, Secretary

Marling J. Ankeny, Director

Iron and Steel Scrap,
Monthly

IRON AND STEEL SCRAP IN JUNE 1962 AND SECOND QUARTER 1962 (Final Data)

The quantity of domestic scrap used for all purposes during June 1962 was 6 percent less than during May, and was the lowest quantity used since July 1961, according to data compiled by the Bureau of Mines, U.S. Department of the Interior. The use of scrap during the second quarter 1962 was 18 percent lower than the first quarter of 1962, and 5 percent less than the comparable period of 1961. The use of pig iron was 13 percent less than during the preceding month and was the lowest quantity used since March 1961. The total charge of scrap and pig iron (9,467,297 short tons) dropped 10 percent below the previous month, and consisted of 51 percent scrap and 49 percent pig iron, compared with 49 percent scrap and 51 percent pig iron in May.

The use of scrap in steelmaking furnaces (open-hearth, basic oxygen converter, Bessemer and electric) totaled 3,447,833 tons, a decrease of 6 percent from May and the lowest quantity consumed since February 1961. The total metallics used in steel furnaces (7,577,135 tons) consisted of 46 percent scrap and 54 percent pig iron during June, compared with 43 percent scrap and 57 percent pig iron during May. Scrap made up 40 percent of the open-hearth charge in June compared with 38 percent during the preceding month. Electric furnaces utilized 797,228 tons of scrap during June, a drop of 6 percent from May.

Table 1 - Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, January 1962 through June 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 <u>1/</u>
Jan.-----	3,941,306	2,273,133	6,214,439	6,530,872	6,995,610	8,456,211	3,101,075
Feb.-----	3,810,715	2,418,891	6,229,606	6,183,108	6,575,922	8,505,978	2,961,059
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	2,187,950	4,937,582	4,862,067	4,605,230	9,196,234	3,344,915

1/ Suppliers' stocks included with consumers' stocks.

2/ Excludes 167,244 short tons of scrap shipped, transferred, or otherwise disposed of during month.

Prepared by James E. Larkin and James C.O. Harris, October 1, 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 June totaled 945,075 tons, a slight drop from May. Pig iron consumed by this industry was 3 percent less than during the preceding month. However, during the past five and one-half years the proportion of scrap used in cupola furnaces has increased from 69 to 76 percent of the total charge. In the same period the proportion of pig iron in the charge has dropped from 31 to 24 percent.

U.S. consumers' stocks of ferrous scrap increased for the fifth consecutive month, and were equivalent to a 57-day supply at the June daily consumption rate. Pig iron stocks held by consumers and suppliers at the end of June were 3 percent greater than on May 31.

Home scrap produced plus purchased scrap received totaled 4,937,582 tons, a drop of 11 percent from the preceding month. Net purchased scrap received by consumers was 12 percent less than during May. Of the total purchased, 83 percent was received from dealers and 17 percent from other sources. (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, January 1962 through June 1962, 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
Jan.-----	3,413,247	102,582	425,477	1,677,953	110,615	484,565
Feb.-----	3,288,931	108,512	413,272	1,773,967	133,688	511,236
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

^{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, June 1962, in short tons

Grades of scrap	Stocks at beginning of month 1/	Home scrap produced	Purchased scrap received		Consumption	Shipments	Stocks at end of month
			From dealers	From others			
No. 1 heavy melting steel-----	3,179,478	1,122,693	218,937	56,918	1,369,852	16,946	3,238,596
No. 2 heavy melting steel-----	722,718	113,180	150,507	24,581	335,961		674,494
No. 1 and electric furnace bundles --	973,086	101,184	233,473	84,988	363,317		1,036,383
No. 2 and all other bundles-----	553,358	55,371	137,741	25,298	244,617		521,205
Low phosphorus scrap-----	506,944	105,054	223,179	31,755	334,390	21,023	527,503
Cast iron scrap, other than borings--	1,085,087	537,615	325,536	27,865	847,555		1,085,727
Turnings and/or borings alloy free--	216,105	74,405	135,209	37,912	221,131		221,477
Rerolling rails-----	115,893	225	17,943	10,450	30,940		112,896
Scrap rails-----	47,048	2,526	22,155	671	26,672	1,031	44,697
High speed steel-----	4,088	1,520	886	178	2,630	71	3,971
Stainless steel-----	135,290	32,120	14,239	2,268	46,782	1,310	135,825
All other alloy iron and steel-----	355,037	138,536	27,680	9,870	150,248	5,639	375,236
All other prepared scrap-----	765,057	485,704	164,985	23,333	720,548	120,549	755,285
Unprepared scrap-----	461,530	287,943	29,768	8,425	167,424		462,939
Total-----	9,120,719	3,058,076	1,702,238	344,512	4,862,067	167,244	9,196,234

