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FRED A. SEATON, Secretary

MARLING J. ANKENY, Director

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FERROUS SCRAP IN JUNE 1959

At the half-way mark of 1959, the total consumption of ferrous scrap and pig iron were 62 percent and 68 percent greater, respectively, than during the first six months of 1958, according to the Bureau of Mines, United States Department of the Interior. The combined consumption of ferrous scrap and pig iron for the first six months of 1959 was 75,462,645 gross tons, the highest quantity ever consumed for any January through June period. In June, the combined use of ferrous scrap and pig iron was 4 percent less than in May, however, the daily consumption rate of these materials, 430,282 gross tons decreased only 1 percent. The total melt (12,908,466 gross tons) consisted of 49 percent scrap and 51 percent pig iron, unchanged from May.

Table 1 - Summary of production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, January 1959 to June 1959, in gross 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/}
Jan. 1959--	3,139,909	1,996,185	5,136,094	5,375,042	5,609,509	8,330,913	3,477,606
Feb. 1959--	3,250,026	2,263,986	5,514,012	5,657,873	5,627,953	8,197,032	3,296,182
Mar. 1959--	3,869,752	2,861,674	6,731,426	6,677,499	6,798,053	8,242,936	3,171,999
Apr. 1959--	3,919,279	2,755,886	6,675,165	6,644,905	6,652,916	8,275,777	3,095,256
May 1959--	3,922,048	2,639,821	6,561,869	6,642,572	6,867,857	8,199,281	3,118,025
June 1959--	3,865,664	2,431,824 ^{2/}	6,297,488	6,322,404	6,586,062	8,214,592	3,064,057

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

^{2/} Excludes 215,252 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

Prepared by James E. Larkin and James C. O. Harris, Sept. 22, 1959, under the supervision of H.G. Iverson, Chief, Branch of Ferrous Metals and Ferroalloys, Division of Minerals.

The use of ferrous scrap in steelmaking furnaces (open-hearth, Bessemer, oxygen steel process, and electric) during June totaled 4,891,549 gross tons, 6 percent lower than during the preceding month. Consumption of pig iron (over 90 percent in the molten state) in steelmaking furnaces was 4 percent below the record quantity consumed during May. The total steel-furnace melt (10,824,652 tons) consisted of 45 percent scrap and 55 percent pig iron, compared with 46 and 54 percent, respectively, during May.

The use of scrap by gray iron foundries during June totaled 885,497 gross tons, 2 percent greater than the 868,661 tons, used during May. Pig iron consumed by this industry totaled 366,136 tons, an increase of 2 percent over the preceding month.

Domestic stocks of ferrous scrap and pig iron held by consumers at the end of June totaled 11,278,649 gross tons, a slight decrease from those held at the end of the preceding month. Stocks of ferrous scrap were equivalent to a 39-day supply at the June daily consumption rate and totaled 8,214,592 tons, slightly greater than at the end of May, and 4 percent greater than stocks held on June 30, 1958. Pig iron stocks held by consumers and suppliers, totaled 3,064,057 tons, a decrease of 2 percent from those held on May 31, and 10 percent less than those at the end of June 1958.

Home scrap produced, plus purchased scrap received totaled 6,297,488 tons during June, 4 percent less than during May; home scrap produced accounted for 3,865,664 tons, a decrease of 1 percent from May. Net purchased scrap received totaled 2,431,824 tons, a decrease of 8 percent from May. Of the purchases, 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, in gross 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
Jan. 1959--	2,674,204	85,213	380,492	1,490,357	90,383	415,445
Feb. 1959--	2,771,238	89,710	389,078	1,719,644	110,442	433,900
Mar. 1959--	3,324,913	105,496	439,343	2,218,698	129,608	513,368
Apr. 1959--	3,356,592	110,091	452,596	2,085,713	140,694	529,479
May 1959--	3,386,717	105,144	430,187	1,999,324	152,144	488,353
June 1959--	3,325,669	110,515	429,480	1,790,576	154,483	486,765

