



MINERAL INDUSTRY SURVEYS

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DOUGLAS McKAY, Secretary

Thos. H. Miller, Acting Director

Iron and Steel Scrap
Monthly Report No. 181

IRON AND STEEL SCRAP IN NOVEMBER 1955

Consumption and stocks of ferrous materials, scrap and pig iron, decreased slightly during November, but the daily consumption rate increased over the previous month according to the Bureau of Mines, United States Department of the Interior. The daily consumption rate of ferrous materials in November (413,819 gross tons) was 2 percent higher than the previous month. Scrap consumed for all purposes totaled 6,441,351 gross tons, slightly less than during October; pig iron consumption totaled 5,973,223 tons, a decrease of 4 percent. The total melt (12,414,574 gross tons) consisted of 52 percent scrap and 48 percent pig iron, respectively, compared with 51 percent scrap and 49 percent pig iron during October.

Steel production and ferrous materials used in steel-making furnaces each decreased 2 percent from October. The use of scrap in these furnaces (open-hearth, Bessemer and electric) totaled 4,906,395 gross tons, slightly lower than during October; pig iron consumption totaled 5,236,087 tons, a decrease of 4 percent. The total steel-furnace melt (10,142,482 gross tons) of scrap and pig iron decreased 2 percent and consisted of 48 percent scrap and 52 percent pig iron. Electric furnaces used 839,971 tons of scrap during November, an increase of 2 percent.

Table 1 - Summary of production, receipts, consumption and consumers' stocks of iron and steel scrap and pig iron, June 1955 to November 1955, 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/}
June 1955--	3,431,959	2,615,398	6,047,357	6,117,573	5,774,896	6,411,423	1,889,368
July 1955--	3,086,718	2,313,211	5,399,929	5,447,130	5,430,550	6,367,841	2,082,385
Aug. 1955--	3,419,122	2,697,239	6,116,361	5,913,031	5,769,689	6,568,771	2,205,932
Sept. 1955--	3,501,052	2,558,199	6,059,251	6,060,491	5,903,190	6,566,601	2,217,334
Oct. 1955--	3,573,364	2,897,714	6,471,078	6,443,349	6,193,512	6,593,899	2,161,702
Nov. 1955--	3,543,690	2,896,539 ^{2/}	6,440,229	6,441,351	5,973,223	6,593,987	2,108,060

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

^{2/} Excludes 215,786 gross tons of scrap shipped, transferred or otherwise disposed of during month.

Prepared by James E. Larkin and James C.O. Harris, February 2, 1956, under the supervision of H. G. Iverson, Chief, Branch of Ferrous Metals and Ferroalloys, Division of Minerals.

The use of scrap by gray iron foundries during November totaled 952,906 gross tons, compared with 944,685 tons during October. Pig iron consumed by this industry totaled 469,485 gross tons, compared with 445,099 tons used during the previous month.

Stocks of scrap and pig iron held by consumers at the end of November totaled 8,702,047 gross tons, a decrease of 1 percent from the previous month. Stocks of scrap at the end of November totaled 6,593,987 tons, to establish a record high for stocks of scrap held by consumers. Pig iron stocks totaled 2,108,060 tons, a decrease of 2 percent from the previous month.

Total scrap for consumption (home scrap produced plus purchased scrap received) totaled 6,440,229 gross tons during November, compared with 6,471,078 tons in October; home scrap accounted for 3,543,690 tons and purchased 2,896,539 tons. Of the purchases, 84 percent was received from dealers and 16 percent from other sources. Receipts of purchased scrap is a net figure computed by deducting consumers scrap shipped, transferred or otherwise disposed of during the month from total scrap received from dealers and all others.

Table 2 - Scrap produced and received during November, and stocks at consumers' plants November 30, 1955, in gross tons