1/ Revised

Table 4 - Consumption of ferrous scrap at major consuming industries' plants during June 1962 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 miscellaneous users	Total scrap consumed	Consumption year-to-date
No. 1 heavy melting steel-----	1,306,579	28,106	35,167	1,369,852	11,037,211
No. 2 heavy melting steel-----	319,611	1,330	15,020	335,961	2,320,461
No. 1 and electric furnace bundles-----	334,585	6,458	22,274	363,317	2,951,097
No. 2 and all other bundles-----	232,651	5,998	5,968	244,617	1,912,822
Low phosphorus scrap-----	128,956	115,571	89,863	334,390	2,239,616
Cast iron scrap, other than borings-----	260,244	21,819	565,492	847,555	5,259,823
Turnings and/or borings, alloy free-----	147,347	3,541	70,243	221,131	1,554,764
Rerolling rails-----	9,896	-	21,044	30,940	192,648
Scrap rails-----	1,838	2,130	22,704	26,672	168,149
High speed steel-----	2,533	-	97	2,630	16,849
Stainless steel-----	43,214	2,536	1,032	46,782	360,220
All other alloy iron and steel-----	133,074	12,546	4,628	150,248	1,227,931
All other prepared scrap-----	600,509	45,901	74,138	720,548	4,925,682
Unprepared scrap-----	98,347	22,735	46,342	167,424	1,277,007
Total-----	3,619,384	268,671	974,012	4,862,067	35,444,280

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			
	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users	Total	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscellaneous users
Jan. 31-----	7,295,888	356,407	803,916	8,456,211	2,662,040	34,076	404,959
Feb. 28-----	7,339,988	349,308	816,682	8,505,978	2,549,784	34,823	376,452
Mar. 31-----	7,374,507	350,604	808,783	8,533,894	2,567,454	36,097	345,615
Apr. 30-----	7,509,642	364,167	815,144	8,688,953	2,682,084	36,995	360,157
May 31-----	7,870,370	383,368	814,039	9,067,777	2,871,561	36,029	368,884
June 30-----	7,975,498	393,117	827,619	9,196,234	2,927,946	34,328	382,641
							3,101,075
							2,961,059
							2,949,166
							3,079,236
							3,276,474
							3,344,915

CONSUMPTION OF SCRAP AND STEEL AND PIG IRON

Consumption of scrap in June totaled 4,862,067 short tons which was at an average daily rate of 162,069 tons or 8 percent less than for the year 1961.

In June, open-hearth furnaces used 52 percent of the total scrap, and 81 percent of the pig iron, unchanged from May; electric furnaces in June used 8 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 66 percent. During 1961, these percentages were 8 and 71 percent, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1961 was 6.