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

Table 3 - Scrap produced, received, and consumed during June, stocks at consumers plants June 30, 1959, and consumption year-to-date, by grades, in gross tons

Grades of scrap	Home scrap produced	Purchased scrap received		Total scrap consumed	Scrap stocks June 30	Consumption Year-to-date
		From dealers*	From others*			
No. 1 heavy melting steel-----	1,660,803	410,407	79,598	2,145,122	2,529,420	12,690,134
No. 2 heavy melting steel-----	184,315	219,569	24,372	448,591	744,662	2,619,742
No. 1 and electric furnace bundles--	97,543	330,278	100,631	487,373	837,536	3,012,082
No. 2 and all other bundles-----	27,575	252,545	34,587	321,132	853,152	2,074,553
Low phosphorous scrap-----	107,675	217,852	24,484	354,565	475,905	2,021,146
Cast iron scrap other than borings--	549,197	305,689	55,016	907,092	988,463	5,264,890
Turnings and/or borings, alloy free-	42,693	196,555	40,330	273,442	220,594	1,573,078
Rerolling rails-----	30	17,469	20,049	37,281	117,187	249,224
Scrap rails-----	4,131	23,177	670	26,126	61,259	161,824
High speed steel-----	2,358	814	259	3,575	5,424	17,700
Stainless steel-----	42,890	19,532	3,267	58,944	106,682	382,841
All other alloy iron and steel-----	152,200	28,404	12,320	189,299	270,682	1,133,703
All other prepared scrap-----	602,680	145,062	33,152	841,238	585,297	4,882,671
Unprepared scrap-----	391,574	39,977	11,011	228,624	418,329	1,236,707
Total (all grades)-----	3,865,664	2,207,330	439,746	6,322,404	8,214,592	37,320,295

* Includes 215,252 gross tons of scrap shipped, transferred, or otherwise disposed of during the month.

Table 4 - Stocks of ferrous scrap and pig iron on hand at major consuming industries plants, at end of month, in gross tons

Date	Scrap stocks			Pig iron stocks			Total
	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. 31, 1959--	7,172,318	387,775	770,820	3,022,110	36,084	419,412	3,477,606
Feb. 28, 1959--	7,062,756	378,494	755,782	2,827,861	37,816	430,505	3,296,182
Mar. 31, 1959--	7,091,280	366,923	784,733	2,668,774	38,125	465,100	3,171,999
Apr. 30, 1959--	7,123,652	358,332	793,793	2,522,156	41,060	532,040	3,095,256
May 31, 1959--	7,040,759	360,989	797,533	2,460,951	50,356	606,718	3,118,025
June 30, 1959--	7,062,885	362,899	788,808	2,280,171	62,350	721,536	3,064,057

DEALERS, BROKERS, AND AUTOMOBILE WRECKERS FOR JUNE 1959

The 869 identical companies reporting for May and June indicated that at the end of June, stocks of ferrous scrap in their yards had decreased slightly from the end of May. During June, receipts and shipments increased 4 and 1 percent, respectively. Receipts in June were 29 percent less than shipments. Of the scrap handled during June, six grades (No. 1 and No. 2 heavy melting steel, No. 1 and electric furnace bundles, No. 2 and all other bundles, low phosphorous and cast iron scrap other than borings) represented 68 percent of the total shipments and 43 percent of the stocks on hand June 30. Unprepared scrap stocks held in dealers and automobile wreckers yards at the end of June constituted 45 percent of the total.

