



MINERAL INDUSTRY SURVEYS

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



Stewart L. Udall, Secretary

Frank C. Memmott, Acting Director

Iron and Steel Scrap Monthly

Iron and Steel Scrap in August and September 1964

Total consumption of scrap increased 5 percent in August and in September over the previous month, according to the Bureau of Mines, U.S. Department of the Interior. Total consumption of scrap and pig iron rose 4 percent in August over July and 3 percent in September. Scrap represented 48 percent of total metallics in August, the same as in July, but rose to 50 percent of total metallics in September 1964.

Scrap used in steelmaking furnaces (open-hearth, basic oxygen, electric, and Bessemer) increased 5 percent in August and 4 percent in September representing 44 percent of total metallics charged in August and 45 percent of the total metallics charged in September. The percent of scrap charged to the open-hearth rose 1 percent each month being 40 percent in September. The use of scrap in electric furnaces increased 7 percent in August and 8 percent in September, remaining at 98 percent of the total electric furnace charge. Use of scrap in metallics charged to basic oxygen converters increased 7 percent in August and 2 percent in September. In August scrap constituted nearly 31 percent of scrap charged to basic oxygen converters and in September it was just over 31 percent of total metallics charged.

TABLE 1.--Production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, March 1964 through September 1964
(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. 1964--	4,263,048	2,550,133	6,813,181	7,161,550	7,029,755	7,301,731	2,569,105
Apr. 1964--	4,444,677	2,623,868	7,068,545	7,339,946	7,057,719	7,030,178	2,492,762
May 1964--	4,495,844	2,747,623	7,243,467	7,351,265	7,506,103	6,921,210	2,400,032
June 1964--	4,330,607	2,704,209	7,034,816	6,831,344	7,062,972	7,128,929	2,501,218
July 1964--	4,254,357	2,379,148	6,633,505	6,459,513	7,059,299	7,316,926	2,528,995
Aug. 1964--	4,329,617	^{2/} 2,534,237	6,863,854	6,766,125	7,243,675	7,413,461	2,484,524
Sept. 1964--	4,531,944	^{2/} 2,695,631	7,227,575	7,132,932	7,262,345	7,509,941	2,404,081

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

^{2/} Excludes 445,852 short tons of scrap shipped, transferred, or otherwise disposed of during month of August and 434,588 for month of September.

Prepared March 26, 1965, by Robert A. Whitman, Physical Scientist.

Consumption of scrap in gray iron foundries in August 1964 increased 5 percent over July. During September these foundries used 13 percent more scrap than in August.

U.S. consumers' stocks of iron and steel scrap increased 1 percent in August and 1 percent in September. It represented in September a 32-day supply at the average daily consumption rate of 237,764 short tons.

There was a 5 percent gain in the total of home scrap produced plus purchased scrap received in August as compared with July 1964. The gain in September over August was only 3 percent. Dealers furnished 75 percent of all scrap purchased in August and 77 percent of all scrap purchased in September. (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.)

TABLE 2.--Production and receipts of ferrous scrap by major consuming industries plants,
March 1964 through September 1964
(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
Mar.-----	3,607,600	127,237	528,211	1,703,523	171,132	675,478
Apr.-----	3,773,423	130,397	540,857	1,766,132	175,851	681,885
May-----	3,843,988	131,810	520,046	1,938,783	168,600	640,240
June-----	3,660,926	128,211	541,470	1,854,781	179,476	669,952
July-----	3,686,447	113,336	454,574	1,645,125	155,792	578,231
Aug.-----	3,752,708	115,102	461,807	1,810,510	157,761	565,966
Sept.-----	3,885,680	127,952	518,312	1,834,438	161,284	699,909

^{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, August and September 1964
(Short tons)