During June, steel-making furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 71 percent of the total scrap, and 90 percent of the pig iron consumed, unchanged from May. 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 June 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 June 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-----	2,474,389	3,721,127	50,979	9,044	-	-	2,525,368	3,730,171
Basic oxygen converter 3/-----	119,448	350,625	-	-	-	-	119,448	350,625
Bessemer converter-----	4,639	34,892	1,047	9	103	57	5,789	34,958
Electric 4/-----	626,608	8,015	156,280	2,712	14,340	2,821	797,228	13,548
Total steelmaking furnaces-----	3,225,084	4,114,659	208,306	11,765	14,443	2,878	3,447,833	4,129,302
Cupola-----	77,248	18,706	35,617	1,485	832,210	280,025	945,075	300,216
Air-----	2,551	1,079	24,748	3,757	74,993	10,795	102,292	15,631
Blast 5/-----	301,437	-	-	-	-	-	301,437	-
Direct castings-----	-	105,015	-	-	-	55,066	-	160,081
Ferro-alloy-----	-	-	-	-	19,742	-	19,742	-
Miscellaneous-----	13,064	-	-	-	32,624	-	45,688	-
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	6,392,330
Total Mar. 1962-----	5,493,878	6,762,170	273,584	17,980	1,009,523	418,062	6,776,985	7,198,212
Total Feb. 1962-----	5,019,376	6,175,644	250,719	16,744	913,013	383,534	6,183,108	6,575,922
Total Jan. 1962-----	5,355,228	6,569,918	243,634	16,490	932,010	409,202	6,530,872	6,995,610

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, June 1962, in short tons

State and Region	Scrap			Scrap stocks June 30	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	3,058,076	1/2,046,750	4,862,067	9,196,234	4,605,230
New England, total-----	19,657	24,623	39,511	49,872	12,584
Connecticut-----	6,218	7,551	11,977	14,756	2,986
Maine and New Hampshire-----	560	786	1,398	1,359	220
Massachusetts-----	8,286	10,284	17,548	24,424	6,158
Rhode Island-----	3,743	4,847	6,672	8,521	2,608
Vermont-----	850	1,155	1,916	812	612
Middle Atlantic, total-----	791,132	458,958	1,153,895	2,940,244	1,333,197
New Jersey-----	14,118	40,137	48,835	74,052	10,484
New York-----	115,778	85,264	178,474	702,896	198,259
Pennsylvania(East)2/-----	200,934	137,253	331,096	704,280	333,316
Pennsylvania(West)-----	460,302	196,304	595,490	1,459,016	791,138
East North Central, total-----	1,529,047	989,907	2,372,853	3,725,311	2,028,540
Illinois-----	298,255	251,637	523,082	907,099	296,679
Indiana-----	379,812	186,092	522,806	987,547	578,713
Michigan-----	265,569	235,349	499,573	395,333	378,966
Ohio(East)3/-----	426,774	213,481	590,852	988,777	610,958
Ohio(West)-----	111,348	61,136	157,728	398,750	147,264
Wisconsin-----	47,289	42,212	78,812	47,805	15,960
West North Central, total-----	53,264	98,910	152,312	344,554	42,829
Iowa-----	15,583	23,853	36,754	38,012	6,222
Kansas and Nebraska-----	4,343	9,312	13,976	15,926	429
Minnesota-----	17,607	12,300	34,916	79,160	33,674
Missouri-----	15,731	53,445	66,666	211,456	2,504
South Atlantic, total-----	244,995	107,638	345,365	430,513	483,799
Delaware and Maryland-----	169,676	24,426	161,699	282,432	325,252
Florida and Georgia-----	8,025	15,912	31,425	24,326	1,147
North Carolina-----	1,841	3,255	6,759	2,494	2,520
South Carolina-----	1,798	1,668	3,707	5,240	1,788
Virginia and West Virginia-----	63,655	62,377	141,775	116,021	153,092
East South Central, total-----	155,473	153,966	294,917	618,492	316,251
Alabama-----	108,844	105,126	195,955	415,890	251,842
Kentucky, Mississippi, and Tennessee-----	46,629	48,840	98,962	202,602	64,409
West South Central, total-----	75,097	71,441	172,544	348,893	76,698
Arkansas, Louisiana, and Oklahoma-----	4,644	9,436	15,800	35,086	634
Texas-----	70,453	62,005	156,744	313,807	76,064
Rocky Mountain, total-----	69,613	32,614	85,063	223,011	146,139
Arizona and Nevada-----	1,704	5,291	7,559	12,325	15
Colorado, Idaho, Montana, and Utah-----	67,909	27,323	77,504	210,686	146,124
Pacific Coast, total-----	119,798	108,693	245,607	515,344	165,193
California and Hawaii-----	110,631	78,110	198,144	414,921	164,962
Oregon and Washington-----	9,167	30,583	47,463	100,423	231