Table 5 - Dealers, brokers, and automobile wreckers, receipts, shipments, and stocks of ferrous scrap, for June 1959, in gross tons

	Receipts during month		Shipments ^{1/} during month		Stocks	
	June 1959	Change from previous month (percent)	To domestic consumers	For export	June 30 1959	Change from end of previous month (percent)
No. 1 heavy melting steel-----	44,575	+ 1	101,266	43,943	102,758	-12
No. 2 heavy melting steel-----	71,466	+23	74,476	40,879	137,628	+ 2
No. 1 and electric furnace bundles-----	13,437	+69	38,970	7,129	12,870	-30
No. 2 and all other bundles-----	55,203	+27	81,153	22,431	181,313	+ 2
Low phosphorous scrap-----	13,591	+12	35,746	1,853	32,371	+ 2
Cast iron scrap other than borings-----	44,171	+ 4	69,868	2,663	61,393	- 1
Turnings and/or borings, alloy free-----	17,995	- 4	32,213	78	63,125	+ 4
Rerolling rails-----	913	-33	2,379	-	10,735	- 4
Scrap rails-----	5,127	+80	4,504	55	18,122	+ 3
Highspeed steel-----	45	-24	30	-	113	+15
Stainless steel-----	4,358	- 5	4,767	38	4,895	- 6
All other alloy iron and steel-----	1,474	+52	3,188	-	3,007	+ 8
All other prepared scrap-----	11,770	+28	35,952	36,113	51,421	+12
Unprepared scrap-----	253,251	- 6	111,576	8,426	549,857	2/
Total (all grades)-----	537,376	+ 4	596,088	163,608	1,229,608	3/

^{1/} Includes shipments from yards, and direct shipments by dealers and brokers from other than yard operations.

^{2/} Less than 1 percent increase.

^{3/} Less than 1 percent decrease.

CONSUMPTION OF FERROUS SCRAP AND PIG IRON

Consumption of scrap in June totaled 6,322,404 gross tons which was at an average daily rate of 210,747 tons or 53 percent greater than for the year 1958.

In June, open-hearth furnaces used 60 percent of the total scrap, and 84 percent of the pig iron compared with 61 and 84 percent, respectively, in 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 72 percent. During 1958, these percentages were 7 and 73, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1958 was 5.

During June, steelmaking furnaces (open-hearth, Bessemer, oxygen steel process, and electric) accounted for 77 percent of the total scrap, and 90 percent of the pig iron consumed, compared with 78 and 90 percent, respectively, during May. In 1958, steelmaking furnaces used 76 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 types 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 1959, by type of furnace, in gross 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	3,749,199	5,513,211	51,355	9,255	-	-	3,800,554	5,522,466
Basic oxygen process	73,622	195,029	-	-	-	-	73,622	195,029
Bessemer	18,600	175,655	649	51	203	35	19,452	175,741
Electric ^{3/}	843,391	35,393	139,836	2,555	14,694	1,919	997,921	39,867
Total steelmaking furnaces	4,684,812	5,919,288	191,840	11,861	14,897	1,954	4,891,549	5,933,103
Cupola	71,158	46,405	42,021	1,844	772,318	317,887	885,497	366,136
Air	2,941	1,075	29,750	4,453	71,992	14,862	104,683	20,390
Blast casting	355,215	-	-	-	-	-	355,215	-
Direct casting	-	147,591	-	-	-	118,842	-	266,433
Ferro-alloy	-	-	-	-	21,090	-	21,090	-
Miscellaneous	17,893	-	-	-	46,477	-	64,370	-
Total June 1959	5,132,019	6,114,359	263,611	18,158	926,774	453,545	6,322,404	6,586,062
Total May 1959	5,468,703	6,400,158	256,307	16,732	917,562	450,967	6,642,572	6,867,857
Total April 1959	5,409,522	6,177,722	260,939	16,486	974,444	458,708	6,644,905	6,652,916
Total March 1959	5,504,795	6,340,149	247,534	15,299	925,170	442,605	6,677,499	6,798,053
Total February 1959	4,611,586	5,216,578	210,810	12,947	835,477	398,428	5,657,873	5,627,953
Total January 1959	4,351,939	5,208,421	201,285	11,981	821,818	389,107	5,375,042	5,609,509

^{1/} Includes only those castings made by companies producing steel ingots.

^{2/} Excludes companies that produce both steel castings and steel ingots.

