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Iron and Steel Scrap
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FERROUS SCRAP IN FEBRUARY 1959

The combined domestic consumption of ferrous scrap and pig iron in steel-making furnaces during February 1959 was the highest since May 1957, and the net purchased scrap received by the iron and steel scrap consuming industries was the highest since September 1957, according to the Bureau of Mines, United States Department of the Interior. Although there were fewer working days during February, the daily steel production rate was 14 percent higher than in January, and resulted in consumption of ferrous scrap and pig iron increasing for the third consecutive month. Scrap consumed in steelmaking furnaces (open-hearth, Bessemer, basic oxygen process, and electric) was 6 percent greater than during the preceding month, and was the highest quantity used since May 1957. The use of pig iron in these furnaces during February increased slightly over January and was the highest monthly quantity consumed since October 1957. The total steel-furnace melt (9,489,560 gross tons), consisted of 47 percent scrap and 53 percent pig iron, compared with 45 percent and 55 percent, respectively, during January.

Table 1 - Summary of production, receipts, consumption, and consumers' stocks of ferrous scrap and pig iron, September 1958 to February 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/}
Sept. 1958—	2,629,534	1,935,287	4,564,821	4,472,219	4,524,851	8,048,320	3,338,873
Oct. 1958—	2,957,607	2,131,946	5,089,553	5,091,207	5,239,582	8,042,917	3,378,292
Nov. 1958—	2,813,830	2,248,222	5,062,052	4,803,615	5,190,118	8,303,244	3,466,262
Dec. 1958—	3,019,900	2,218,407	5,238,307	4,973,670	5,319,991	8,565,714	3,539,526
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 ^{2/}	5,514,012	5,657,873	5,627,953	8,197,032	3,296,182

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

^{2/} Excludes 169,974 gross tons of scrap shipped, transferred or otherwise disposed of during the month.

Prepared by James E. Larkin and James C. O. Harris, May 11, 1959, under the supervision of H. G. Iverson, Chief, Branch of Ferrous Metals and Ferroalloys, Division of Minerals.

Total domestic consumption of ferrous scrap in February was 62 percent higher than for the comparable month of 1958, and the highest monthly quantity consumed since May 1957. Although pig iron used during February showed only a slight increase over the preceding month it was the highest quantity used since October 1957.

The use of scrap by gray iron foundries during February totaled 791,137 gross tons, an increase of 1 percent over the 783,045 tons used in January. Pig iron consumed by this industry totaled 328,876 tons, a slight increase over the preceding month.

Domestic stocks of ferrous scrap and pig iron held by consumers at the end of February totaled 11,493,214 gross tons, a decrease of 3 percent from the preceding month. Stocks of ferrous scrap were equivalent to a 41-day supply at the February daily consumption rate and totaled 8,197,032 tons, 2 percent less than at the end of January, but 3 percent greater than stocks held on February 28, 1958. Pig iron stocks held by consumers and suppliers, totaled 3,296,182 tons, a decrease of 5 percent from those held on January 31, and 5 percent less than those at the end of February 1958.

Home scrap produced, plus purchased scrap received totaled 5,514,012 tons during February, 7 percent greater than during January; home scrap produced accounted for 3,250,026 tons, an increase of 4 percent over January. Net purchased scrap received totaled 2,263,986 tons, an increase of 13 percent over January and the largest monthly quantity received by consumers since September 1957. Of the purchases, 85 percent was received from dealers and 15 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/}		
	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. 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

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

Table 3 - Scrap produced, received, and consumed during February, stocks at consumers plants February 28, 1959, by grades, in gross tons

Grade of scrap	Home scrap produced	Purchased scrap received		Total scrap consumed	Scrap stocks Feb. 28	Consumption Year-to-date
		From dealers*	From others*			
No. 1 heavy melting steel-----	1,392,487	373,419	66,779	1,926,803	2,582,398	3,724,062
No. 2 heavy melting steel-----	146,486	215,666	23,329	399,013	675,944	760,920
No. 1 and electric furnace bundles-----	95,738	291,796	71,084	445,596	789,648	934,794
No. 2 and all other bundles-----	22,739	318,694	23,757	329,535	736,791	618,090
Low phosphorous scrap-----	82,278	207,978	28,284	298,918	542,231	596,190
Cast iron scrap other than borings-----	482,039	259,674	52,801	823,319	1,019,766	1,601,047
Turnings and/or borings, alloy free-----	38,730	160,016	27,446	223,940	246,647	423,872
Rerolling rails-----	-	16,420	18,738	40,264	147,903	81,437
Scrap rails-----	2,897	20,301	2,895	25,199	55,676	49,435
High speed steel-----	1,400	701	164	2,558	4,675	4,754
Stainless steel-----	36,661	15,639	2,795	59,687	105,875	111,101
All other alloy iron and steel-----	140,336	28,635	10,349	178,196	281,322	336,965
All other prepared scrap-----	497,869	116,269	39,385	728,192	579,599	1,442,074
Unprepared scrap-----	310,366	32,791	8,155	176,653	428,557	348,174
Total (all grades)-----	3,250,026	2,057,999	375,961	5,657,873	8,197,032	11,032,915