Grades of scrap	Stocks at beginning of month <u>1/</u>	Home scrap produced	Purchased scrap received <u>2/</u>	Consump- tion	Ship- ments	Stocks at end of month
<u>August</u>						
Steel scrap, excludes rerolling rails:						
Carbon-----	5,466,844	3,270,473	2,413,784	5,291,388	340,866	5,518,847
Alloy, excludes stainless-----	331,527	212,615	49,446	236,330	10,231	347,027
Stainless-----	106,355	43,114	24,688	68,181	2,368	103,608
Cast iron, includes borings-----	1,411,006	803,415	492,171	1,170,226	92,387	1,443,979
Total-----	7,315,732	4,329,617	2,980,089	6,766,125	445,852	7,413,461
<u>September</u>						
Steel scrap, excludes rerolling rails:						
Carbon-----	5,517,086	3,434,333	2,495,520	5,544,816	331,491	5,570,632
Alloy, excludes stainless-----	347,414	212,971	51,335	258,225	12,067	341,428
Stainless-----	103,604	50,434	25,305	78,175	2,054	99,114
Cast iron, includes borings-----	1,447,194	834,206	558,059	1,251,716	88,976	1,498,767
Total-----	7,415,298	4,531,944	3,130,219	7,132,932	434,588	7,509,941

1/ Revised.

2/ Purchased scrap received from dealers and all others.

TABLE 4.--Home scrap produced by source, by type of manufacturers,
during August and September 1964
(Short tons)

	Source of scrap			Total
	Recirculating 1/	Obsolete 2/	Other including slag	
<u>August</u>				
Manufacturers of steel ingots and castings---	3,314,228	272,458	166,022	3,752,708
Manufacturers of steel castings-----	114,459	619	24	115,102
Iron foundries and miscellaneous users-----	458,677	1,978	1,152	461,807
Total-----	3,887,364	275,055	167,198	4,329,617
<u>September</u>				
Manufacturers of steel ingots and castings---	3,414,399	301,565	169,716	3,885,680
Manufacturers of steel castings-----	127,301	418	38	127,757
Iron foundries and miscellaneous users-----	516,177	1,647	683	518,507
Total-----	4,057,877	303,630	170,437	4,531,944

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 August and September 1964, and consumption year to date, by grades
(Short tons)

Grades of scrap	Mfgs. of steel ingots and castings	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total consump- tion	Total consumption year to date
<u>August</u>					
Steel scrap, excludes rerolling rails:					
Carbon-----	4,723,911	220,770	346,707	5,291,388	42,629,246
Alloy, excludes stainless-----	212,995	10,476	12,859	236,330	1,921,649
Stainless-----	64,003	3,078	1,100	68,181	540,736
Cast iron, includes borings-----	437,354	30,468	702,404	1,170,226	9,908,706
Total-----	5,438,263	264,792	1,063,070	6,766,125	55,000,337
<u>September</u>					
Steel scrap, excludes rerolling rails:					
Carbon-----	4,907,737	251,171	385,908	5,544,816	48,174,062
Alloy, excludes stainless-----	231,341	12,884	14,000	258,225	2,179,874
Stainless-----	73,178	3,226	1,771	78,175	618,911
Cast iron, includes borings-----	437,678	32,158	781,880	1,251,716	11,160,422
Total-----	5,649,934	299,439	1,183,559	7,132,932	62,133,269

TABLE 6.---Stocks of iron and steel scrap and pig iron on hand at major consuming industries' plants,
at end of month
(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	Mfgs. of steel castings	Iron foundries and miscel- laneous users	Total
Mar. 31, 1964--	6,090,379	365,345	846,007	7,301,731	2,180,529	29,666	358,910	2,569,105
Apr. 30, 1964--	5,834,879	356,025	839,274	7,030,178	2,127,334	28,971	336,457	2,492,762
May 31, 1964--	5,738,855	355,275	827,080	6,921,210	2,061,150	39,686	299,196	2,400,032
June 30, 1964--	5,952,787	360,062	816,080	7,128,929	2,153,589	27,761	319,868	2,501,218
July 31, 1964--	6,111,406	364,149	841,371	7,316,926	2,162,175	25,578	341,242	2,528,995
Aug. 31, 1964--	6,236,454	372,506	804,501	7,413,461	2,110,349	24,498	349,677	2,484,524
Sept. 30, 1964--	6,303,002	364,604	842,335	7,509,941	2,017,548	27,322	359,211	2,404,081

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TABLE 7.---Pig iron stocks, production, receipts, consumption and shipments
(Short tons)

	Stocks at beginning of month 1/	Produced during the month	Received during the month	Consumed during the month	Shipped to others during the month	Stocks at end of month
July 1964-----	2,503,960	7,056,221	608,761	7,059,299	580,648	2,528,995
Aug. 1964-----	2,530,469	7,164,042	619,999	7,243,675	586,311	2,484,524
Sept. 1964-----	2,487,286	7,145,859	677,848	7,262,345	644,567	2,404,081

1/ Revised.