	Home Scrap Produced	Scrap received		Scrap Stocks Nov. 30
		From Dealers	From Others	
No. 1 heavy melting steel-----	1,397,817	436,933	83,063	1,644,373
No. 2 heavy melting steel-----	188,484	395,288	49,203	940,221
Bundles-----	98,849	601,038	136,561	1,052,386
Low phosphorous scrap-----	126,868	273,655	28,787	437,964
Cast iron scrap, other than borings	604,117	346,853	53,775	891,635
Turnings and/or borings, alloy free	53,432	230,855	42,309	243,549
Rerolling rails-----	1,423	35,446	29,113	170,665
Scrap rails-----	4,034	34,802	3,251	75,401
High speed steel-----	2,156	918	2,275	4,525
Stainless steel-----	39,086	17,600	3,980	66,004
All other alloy iron and steel-----	153,932	24,954	10,069	182,475
All other prepared scrap-----	557,286	136,524	43,345	503,517
Unprepared scrap-----	316,206	75,225	16,503	381,272
Total scrap-----	3,543,690	2,610,091*	502,234*	6,593,987

* Includes 215,786 gross tons of scrap shipped, transferred or otherwise disposed of during month.

Stocks of iron and steel scrap at the end of November totaled 6,593,987 tons, compared with 6,593,899 tons on October 31, and were equivalent to a 31-day supply at the November consumption rate.

Table 3 - Stocks of iron and steel scrap and pig iron on hand at major consuming industries plants,
at end of month, in gross tons

Date	Scrap Stocks			Pig Iron Stocks		
	Mfrs. of Steel Ingots and Castings	Mfrs. of Steel Castings	Iron Foundries and Miscel- laneous Users	Mfrs. of Steel Ingots and Castings	Mfrs. of Steel Castings	Iron Foundries and Miscel- laneous Users
				Total		Total
June 30, 1955	5,193,555	313,687	907,181	6,414,423	1,275,602	564,975
July 31, 1955	5,141,988	328,461	897,392	6,367,841	1,391,229	638,751
Aug. 31, 1955	5,334,960	341,008	892,803	6,568,771	1,512,441	638,932
Sept. 30, 1955	5,345,201	338,146	883,254	6,566,601	1,551,247	612,364
Oct. 31, 1955	5,371,835	345,850	876,214	6,593,899	1,479,431	628,540
Nov. 30, 1955	5,353,243	370,847	869,897	6,593,987	1,438,512	644,611
						1,889,368
						2,082,385
						2,205,932
						2,217,334
						2,161,702
						2,108,060

Table 4 - Consumption of iron and steel scrap in the United States during
October and November, by grades, in gross tons

	October	November	Year to date
No. 1 heavy melting steel	1,927,317	1,992,292	20,328,444
No. 2 heavy melting steel	574,482	586,489	6,033,643
Bundles	890,010	827,828	8,657,222
Low phosphorous scrap	395,546	387,776	3,959,344
Cast iron scrap, other than borings	979,460	996,880	10,037,131
Turnings and/or borings, alloy free	254,597	286,469	3,112,211
Rerolling rails	57,856	60,530	590,295
Scrap rails	38,621	38,357	385,627
High speed steel	4,228	4,883	54,593
Stainless steel	56,947	59,304	590,784
All other alloy iron and steel	201,791	202,761	1,899,630
All other prepared scrap	828,473	775,341	8,120,389
Unprepared scrap	234,021	222,441	2,388,816
Total (all grades)	6,443,349	6,441,351	66,158,129

DEALERS AND BROKERS

Data on shipments and stocks of iron and steel scrap for November 1955 were submitted on a voluntary basis by 592 dealers which represented approximately 30 percent of those that reported during January 1953. Based on data reported by 583 identical dealers during these two periods, shipments and stocks of iron and steel scrap in November 1955, increased 12 percent and 77 percent, respectively, over those in January 1953.

Table 5 - Reported ^{1/} shipments and stocks of iron and steel scrap on hand at dealers^T and automobile wreckers yards November 1955, in gross tons

	Shipments during November 1955	Stocks November 30, 1955
No. 1 heavy melting steel-----	116,577	70,652
No. 2 heavy melting steel-----	117,558	58,041
Bundles-----	159,271	44,024
Low phosphorous scrap-----	47,275	14,131
Cast iron scrap, other than borings-----	80,103	52,988
Turnings and/or borings, alloy free-----	44,334	24,015
Rerolling rails-----	1,328	1,148
Scrap rails-----	8,030	12,213
High speed steel-----	35	149
Stainless steel-----	2,979	3,175
All other alloy iron and steel-----	1,333	1,240
All other prepared scrap-----	29,916	20,710
Unprepared scrap-----	55,788	463,379
Total (all grades)-----	664,527	765,865

^{1/} Reported by a combined total of 592 dealers and automobile wreckers.