^{3/} Includes crucible furnaces.

^{4/} 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, in gross tons

State and region	Scrap			Scrap stocks June 30, 1959	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total-----	3,865,664	2,647,076 ^{1/}	6,322,404	8,214,592	6,586,062
New England, total-----	18,913	20,201	39,535	48,145	12,837
Connecticut-----	5,726	4,238	10,786	12,450	2,493
Maine and New Hampshire-----	585	835	1,581	1,292	334
Massachusetts-----	9,259	10,045	17,940	26,032	5,676
Rhode Island-----	2,571	4,538	7,616	7,316	3,728
Vermont-----	772	545	1,612	1,055	606
Middle Atlantic, total-----	1,140,620	692,567	1,776,242	2,295,962	2,090,535
New Jersey-----	15,834	34,780	55,320	61,123	15,970
New York-----	170,776	139,082	304,407	548,786	323,087
Pennsylvania (East) ^{2/} -----	235,328	187,911	457,256	612,413	464,900
Pennsylvania (West)-----	718,682	330,794	959,259	1,073,640	1,286,578
East North Central, total-----	1,840,084	1,181,485	2,947,239	3,404,569	2,991,265
Illinois-----	342,158	266,778	604,750	813,803	511,976
Indiana-----	468,016	229,615	662,001	1,006,332	828,854
Michigan-----	265,922	234,958	500,444	382,775	400,353
Ohio (East) ^{2/} -----	619,188	329,025	938,071	817,403	1,061,940
Ohio (West)-----	99,142	80,460	167,828	331,365	167,543
Wisconsin-----	45,658	40,649	74,145	52,891	20,599
West North Central, total-----	57,717	103,884	170,970	338,755	60,169
Iowa-----	12,570	19,024	31,092	32,267	7,157
Kansas and Nebraska-----	4,513	8,773	13,429	10,997	412
Minnesota-----	22,173	22,845	41,404	120,978	47,097
Missouri-----	18,461	53,242	85,045	174,513	5,503
South Atlantic, total-----	314,583	148,109	416,562	513,779	600,769
Delaware, District of Columbia, and Maryland-----	239,312	66,487	287,703	286,621	410,582
Florida and Georgia-----	7,263	23,066	24,445	16,378	1,071
North Carolina-----	1,876	3,496	5,197	3,705	1,865
South Carolina-----	1,076	676	2,271	2,638	1,345
Virginia and West Virginia-----	65,056	54,384	96,946	204,437	185,906
East South Central, total-----	199,222	198,621	363,503	448,820	410,937
Alabama-----	139,931	124,890	227,126	263,787	329,739
Kentucky, Mississippi, and Tennessee-----	59,291	73,731	136,377	185,033	81,198
West South Central, total-----	68,659	87,235	169,587	334,200	69,776
Arkansas, Louisiana, and Oklahoma-----	4,150	13,686	22,080	11,880	623
Texas-----	64,509	73,549	147,507	322,320	69,153
Rocky Mountain, total-----	101,359	72,394	153,292	258,527	196,164
Arizona and Nevada-----	2,142	6,235	7,279	18,943	19
Colorado and Utah-----	98,801	64,628	144,413	233,886	196,131
Idaho and Montana-----	416	1,531	1,600	5,698	14
Pacific Coast, total-----	124,507	142,580	285,474	571,835	153,610
California-----	114,578	112,846	241,233	438,663	153,269
Oregon-----	3,364	9,674	16,688	38,561	94
Washington-----	6,565	20,060	27,553	94,611	247

^{1/} Includes 215,252 gross 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 gross tons