TABLE 8.--Consumers' receipts and total consumption of iron and steel scrap,
by grades, during August and September 1964
(Short tons)

Grades of scrap (excludes rerolling rails)	Receipts during the month			Total consumption
	From dealers	From others	Total	
<u>August</u>				
Carbon steel:				
Low phosphorus plate and punchings--	186,633	68,695	255,328	310,298
Cut structurals and plate-----	68,731	2,545,	71,276	73,564
Steel car wheels-----	11,557	3,807	15,364	12,554
No. 1 heavy melting-----	376,512	221,831	598,343	2,381,792
No. 1 and electric furnace bundles--	310,573	130,151	440,724	477,759
No. 2 and all other bundles-----	445,454	38,190	483,644	561,346
Turnings and borings-----	155,725	15,339	171,064	198,034
Slag scrap (Fe content)-----	28,548	36,093	64,641	220,695
All other carbon steel scrap-----	231,126	82,274	313,400	1,055,346
Alloy steel, excludes stainless-----	33,565	15,881	49,446	236,330
Stainless steel-----	21,051	3,637	24,688	68,181
Cast iron: Borings-----	53,640	24,408	78,048	98,623
All other cast iron scrap-----	317,698	96,425	414,123	1,071,603
Total-----	2,240,813	739,276	2,980,089	6,766,125
<u>September</u>				
Carbon steel:				
Low phosphorus plate and punchings--	200,302	85,169	285,471	336,624
Cut structurals and plate-----	67,867	3,277	71,144	79,842
Steel car wheels-----	10,187	2,491	12,678	13,983
No. 1 heavy melting-----	408,190	196,280	604,470	2,455,033
No. 1 and electric furnace bundles--	374,701	126,692	501,393	561,240
No. 2 and all other bundles-----	422,132	36,794	458,926	543,866
Turnings and borings-----	172,256	11,712	183,968	212,566
Slag scrap (Fe content)-----	25,937	34,539	60,476	232,139
All other carbon steel scrap-----	231,691	85,303	316,994	1,109,523
Alloy steel, excludes stainless-----	34,029	17,306	51,335	258,225
Stainless steel-----	21,660	3,645	25,305	78,175
Cast iron: Borings-----	68,156	23,336	91,492	108,957
All other cast iron scrap-----	365,294	101,273	466,567	1,142,759
Total-----	2,402,402	727,817	3,130,219	7,132,932

TABLE 9.--Consumers' production, receipts, consumption and stocks of iron and steel scrap, and consumption of pig iron in the United States, by districts and States, August and September 1964 (Short tons)