1/ Includes 167,244 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 June 1962		
	Total scrap	Pig iron	Total charge
United States, total-----	2,525,368	3,730,171	6,255,539
New England and Middle Atlantic, total--	690,716	1,118,187	1,808,903
New Jersey and Rhode Island-----	12,269	1,785	14,054
New York-----	81,701	181,867	263,568
Pennsylvania(East)-----	207,302	297,489	504,791
Pennsylvania(West)-----	389,444	637,046	1,026,490
East North Central, total-----	1,273,841	1,661,828	2,935,669
Illinois-----	266,354	228,014	494,368
Indiana-----	443,748	560,430	1,004,178
Michigan and Wisconsin-----	186,519	245,640	432,159
Ohio(East)-----	297,138	494,643	791,781
Ohio(West)-----	80,082	133,101	213,183
West North Central, total-----	23,511	30,289	53,800
Minnesota and Missouri-----	23,511	30,289	53,800
South Atlantic, total-----	236,745	465,046	701,791
Delaware, Maryland, and West Virginia----	236,745	465,046	701,791
East and West South Central, total-----	163,721	292,350	456,071
Alabama, Kentucky, and Texas-----	163,721	292,350	456,071
Rocky Mountain and Pacific Coast, total--	136,834	162,471	299,305
California, Colorado, and Utah-----	136,834	162,471	299,305

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 444,580 short tons in June compared with 560,341 short tons in May. During July 1962, the Office of Export Supply, U.S. Department of Commerce, issued scrap export licenses for 603,946 short tons. Exports of pig iron during June totaled 10,640 tons and 18,774 tons in May. Imports of scrap totaled 18,519 short tons in June compared with 12,657 tons in May. Of the scrap imported during June, 18,417 short tons came from Canada and 102 tons from other sources. Imports of pig iron totaled 71,186 short tons in June and 57,238 tons in May. In addition to the foregoing imports of pig iron during June, there were 234 tons of sponge iron, valued at \$35,988, imported, all from Canada.

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

Country	June 1962		Jan. through June 1962	
	Short tons	Value	Short tons	Value
Canada-----	45,192	\$1,292,755	192,967	\$6,001,316
France-----	1,232	92,400	13,075	715,301
Italy-----	120,484	3,007,301	591,397	15,561,533
Japan-----	228,338	7,229,903	1,443,087	49,507,402
Mexico-----	17,559	500,269	134,342	4,166,117
Spain-----	5,980	186,932	36,764	1,171,657
Taiwan-----	9,411	348,413	53,140	1,935,625
West Germany-----	467	14,600	11,404	540,616
Yugoslavia-----	-	-	37,475	1,290,442
All others-----	15,917	408,705	55,086	1,741,861
Total-----	444,580	\$13,081,278	2,568,737	\$82,631,870

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

Grades of scrap	June 1962		Jan. through June 1962	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap--	160,300	\$5,365,879	864,241	\$31,811,329
No. 2 heavy melting steel scrap--	93,389	2,639,277	456,190	14,430,334
No. 1 baled sheet melting scrap--	32,978	951,971	198,532	6,518,713
No. 2 baled sheet melting scrap--	97,658	2,092,590	619,961	14,575,391
Borings, shovelings, and turnings--	1,450	35,356	71,389	1,816,813
Iron scrap-----	20,814	655,029	155,791	4,881,430
Rerolling material-----	2,857	155,099	50,540	2,783,772
All other scrap <u>3/</u> -----	35,134	1,186,077	152,093	5,814,088
Total-----	444,580	\$13,081,278	2,568,737	\$82,631,870

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.