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in November totaled 6,441,351 gross tons which was at an average daily rate of 214,712 tons or 43 percent greater than for the year 1954.

In November, open-hearth furnaces used 63 percent of the total scrap, and 82 percent of the pig iron, the same percentages as in October; electric furnaces in November used 7 percent of the ferrous materials (scrap and pig iron) charged to all furnaces, with open-hearth using 72 percent. During 1954, these percentages were 6 and 73, respectively. Blast furnaces used 6 percent of the total scrap; the corresponding percentage for the year 1954 was 6.

During November, steel-making furnaces (open-hearth, Bessemer and electric) accounted for 76 percent of the total scrap, and 88 percent of the pig iron consumed, the same percentages as during October. In 1954, steel-making furnaces used 75 percent of the total scrap, and 88 percent of the pig iron. The remainder was used in iron-making furnaces, principally the cupola. Consumption by type of furnace during November is shown in the following table:

Table 6 - Consumption of iron and steel scrap and pig iron by manufacturers of ingots, steel castings and iron foundries during November 1955, 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-----	3,961,465	4,871,907	66,607	11,710	-	-	4,028,072	4,883,617
Bessemer*-----	36,114	334,217	1,880	70	358	35	38,352	334,322
Electric-----	689,729	13,769	138,032	2,893	12,210	1,486	839,971	18,148
Total steel-making furnaces-----	4,687,308	5,219,893	206,519	14,673	12,568	1,521	4,906,395	5,236,087
Cupola-----	80,218	64,108	38,533	2,401	834,155	402,976	952,906	469,485
Air-----	2,878	1,051	25,868	4,339	63,310	17,231	112,056	22,621
Blast 3/-----	356,725	-	-	-	-	-	356,725	-
Direct casting-----	-	141,238	-	-	-	103,792	-	245,030
Ferro-alloy-----	-	-	-	-	29,262	-	29,262	-
Miscellaneous-----	30,648	-	-	-	53,359	-	84,007	-
Total November 1955-----	5,157,777	5,426,290	270,920	21,113	1,012,054	525,520	6,441,351	5,973,223
Total October 1955-----	5,174,792	5,647,784	271,805	20,204	996,752	525,524	6,443,349	6,193,512
Total September 1955-----	4,844,798	5,383,336	278,368	20,461	937,325	499,393	6,060,491	5,903,190
Total August 1955-----	4,731,485	5,250,610	256,222	19,064	925,324	500,015	5,913,031	5,769,689
Total July 1955-----	4,489,784	5,003,293	182,850	13,483	774,496	413,774	5,447,130	5,430,550
Total June 1955-----	4,874,453	5,247,717	254,142	18,026	988,976	509,153	6,117,573	5,774,896

* Includes scrap and pig iron used in Oxygen Steel Process.

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

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

3/ Includes consumption in blast furnaces by both integrated and non-integrated mills.