State and region	Consumption during June 1959		
	Total scrap	Pig iron	Total charge
United States, total-----	3,800,554	5,522,466	9,323,020
New England and Middle Atlantic, total---	1,283,567	1,822,199	3,105,766
Massachusetts, New Jersey, and Rhode Island-----	21,439	5,905	27,344
New York-----	223,750	309,471	533,221
Pennsylvania (East)-----	341,060	421,998	763,058
Pennsylvania (West)-----	697,318	1,084,825	1,782,143
East North Central, total-----	1,687,954	2,458,502	4,146,456
Illinois-----	317,624	407,080	724,704
Indiana-----	583,338	805,036	1,388,374
Michigan and Wisconsin-----	164,569	250,377	414,946
Ohio (East)-----	551,415	843,219	1,394,634
Ohio (West)-----	71,008	152,790	223,798
West North Central, total-----	56,888	46,044	102,932
Minnesota and Missouri-----	56,888	46,044	102,932
South Atlantic, total-----	308,506	582,244	890,750
Delaware, Maryland, and West Virginia--	308,506	582,244	890,750
East and West South Central, total-----	219,619	359,638	579,257
Alabama, Kentucky, Tennessee, and Texas-----	219,619	359,638	579,257
Rocky Mountain and Pacific Coast, total--	244,020	253,839	497,859
California, Colorado, and Utah-----	244,020	253,839	497,859

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 365,502 gross tons in June and 375,164 tons in May. During July 1959, the Office of Export Supply, United States Department of Commerce, issued scrap export licenses for 636,292 gross tons. Exports of pig iron during June totaled 1,554 tons and 88 tons in May. Imports of scrap totaled 31,065 gross tons in June compared with 30,593 tons in May. Imports of pig iron totaled 60,554 gross tons in June and 74,610 tons in May. In addition to the foregoing imports of pig iron during June, there was 112 tons of sponge iron, valued at \$24,522, imported, of which 103 tons came from Canada and 9 tons from Sweden.

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

Country	June 1959		Jan. through June 1959	
	Gross tons	Value	Gross tons	Value
Canada-----	24,838	\$945,477	103,582	\$3,994,058
Cuba-----	260	1,171	1,448	19,648
France-----	50	10,061	2,188	164,836
Japan-----	16	868	81	25,204
United Kingdom-----	348	20,233	8,249	379,917
West Germany-----	-	-	3,463	238,808
All others-----	5,553	336,654	16,235	974,141
Total-----	31,065	\$1,314,464	135,246	\$5,796,612

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

Country	June 1959		Jan. through June 1959	
	Gross tons	Value	Gross tons	Value
Argentina-----	215	\$21,354	1,399	\$106,207
Canada-----	31,035	1,173,169	224,862	9,106,537
Greece-----	289	32,400	1,280	199,038
Italy-----	18,475	567,476	59,051	1,786,618
Japan-----	249,653	9,380,761	1,132,083	41,101,709
Mexico-----	31,698	1,101,595	157,170	5,791,689
Nicaragua-----	-	-	1,917	66,927
Spain-----	2,881	121,106	56,028	2,245,751
Taiwan-----	9,828	527,523	31,180	1,242,245
All others-----	21,428	601,859	35,614	1,372,097
Total-----	365,502	\$13,527,243	1,700,584	\$63,018,818

Table 11 - Exports 2/ of ferrous scrap from the United States, by grades
(U. S. Department of Commerce)

	June 1959		Jan. through June 1959	
	Gross tons	Value	Gross tons	Value
No. 1 heavy melting steel scrap-----	144,580	\$5,876,407	639,829	\$25,358,469
No. 2 heavy melting steel scrap-----	87,305	3,190,458	456,609	16,368,021
No. 1 baled sheet melting scrap-----	4,647	205,833	56,214	2,366,326
No. 2 baled sheet melting scrap-----	72,562	2,082,737	262,360	6,928,360
Borings, shovelings, and turnings-----	4,794	139,312	32,524	840,474
Iron scrap-----	38,573	1,337,516	183,729	7,278,991
Rerolling material-----	3,609	243,912	11,569	848,616
All other scrap 3/-----	9,432	451,068	57,750	3,029,561
Total-----	365,502	\$13,527,243	1,700,584	\$63,018,818

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 terne plate, tin plate, circles, cobbles, strip, and scroll shear butts.