District and State	Home scrap produced	Total purchased scrap received 1/	Consumption by grades					Scrap stocks	Pig iron consumption	
			Carbon steel (excludes re-rolling rails)	Alloy steel (excludes stainless)	Stainless steel	Cast iron (includes borings)	Total scrap			
August										
New England:										
Connecticut, Massachusetts, Rhode Island-----	16,515	20,351	13,804	834	1,612	18,170	34,420	33,785	10,582	
Maine, New Hampshire, Vermont-----	1,232	1,770	677	-----	-----	2,347	3,024	1,984	667	
Total-----	17,747	22,121	14,481	834	1,612	20,517	37,444	35,769	11,249	
Middle Atlantic:										
New Jersey-----	14,074	43,908	20,049	715	281	31,318	52,363	80,940	6,116	
New York-----	189,360	117,099	168,912	8,607	5,061	41,054	223,634	585,275	389,611	
Pennsylvania (East) 2/-----	246,064	213,186	312,028	51,344	2,407	79,440	445,219	546,487	516,700	
Pennsylvania (West)-----	703,557	318,725	701,501	58,126	28,057	105,848	893,532	1,022,771	1,281,134	
Total-----	1,153,055	692,918	1,202,490	118,792	35,806	257,660	1,614,748	2,235,473	2,193,561	
East North Central:										
Illinois-----	384,567	362,000	568,374	16,662	5,213	114,096	704,345	859,075	492,633	
Indiana-----	577,709	290,016	694,563	8,162	1,900	67,987	772,692	790,596	913,317	
Michigan-----	340,925	325,213	441,789	2,453	10,152	219,755	674,149	364,433	611,279	
Ohio (East) 3/-----	606,407	400,462	834,448	61,374	7,428	103,257	1,006,507	839,868	1,086,459	
Ohio (West)-----	191,485	63,437	155,774	1,188	129	71,376	288,467	180,286	136,061	
Wisconsin-----	46,452	36,480	37,882	424	243	36,447	74,996	46,240	14,898	
Total-----	2,147,545	1,477,608	2,732,830	90,263	25,145	612,918	3,461,156	3,080,498	3,254,647	
West North Central:										
Iowa-----	11,249	24,408	25,872	-----	-----	11,332	37,208	41,158	4,926	
Kansas and Nebraska-----	4,213	6,175	8,218	-----	-----	3,099	11,318	11,102	456	
Minnesota-----	22,566	18,177	29,785	1,088	117	11,412	41,888	37,217	41,306	
Missouri-----	20,016	59,883	72,679	-----	-----	13,479	86,667	144,957	3,105	
Total-----	58,044	108,643	136,554	1,088	117	39,322	177,081	234,434	49,793	
South Atlantic:										
Delaware and Maryland-----	305,341	31,531	236,123	1,527	(4/)	9,901	252,577	288,340	533,923	
Florida and Georgia-----	7,622	29,484	28,330	-----	-----	2,762	31,092	64,544	1,076	
North Carolina and South Carolina-----	2,990	6,116	1,105	-----	-----	8,693	10,296	8,867	3,552	
Virginia and West Virginia-----	78,816	85,217	157,500	1,172	-----	18,428	176,602	126,968	214,304	
Total-----	394,769	152,348	423,058	2,699	(4/)	39,784	470,567	488,719	752,855	
East South Central:										
Alabama-----	142,838	110,827	172,838	5,208	-----	68,856	246,902	266,197	337,966	
Kentucky, Mississippi, Tennessee-----	82,013	98,718	130,693	7,310	(4/)	39,605	177,909	226,889	129,688	
Total-----	224,851	209,545	303,531	12,518	(4/)	108,461	424,711	493,086	467,654	
West South Central:										
Arkansas, Louisiana, Oklahoma-----	4,522	16,158	14,702	2,287	-----	3,372	18,084	25,069	946	
Texas-----	84,960	99,272	121,138	-----	(4/)	38,239	161,736	129,351	125,365	
Total-----	89,482	115,430	135,840	2,287	(4/)	41,611	179,820	154,420	126,311	
Rocky Mountain:										
Arizona, Colorado, Idaho, Montana, Nevada, Utah-----	111,511	40,716	122,863	4,629	-----	17,230	144,722	237,715	195,301	
Total-----	111,511	40,716	122,863	4,629	-----	17,230	144,722	237,715	195,301	
Pacific Coast:										
California and Hawaii-----	120,135	122,786	171,909	2,115	76	30,032	204,132	336,535	187,079	
Oregon and Washington-----	12,478	37,974	47,832	1,105	116	2,691	51,744	116,812	5,225	
Total-----	132,613	160,760	219,741	3,220	192	32,723	255,876	453,347	192,304	
U.S. total-----	4,329,617	2,880,089	5,291,388	236,330	68,181	1,170,226	6,766,125	7,413,461	7,243,675	

See footnotes at end of table.