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 Nov. 30 1955	Pig Iron Consumed
	Home Scrap Produced	Purchased Scrap Received	Consumed		
United States, total-----	3,543,690	3,112,325 ^{1/}	6,441,351	6,593,987	5,973,223
New England, total-----	33,007	46,496	76,439	98,508	23,052
Connecticut-----	10,793	19,151	27,220	16,553	4,230
Maine-----	268	561	518	905	264
Massachusetts-----	15,946	20,093	35,376	70,007	12,728
New Hampshire-----	712	1,356	1,580	1,836	301
Rhode Island-----	3,978	4,460	9,143	7,293	4,564
Vermont-----	1,310	875	2,602	1,914	965
Middle Atlantic, total-----	1,064,419	792,299	1,836,102	1,903,321	1,957,340
New Jersey-----	17,169	38,309	58,761	74,350	18,886
New York-----	153,058	139,918	302,848	387,043	299,192
Pennsylvania (East)-----	238,333	297,922	515,668	540,405	424,389
Pennsylvania (West)-----	655,859	316,150	959,825	901,523	1,214,873
East North Central, total-----	1,712,114	1,438,773	3,063,515	2,766,838	2,694,296
Illinois-----	321,233	389,519	642,750	714,125	464,166
Indiana-----	408,432	249,387	680,498	727,655	690,735
Michigan-----	272,928	283,164	549,158	358,787	351,314
Ohio (East)-----	570,328	360,937	931,869	647,334	1,030,227
Ohio (West)-----	99,553	114,456	186,662	253,145	137,615
Wisconsin-----	39,640	41,310	72,578	65,792	20,239
West North Central, total-----	55,638	143,999	183,599	340,751	58,412
Iowa-----	13,882	21,900	37,933	30,136	6,492
Kansas and Nebraska-----	1,888	5,975	6,807	11,325	648
Minnesota-----	23,448	32,175	56,175	140,347	46,261
Missouri-----	16,420	83,949	82,684	158,943	5,011
South Atlantic, total-----	231,420	170,231	407,052	359,754	481,537
Delaware, District of Columbia and Maryland-----	158,654	61,706	240,772	145,534	323,462
Florida and Georgia-----	5,803	16,696	30,892	12,004	3,973
North Carolina-----	2,449	2,419	4,634	6,185	1,925
South Carolina-----	845	695	2,044	1,523	1,009
Virginia and West Virginia-----	63,969	88,715	128,710	194,508	151,168
East South Central, total-----	189,906	174,403	325,092	271,302	435,645
Alabama-----	137,618	108,487	204,014	180,599	346,779
Kentucky, Mississippi and Tennessee-----	52,288	65,916	121,078	90,703	88,866
West South Central, total-----	65,445	110,731	147,375	312,572	46,500
Arkansas, Louisiana and Oklahoma-----	4,690	12,938	16,894	24,106	886
Texas-----	60,755	97,793	130,481	288,466	45,614
Rocky Mountain, total-----	93,214	40,681	130,363	142,246	177,790
Arizona and Nevada-----	703	6,903	4,800	13,030	5
Colorado and Utah-----	92,086	32,769	123,506	122,455	177,773
Idaho-----	45	338	704	2,086	-
Montana-----	380	671	1,353	4,675	12
Pacific Coast, total-----	98,527	194,712	271,814	398,695	98,651
California-----	88,682	152,005	227,866	297,123	97,459
Oregon-----	2,750	18,424	15,310	35,723	171
Washington-----	7,095	24,283	28,638	65,849	1,021

^{1/} Includes 215,786 gross tons that was shipped, transferred or otherwise disposed of during November.

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 375,845 gross tons in November and 396,706 tons in October; exports of pig iron during November totaled 407 tons and 2,846 tons in October. Scrap and pig iron import data in November were not available for this release; these data will appear in the December release.

Table 9 - Exports of iron and steel scrap from the United States by countries (U. S. Department of Commerce)

Country	November 1955		January to November 1955	
	Gross tons	Value	Gross tons	Value
Argentina	1,623	\$294,269	92,796	\$4,621,509
Austria	-	-	62,292	2,303,540
Belgium and Luxembourg	27,341	1,203,746	133,038	5,217,309
Canada	54,150	2,200,871	356,378	13,040,541
Finland	-	-	11,764	382,248
France	-	-	210,027	7,516,457
Italy	123,610	5,487,393	890,213	33,727,507
Japan	67,684	2,900,217	649,659	26,706,957
Mexico	22,820	978,090	222,773	8,101,759
Netherlands	-	-	37,892	1,322,674
Sweden	-	-	22,846	837,763
Spain	-	-	22,541	858,673
United Kingdom	45,953	1,879,294	843,577	29,861,849
West Germany	19,061	887,321	586,605	21,753,860
Yugoslavia	9,099	436,007	15,322	653,812
All others	1,504	89,890	9,609	672,146
Total	375,845	\$16,357,098	4,137,332	\$157,578,804

Table 10 - Exports of iron and steel scrap from the United States by grades (U. S. Department of Commerce)

	November 1955		January to November 1955	
	Gross tons	Value	Gross tons	Value
No. 1 and No. 2 heavy melting steel scrap	200,854	\$8,943,140	2,508,648	\$96,833,767
Baled sheet melting scrap	99,171	4,100,615	1,094,901	39,248,669
Borings, shavings and turnings	9,820	334,191	77,242	2,765,389
Iron scrap	56,087	2,396,047	353,783	13,053,265
Rolling material	4,557	243,892	31,750	1,567,477
All other scrap 2/	5,356	339,013	71,008	4,110,237
Total	375,845	\$16,357,098	4,137,332	\$157,578,804

1/ To conform with other data in this report foreign trade data include tin plate scrap.
2/ Includes terms plate, tin plate, circles, cobbles, strip and scull shear butts.