* Includes 169,974 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			
	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
Sept. 30, 1958----	6,903,444	407,751	737,125	8,048,320	2,884,193	39,112	415,568	3,338,873
Oct. 31, 1958----	6,879,345	406,860	756,712	8,042,917	2,880,979	37,304	460,009	3,378,292
Nov. 30, 1958----	7,094,121	414,887	794,236	8,303,244	2,959,237	37,537	469,488	3,466,262
Dec. 31, 1958----	7,357,904	410,187	797,623	8,565,714	3,048,913	36,491	454,122	3,539,526
Jan. 31, 1959----	7,172,318	387,775	770,820	8,330,913	3,022,110	36,084	419,412	3,477,606
Feb. 28, 1959----	7,062,756	378,494	755,782	8,197,032	2,827,861	37,816	430,505	3,296,182

DEALERS, BROKERS, AND AUTOMOBILE WRECKERS FOR FEBRUARY 1959

The 897 identical companies reporting for January and February indicated that at the end of February, stocks of ferrous scrap in their yards had decreased 2 percent from January 31; however, receipts and shipments increased 15 and 21 percent, respectively. Receipts in February were 28 percent less than shipments. Of the scrap handled during February, 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 44 percent of the stocks on February 28. Unprepared scrap stocks held in dealers and automobile wreckers yards at the end of February constituted 45 percent of the total.

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

Grades of scrap	Receipts during month		Shipments ¹ during month		Stocks	
	February 1959	Change from previous month (percent)	To domestic consumers	For export	February 28, 1959	Change from end of previous month (percent)
No. 1 heavy melting steel-----	45,615	+33	95,178	20,720	136,806	- 5
No. 2 heavy melting steel-----	56,370	+33	83,915	19,699	139,084	+ 3
No. 1 and electric furnace bundles-----	9,843	+31	36,712	979	19,067	+ 7
No. 2 and all other bundles-----	40,411	+ 2	96,183	5,443	186,562	- 3
Low phosphorous scrap-----	14,565	+45	42,026	375	28,122	- 8
Cast iron scrap other than borings-----	39,455	+ 7	69,271	1,213	68,410	- 2
Turnings and/or borings, alloy free-----	24,188	+21	45,290	2,037	72,303	- 6
Rerolling rails-----	2,673	+245	3,981	-	5,762	+29
Scrap rails-----	2,464	-33	3,436	68	15,817	- 4
Highspeed steel-----	18	-28	345	-	191	-62
Stainless steel-----	3,848	+13	4,309	6	5,742	- 2
All other alloy iron and steel-----	844	- 7	2,752	-	2,004	+ 2
All other prepared scrap-----	12,532	2/	37,534	6,929	48,133	- 2
Unprepared scrap-----	251,278	+11	115,216	2,483	593,682	- 1
Total (all grades)-----	504,104	+15	636,148	59,952	1,321,685	- 2

¹/ Includes shipments from yards, and direct shipments by dealers and brokers from other than yard operations.
²/ Less than 1 percent decrease.

CONSUMPTION OF FERROUS SCRAP AND PIG IRON

Consumption of scrap in February totaled 5,657,873 gross tons which was at an average daily rate of 202,067 tons or 47 percent greater than for the year 1958.

In February, open-hearth furnaces used 63 percent of the total scrap, and 85 percent of the pig iron compared with 62 and 85 percent, respectively, in January; electric furnaces in February used 7 percent of the combined total of ferrous scrap and pig iron charged to all furnaces, with open-hearth using 74 percent. During 1958, these percentages were 7 and 73, respectively. Blast furnaces used 5 percent of the total scrap; the corresponding percentage for the year 1958 was 5.