TABLE 9.--Consumers' production, receipts, consumption and stocks of iron and steel scrap, and consumption of pig iron in the United States, by districts and States, August and September 1964 (Continued)
(Short tons)

District and State	Home scrap produced	Total purchased scrap received ^{1/}	Consumption by grades					Scrap stocks	Pig iron consumption	
			Carbon steel (excludes re-rolling rail)	Alloy steel (excludes stainless)	Stainless steel	Cast iron (includes borings)	Total scrap			
<u>September</u>										
New England:										
Connecticut, Massachusetts, Rhode Island-----	19,465	26,758		994	2,795	23,227	42,625	35,779	11,958	
Maine, New Hampshire, Vermont-----	1,264	1,776		-----	-----	2,428	3,111	1,816	659	
Total-----	20,729	28,534	15,609	994	2,795	25,655	45,736	37,595	12,617	
Middle Atlantic:										
New Jersey-----	20,762	49,733	31,897	1,128	295	35,100	68,420	82,191	8,990	
New York-----	192,255	126,331	188,709	8,645	5,459	41,470	244,283	653,757	364,336	
Pennsylvania (East) ^{2/} -----	279,656	174,263	358,415	52,211	2,229	72,619	485,474	508,465	508,465	
Pennsylvania (West)-----	760,435	339,195	724,430	65,398	33,635	114,466	937,929	1,038,857	1,357,503	
Total-----	1,253,108	689,542	1,303,451	127,382	41,618	263,655	1,736,106	2,283,614	2,239,234	
East North Central:										
Illinois-----	398,151	353,992	593,648	16,762	4,635	126,742	741,787	850,399	493,944	
Indiana-----	584,462	309,989	698,710	11,671	2,203	67,486	780,070	959,107	919,239	
Michigan-----	339,294	370,772	446,684	3,625	10,675	224,035	685,019	383,208	619,251	
Ohio (East) ^{3/} -----	659,254	419,278	849,666	69,154	8,718	119,608	1,047,146	844,477	1,093,307	
Ohio (West)-----	202,774	69,881	163,268	1,390	65	66,334	231,057	153,654	157,094	
Wisconsin-----	54,147	51,606	47,660	426	338	41,527	89,951	52,504	17,681	
Total-----	2,238,082	1,575,518	2,799,636	103,028	26,634	645,732	3,575,930	3,143,349	3,300,316	
West North Central:										
Iowa-----	18,732	37,345	28,289	-----	-----	21,297	49,610	47,100	8,993	
Kansas and Nebraska-----	4,241	6,715	8,135	-----	-----	3,396	11,532	10,190	530	
Minnesota-----	26,824	21,173	36,200	980	150	11,781	48,532	35,916	47,163	
Missouri-----	20,300	58,531	68,506	-----	-----	13,195	82,345	140,691	3,271	
Total-----	70,097	123,764	141,220	980	150	49,669	192,019	233,897	59,957	
South Atlantic:										
Delaware and Maryland-----	264,314	40,430	264,849	2,054	(4/)	15,230	287,922	272,076	488,593	
Florida and Georgia-----	10,928	32,171	45,119	-----	-----	2,735	47,854	59,635	1,087	
North Carolina and South Carolina-----	3,913	8,153	1,379	-----	-----	11,262	13,055	8,280	4,391	
Virginia and West Virginia-----	82,141	98,418	155,570	1,069	-----	22,283	178,508	128,320	207,357	
Total-----	361,296	179,172	466,917	3,123	(4/)	51,510	527,339	468,311	701,428	
East South Central:										
Alabama-----	152,189	121,883	177,879	4,511	-----	70,427	252,817	273,139	325,976	
Kentucky, Mississippi, Tennessee-----	81,202	99,591	127,849	6,831	(4/)	37,463	172,952	227,233	122,364	
Total-----	233,391	221,474	305,728	11,342	(4/)	107,890	425,769	500,372	448,340	
West South Central:										
Arkansas, Louisiana, Oklahoma-----	5,035	14,647	16,890	2,792	-----	3,376	20,294	23,703	924	
Texas-----	94,412	83,045	122,809	-----	(4/)	39,617	165,292	136,989	122,983	
Total-----	99,447	97,692	139,699	2,792	(4/)	42,993	185,586	160,692	123,907	
Rocky Mountain:										
Arizona, Colorado, Idaho, Montana, Nevada, Utah-----	120,155	46,799	136,705	4,896	-----	25,534	167,135	234,795	181,595	
Total-----	120,155	46,799	136,705	4,896	-----	25,534	167,135	234,795	181,595	
Pacific Coast:										
California and Hawaii-----	122,288	125,146	180,612	2,540	113	36,710	219,975	334,144	189,269	
Oregon and Washington-----	13,351	42,578	54,556	1,148	165	2,368	58,237	113,172	5,482	
Total-----	135,639	167,724	235,168	3,688	278	39,078	278,212	447,316	194,751	
U.S. total-----	4,531,944	3,130,219	5,544,816	258,225	78,175	1,251,716	7,132,932	7,509,941	7,262,345	