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 November 1955		
	Total scrap	Pig iron	Total charge
United States, total	4,028,072	4,883,617	8,911,689
New England, total	27,260	7,987	35,247
Connecticut, Massachusetts, and Rhode Island	27,260	7,987	35,247
Middle Atlantic, total	1,341,642	1,716,592	3,058,234
New Jersey and New York	234,471	286,430	520,901
Pennsylvania (East)	393,795	370,157	767,952
Pennsylvania (West)	713,376	1,056,005	1,769,381
East North Central, total	1,777,610	2,099,674	3,877,284
Illinois	339,249	359,939	699,188
Indiana	598,853	663,578	1,262,431
Michigan and Wisconsin	159,449	219,053	378,502
Ohio (East)	599,867	711,927	1,311,794
Ohio (West)	80,172	115,177	195,349
West North Central, total	79,325	43,073	122,398
Minnesota and Missouri	79,325	43,073	122,398
South Atlantic, total	303,510	429,400	732,910
Delaware and Maryland	207,127	286,190	493,317
Georgia and West Virginia	96,383	143,210	239,593
East South Central, total	153,152	310,012	463,164
Alabama, Kentucky and Tennessee	153,152	310,012	463,164
West South Central, total	86,542	32,224	118,766
Oklahoma and Texas	86,542	32,224	118,766
Rocky Mountain, total	104,692	163,301	267,993
Colorado and Utah	104,692	163,301	267,993
Pacific Coast, total	124,339	81,354	235,693
California and Washington	124,339	81,354	235,693

Exports of iron and steel scrap from the United States by grades, revised for February, March and August
(U. S. Department of Commerce)

	February 1955		March 1955		August 1955	
	Gross tons	Value	Gross tons	Value	Gross tons	Value
No. 1 and No. 2 heavy melting steel scrap-----	*202,819	*\$7,119,521	*218,935	*\$7,976,090	*189,863	*\$7,351,800
Baled sheet melting scrap-----	*85,864	*2,762,720	*122,988	*4,283,764	*82,232	*2,849,932
Borings, shoveling and turnings-----	10,097	288,482	20,395	714,936	326	15,276
Iron scrap-----	14,760	565,513	5,671	203,536	23,423	835,344
Rerolling material-----	3,821	174,360	1,608	78,822	5,475	269,937
All other scrap 1/-----	3,704	254,667	6,252	424,873	5,092	306,318
Total-----	*321,065	*\$11,195,263	*375,849	*\$13,682,021	*306,411	*\$11,628,607

1/ Includes terme plate, tin plate, circles, cobbles, strip and scroll shear butts.
* Revised.

Exports of iron and steel scrap from the United States, by countries, revised for February, March and August
(U. S. Department of Commerce)

Country	February 1955		March 1955		August 1955	
	Gross tons	Value	Gross tons	Value	Gross tons	Value
Argentina-----	*10,761	*\$126,635	*4,766	*\$190,389	16,559	\$795,814
Austria-----	8,905	285,135	15,413	563,704	-	-
Belgium and Luxembourg-----	26,060	912,282	253	10,019	-	-
Canada-----	4,917	164,881	4,380	125,334	33,347	1,245,673
Finland-----	137	12,205	-	-	-	-
France-----	18,916	632,997	55,465	2,090,814	*8,728	304,858
Italy-----	57,661	1,943,196	74,931	2,677,907	*77,347	*2,817,997
Japan-----	*16,277	*616,983	28,704	1,228,002	*61,085	*2,638,829
Mexico-----	19,023	649,869	16,083	571,168	20,364	742,979
Netherlands-----	13,711	477,830	8,332	291,046	-	-
Spain-----	9,553	352,811	6,218	226,841	-	-
Sweden-----	-	-	-	-	-	-
United Kingdom-----	66,935	2,331,496	81,589	2,757,403	76,291	2,509,095
West Germany-----	67,051	2,304,949	79,014	2,907,324	12,233	530,087
Yugoslavia-----	-	-	-	-	-	-
All others-----	1,158	83,994	701	42,070	457	43,275
Total-----	*321,065	*\$11,195,263	*375,849	*\$13,682,021	*306,411	*\$11,628,607

* Revised