During February, steelmaking furnaces (open-hearth, Bessemer, basic oxygen process, and electric) accounted for 78 percent of the total scrap, and 90 percent of the pig iron consumed, the same percentages as during January. 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 type of furnace during February 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 February 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-----	3,507,625	4,772,265	40,017	5,571	-	-	3,547,642	4,777,836
Basic oxygen process-----	51,456	131,118	-	-	-	-	51,456	131,118
Bessemer-----	17,903	123,589	683	38	158	31	18,744	123,658
Electric ^{3/} -----	674,528	33,378	115,099	2,276	12,065	1,760	801,692	37,414
Total steelmaking furnaces-----	4,251,512	5,060,350	155,799	7,885	12,223	1,791	4,419,534	5,070,026
Cupola-----	61,762	42,746	33,265	1,461	696,110	280,669	791,137	324,876
Air-----	2,742	964	21,746	3,601	63,838	13,395	88,326	17,960
Blast ^{4/} -----	278,386	-	-	-	-	-	278,386	-
Direct casting-----	-	112,518	-	-	-	102,573	-	215,091
Ferro-alloy-----	-	-	-	-	22,283	-	22,283	-
Miscellaneous-----	17,184	-	-	-	41,023	-	58,207	-
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
Total December 1958-----	3,984,747	4,938,658	196,342	11,982	792,581	369,351	4,973,670	5,319,991
Total November 1958-----	3,900,102	4,840,092	166,587	10,468	736,926	339,558	4,803,615	5,190,118
Total October 1958-----	4,128,320	4,874,025	194,761	11,961	768,126	353,596	5,091,207	5,239,582
Total September 1958-----	3,560,871	4,160,970	162,212	9,954	749,136	353,927	4,472,219	4,524,851

^{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 Feb. 28, 1959	Pig iron consumed
	Home scrap produced	Purchased scrap received	Consumed		
United States, total	3,250,026	2,433,960 ^{1/}	5,657,873	8,197,032	5,627,953
New England, total	17,518	16,862	34,334	53,141	11,443
Connecticut	5,015	4,525	9,166	15,180	2,268
Maine and New Hampshire	486	522	1,197	726	276
Massachusetts	8,075	7,887	15,046	27,627	5,193
Rhode Island	3,339	3,400	7,646	7,391	3,193
Vermont	603	528	1,279	2,217	513
Middle Atlantic, total	916,843	592,933	1,594,288	2,416,665	1,723,561
New Jersey	13,269	30,549	44,612	67,126	12,320
New York	142,937	121,099	290,292	585,210	298,464
Pennsylvania (East) ^{2/}	186,796	145,118	368,449	696,786	358,675
Pennsylvania (West)	573,841	296,167	890,935	1,067,543	1,054,102
East North Central, total	1,585,585	1,122,928	2,628,866	3,400,119	2,602,219
Illinois	282,586	205,918	497,429	799,199	467,959
Indiana	418,778	260,787	644,201	902,735	717,757
Michigan	238,601	211,740	418,666	385,448	363,406
Ohio (East) ^{3/}	517,379	331,121	831,336	939,088	879,382
Ohio (West)	92,838	76,152	170,226	322,633	157,544
Wisconsin	35,403	37,210	67,008	51,016	16,171
West North Central, total	51,678	95,501	157,978	309,662	57,183
Iowa	11,309	20,493	31,831	33,694	6,654
Kansas and Nebraska	4,124	8,275	12,186	11,902	416
Minnesota	19,394	20,448	40,971	123,555	45,173
Missouri	16,851	46,285	72,990	140,511	4,940
South Atlantic, total	267,819	168,746	423,839	468,014	515,800
Delaware, District of Columbia, and Maryland	203,532	82,068	280,209	289,345	354,726
Florida and Georgia	2,450	10,768	15,841	16,465	901
North Carolina	1,914	3,343	5,357	3,542	1,775
South Carolina	1,111	1,015	2,409	2,393	1,236
Virginia and West Virginia	58,812	71,552	120,023	156,269	157,162
East South Central, total	164,020	181,304	309,129	403,659	348,768
Alabama	114,283	100,437	183,490	228,729	273,529
Kentucky, Mississippi, and Tennessee	49,737	80,867	125,639	174,930	75,239
West South Central, total	59,609	77,036	142,322	339,671	62,749
Arkansas, Louisiana, and Oklahoma	3,448	7,824	16,851	24,263	548
Texas	56,161	69,212	125,471	315,408	62,201
Rocky Mountain, total	88,636	62,026	152,752	185,412	196,317
Arizona and Nevada	1,321	4,570	5,944	18,680	15
Colorado and Utah	87,058	56,451	145,517	162,415	196,294
Idaho and Montana	257	1,005	1,291	4,317	8
Pacific Coast, total	98,318	116,624	214,365	620,689	109,913
California	90,193	90,067	177,687	469,286	109,626
Oregon	2,902	10,085	15,790	42,042	74
Washington	5,223	16,472	20,888	109,361	213