^{1/} Includes 445,852 short tons that was shipped, transferred or otherwise disposed of during the month of August, and 434,588 short tons during the month of September.
^{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, Cuyahoga, 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 August totaled 6,766,125 short tons and in September, 7,132,932 short tons, which made the average daily consumption rate of 218,262 tons in August and 237,764 tons in September, and 7 and 16 percent, respectively, greater than for the year 1963.

Open-hearth furnaces used 51 percent of scrap and 75 percent of pig iron in September as compared with 52 and 75 percent, respectively, in August; electric furnaces used 9 percent of the combined total of iron and steel scrap and pig iron in both months; blast furnaces used 6 percent of the total scrap in August and 5 percent of the total scrap in September. Percentage for the year 1963 was 6 percent.

During September, steelmaking furnaces (open-hearth, Bessemer, basic oxygen converter, and electric) accounted for 76 percent of the total scrap, and 91 percent of the pig iron consumed, compared with 77 and 92 percent, respectively, during August. In 1963, steelmaking furnaces used 76 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 in August and September is shown in the following table:

TABLE 10.--Consumption of iron and steel scrap and pig iron, by type of manufacturers and furnaces, during August and September 1964
(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
August								
Basic oxygen converters 3/-----	471,945	1,073,660	-----	-----	-----	-----	471,945	1,073,660
Bessemer converters-----	6,764	80,713	566	9	118	15	7,448	80,737
Open-hearth furnaces-----	3,429,573	5,442,204	59,925	6,927	-----	-----	3,489,498	5,449,131
Electric furnaces 4/-----	1,041,998	22,505	159,797	2,585	18,210	2,857	1,220,005	27,947
Total steelmaking furnaces-----	4,950,280	6,619,082	220,288	9,521	18,328	2,872	5,188,896	6,631,475
Blast furnaces 5/-----	387,132	-----	-----	-----	-----	-----	387,132	-----
Cupola furnaces-----	92,358	26,566	26,607	1,188	906,560	263,029	1,025,525	290,783
Air furnaces-----	3,842	796	17,897	3,542	92,425	8,709	114,164	13,047
Direct castings-----	-----	254,687	-----	-----	-----	53,683	-----	308,370
Ferroalloy-----	-----	-----	-----	-----	34,832	-----	34,832	-----
Miscellaneous-----	4,651	-----	-----	-----	10,925	-----	15,576	-----
Total Aug. 1964-----	5,438,263	6,901,131	264,792	14,251	1,063,070	328,293	6,766,125	7,243,675
Total July 1964-----	5,186,490	6,740,649	265,755	13,537	1,007,268	305,113	6,459,513	7,059,299
Total June 1964-----	5,299,509	6,691,701	305,461	15,486	1,226,374	355,785	6,831,344	7,062,972
Total May 1964-----	5,876,029	7,128,249	307,083	18,468	1,168,153	359,386	7,351,265	7,506,103
Total Apr. 1964-----	5,798,277	6,663,751	312,081	16,946	1,229,588	377,022	7,339,946	7,057,719
Total Mar. 1964-----	5,667,083	6,657,344	297,281	14,829	1,197,186	357,582	7,161,550	7,029,755

See footnotes at end of table.

TABLE 10.--Consumption of iron and steel scrap and pig iron, by type of manufacturers and furnaces, during August and September 1964--Continued
(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
September								
Basic oxygen converters 3/	480,180	1,061,310	-----	-----	-----	-----	480,180	1,061,310
Bessemer converters	5,388	67,545	611	12	200	38	6,199	67,595
Open-hearth furnaces	3,570,034	5,433,195	66,103	8,465	-----	-----	3,636,137	5,441,660
Electric furnaces 4/	1,109,133	24,688	186,809	4,010	18,046	2,975	1,313,988	31,673
Total steelmaking furnaces--	5,164,735	6,586,738	253,523	12,487	18,246	3,013	5,436,504	6,602,238
Blast furnaces 5/	360,568	-----	-----	-----	-----	-----	360,568	-----
Cupola furnaces	115,076	28,255	26,821	1,449	1,016,692	293,114	1,158,589	322,818
Air furnaces	2,668	919	19,095	3,648	103,606	9,347	125,369	13,914
Direct castings	-----	260,906	-----	-----	-----	62,469	-----	323,375
Ferroalloy	-----	-----	-----	-----	33,897	-----	33,897	-----
Miscellaneous	6,887	-----	-----	-----	11,118	-----	18,005	-----
Total Sept. 1964	5,649,934	6,876,818	299,439	17,584	1,183,559	367,943	7,132,932	7,262,345
Total Aug. 1964	5,438,263	6,901,131	264,792	14,251	1,063,070	328,293	6,766,125	7,243,675
Total July 1964	5,186,490	6,740,649	265,755	13,537	1,007,268	305,113	6,459,513	7,059,299
Total June 1964	5,299,509	6,691,701	305,461	15,486	1,226,374	355,785	6,831,344	7,062,972
Total May 1964	5,876,029	7,128,249	307,083	18,468	1,168,153	359,386	7,351,265	7,506,103
Total Apr. 1964	5,798,277	6,663,751	312,081	16,946	1,229,588	377,022	7,339,946	7,057,719

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 11.--Consumption of iron and steel scrap and pig iron in open-hearth furnaces in the United States, by districts and States, during August and September 1964 (Short tons)

District and State	Scrap	Pig iron	Total charge
<u>August</u>			
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	16,978	3,883	20,861
New York-----	128,751	364,017	492,768
Pennsylvania (East)-----	315,595	456,393	771,988
Pennsylvania (West)-----	517,162	904,562	1,421,724
Total-----	978,486	1,728,855	2,707,341
East North Central:			
Illinois-----	337,532	415,038	752,570
Indiana-----	680,608	874,586	1,555,194
Michigan and Wisconsin-----	112,944	85,398	198,342
Ohio (East)-----	499,159	831,490	1,330,649
Ohio (West)-----	145,425	124,703	270,128
Total-----	1,775,668	2,331,215	4,106,883
West North Central:			
Minnesota and Missouri-----	30,705	38,173	68,878
Total-----	30,705	38,173	68,878
South Atlantic:			
Delaware, Maryland, West Virginia-----	348,013	737,371	1,085,384
Total-----	348,013	737,371	1,085,384
East and West South Central:			
Alabama, Kentucky, Texas-----	219,041	409,948	628,989
Total-----	219,041	409,948	628,989
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	137,585	203,569	341,154
Total-----	137,585	203,569	341,154
United States, total-----	3,489,498	5,449,131	8,938,629
<u>September</u>			
New England and Middle Atlantic:			
New Jersey and Rhode Island-----	20,691	4,004	24,695
New York-----	146,797	338,448	485,245
Pennsylvania (East)-----	347,840	446,384	794,224
Pennsylvania (West)-----	512,910	961,821	1,474,731
Total-----	1,028,238	1,750,657	2,778,895
East North Central:			
Illinois-----	364,936	414,442	779,378
Indiana-----	682,742	882,318	1,565,060
Michigan and Wisconsin-----	99,504	88,595	188,099
Ohio (East)-----	533,567	854,787	1,388,354
Ohio (West)-----	136,633	143,627	280,260
Total-----	1,817,382	2,383,769	4,201,151
West North Central:			
Minnesota and Missouri-----	36,414	43,770	80,184
Total-----	36,414	43,770	80,184
South Atlantic:			
Delaware, Maryland, West Virginia-----	371,722	681,873	1,053,595
Total-----	371,722	681,873	1,053,595
East and West South Central:			
Alabama, Kentucky, Texas-----	205,766	384,466	590,232
Total-----	205,766	384,466	590,232
Rocky Mountain and Pacific Coast:			
California, Colorado, Utah-----	176,615	197,125	373,740
Total-----	176,615	197,125	373,740
United States, total-----	3,836,137	5,441,660	9,277,797