1/ Includes 169,974 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 February 1959		
	Total scrap	Pig iron	Total charge
United States, total-----	3,547,642	4,777,836	8,325,478
New England and Middle Atlantic, total	1,161,476	1,500,765	2,662,241
Massachusetts, New Jersey, and Rhode Island-----	19,227	5,165	24,392
New York-----	221,884	285,654	507,538
Pennsylvania (East)-----	272,838	323,330	596,168
Pennsylvania (West)-----	647,527	886,616	1,534,143
East North Central, total-----	1,610,024	2,163,831	3,773,855
Illinois-----	249,799	375,264	625,063
Indiana-----	576,047	694,151	1,270,198
Michigan and Wisconsin-----	148,267	236,145	384,412
Ohio (East)-----	534,241	717,041	1,251,282
Ohio (West)-----	101,670	141,230	242,900
West North Central, total-----	53,171	43,918	97,089
Minnesota and Missouri-----	53,171	43,918	97,089
South Atlantic, total-----	328,354	500,385	828,739
Delaware, Maryland, and West Virginia-----	328,354	500,385	828,739
East and West South Central, total---	178,922	314,165	493,087
Alabama, Kentucky, Tennessee, and Texas-----	178,922	314,165	493,087
Rocky Mountain and Pacific Coast, total	215,695	254,772	470,467
California, Colorado, and Utah-----	215,695	254,772	470,467

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of ferrous scrap totaled 239,284 gross tons in February and 197,264 tons in January. During March 1959, the Office of Export Supply, United States Department of Commerce, issued scrap export licenses for 193,653 gross tons. Exports of pig iron during February totaled 146 tons and 238 tons in January. Imports of scrap totaled 17,903 gross tons in February compared with 15,060 tons in January. Imports of pig iron totaled 4,924 gross tons in February and 7,422 tons in January. In addition to the foregoing imports of pig iron during February there was 143 tons of sponge iron valued at \$26,673, imported, all from Canada.

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

Country	January 1959 3/		February 1959		Jan. through Feb. 1959	
	Gross tons	Value	Gross tons	Value	Gross tons	Value
Canada and Newfoundland	14,184	\$609,932	12,792	\$454,406	26,976	\$1,064,338
Cuba	212	4,267	29	577	241	4,844
France	55	14,460	33	5,965	88	20,425
Japan	37	12,750	22	8,500	59	21,250
United Kingdom	46	18,856	2,257	53,519	2,303	72,375
West Germany	-	-	2,579	73,782	2,579	73,782
All others	526	43,869	191	17,600	717	61,469
Total	15,060	\$704,134	17,903	\$614,349	32,963	\$1,318,483

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

Country	January 1959 3/		February 1959		Jan. through Feb. 1959	
	Gross tons	Value	Gross tons	Value	Gross tons	Value
Argentina	170	\$13,352	195	\$12,674	365	\$26,026
Canada	13,653	543,516	25,322	1,063,019	38,975	1,606,535
Greece	112	12,127	322	51,121	434	63,248
Italy	12,667	405,273	11	999	12,678	406,272
Japan	144,214	5,135,563	170,173	5,878,089	314,387	11,013,652
Mexico	18,710	681,599	31,324	1,161,809	50,034	1,843,408
Netherlands	380	5,966	-	-	380	5,966
Spain	6,137	199,615	-	-	6,137	199,615
Taiwan	-	-	9,449	374,250	9,449	374,250
All others	1,221	85,207	2,488	143,173	3,709	228,380
Total	197,264	\$7,082,218	239,284	\$8,685,134	436,548	\$15,767,352

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

	January 1959 3/		February 1959		Jan. through Feb. 1959	
	Gross tons	Value	Gross tons	Value	Gross tons	Value
No. 1 heavy melting steel scrap	75,476	\$2,907,574	84,066	\$3,170,528	159,542	\$ 6,078,102
No. 2 heavy melting steel scrap	71,590	2,507,632	62,795	2,232,712	134,385	4,740,344
No. 1 baled sheet melting scrap	6,277	249,448	6,367	277,554	12,644	527,002
No. 2 baled sheet melting scrap	25,566	669,620	45,364	1,121,397	70,930	1,791,017
Borings, shoveling, and turnings	7,001	176,883	1,634	46,571	8,635	223,454
Iron scrap	6,612	261,347	32,912	1,404,689	39,524	1,666,036
Revolving material	131	16,992	1,199	98,711	1,330	115,703
All other scrap 4/	4,611	292,722	4,947	332,972	9,558	625,694
Total	197,264	\$7,082,218	239,284	\$8,685,134	436,548	\$15,767,352

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/ Revised.

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