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 677,086 short tons in September compared with 709,223 tons in August, and 718,310 tons in July. Exports of pig iron during September totaled 22,264 tons compared with 2,264 tons in August, and 26,957 tons in July. Imports of scrap totaled 20,912 short tons in September compared with 22,597 tons in August, and 16,159 tons in July. Of the scrap imported during September, 20,662 short tons came from Canada and 250 tons came from other sources. Of the scrap imported during August, 21,999 tons came from Canada and 598 tons from other sources. Imports of pig iron totaled 45,976 short tons in September, 93,716 tons in August, and 89,549 tons in July. In addition to the foregoing imports of pig iron during September, there was 1,843 tons of sponge iron, valued at \$239,608, imported, of which 850 tons came from Canada and 993 tons from Sweden. Also during August 847 tons of sponge iron, valued at \$117,565 was imported, of which 296 tons came from Canada and 551 tons from Sweden.

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

Country	August 1964		September 1964		January through September 1964	
	Short tons	Value	Short tons	Value	Short tons	Value
Argentina-----	31,955	\$1,227,681	11,135	\$372,329	140,876	\$4,760,620
Canada-----	83,534	2,602,788	55,776	1,743,820	705,047	19,811,510
France-----	16,751	565,376	1,573	52,453	100,546	3,493,344
Germany, West-----	90,037	3,177,493	51,745	1,578,411	419,624	13,679,499
Italy-----	48,019	1,155,326	34,202	813,565	513,388	12,427,873
Japan-----	278,763	8,482,529	395,030	12,598,953	3,034,760	93,095,003
Korea-----	-----	-----	2,089	120,000	30,640	1,169,686
Mexico-----	70,632	2,309,371	71,677	2,332,577	623,574	19,056,567
Spain-----	15,019	353,977	15,160	449,250	154,721	3,503,924
Sweden-----	17,402	557,592	21,339	640,061	85,892	2,495,849
Taiwan-----	29,152	1,184,805	14,766	633,795	140,283	6,092,682
All others-----	27,959	949,556	2,594	115,634	193,845	5,836,463
Total-----	709,223	22,566,494	677,086	21,450,848	6,143,196	185,423,120

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 combination.

TABLE 13.--Exports 1/ of iron and steel scrap from the United States, by grades
(U.S. Department of Commerce)

Grades of scrap	August 1964		September 1964		Jan. through September 1964	
	Short tons	Value	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap--	329,226	\$11,681,805	236,821	\$8,501,380	2,421,018	\$82,564,335
No. 2 heavy melting steel scrap--	86,193	2,570,796	126,246	4,141,711	938,429	27,525,143
No. 1 baled sheet melting scrap--	33,280	1,153,037	24,807	846,667	446,618	13,532,979
No. 2 baled sheet melting scrap--	145,441	3,346,801	176,739	4,454,859	1,315,155	30,484,697
Borings, shovelings, & turnings--	23,513	522,604	15,065	351,295	181,728	3,841,329
Iron scrap-----	50,942	1,910,437	61,902	2,036,148	404,612	13,124,547
Rerolling material-----	26,691	764,520	32,094	939,399	266,712	7,714,245
All other scrap <u>2/</u> -----	13,937	616,494	3,412	179,389	168,924	6,635,845
Total-----	709,223	22,566,494	677,086	21,450,848	6,143,196	185,423,120

1/ Preliminary data subject to revision. Value may differ widely because of variations in quality, classes, and grade combinations.

2/ Includes tin plate and terne plate scrap.