



MINERAL INDUSTRY SURVEYS

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Douglas McKay, Secretary

J. J. Forbes, Director

For immediate release

IRON AND STEEL SCRAP
MONTHLY REPORT NO. 145

IRON AND STEEL SCRAP IN NOVEMBER 1952

Stocks of ferrous scrap (home and purchased) held by consumers on November 30 totaled 6,193,014 gross tons, decreasing for the second consecutive month, according to the Bureau of Mines, United States Department of the Interior. Purchased scrap stocks totaled 4,987,392 gross tons, slightly lower than October, but 2,145,764 tons greater than on November 30, 1951; home scrap stocks totaled 1,205,622 gross tons, the first decrease in the stocks of this material during the last eight months. Pig iron stocks totaled 2,056,630 tons, an increase of 422,281 tons over October, and 439,714 tons greater than at the same time a year ago.

The consumption of purchased scrap during November totaled 2,885,008 gross tons - 181,033 tons less than October, but the second largest monthly consumption of 1952. Home scrap consumption totaled 3,075,427 gross tons compared with 3,189,990 tons during the previous month. Pig iron consumption totaled 5,471,710 gross tons, a decrease of 340,670 tons.

Scrap used in steel-making furnaces (open-hearth, Bessemer and electric) totaled 4,675,603 gross tons compared with 4,802,440 tons during October; pig iron consumption totaled 4,836,906 gross tons compared with 5,100,174 tons during the previous month. The total melt (9,512,509 tons) of scrap and pig iron in steel-making furnaces decreased 390,105 tons from the 9,902,614 tons consumed in October and consisted of 49 percent scrap and 51 percent pig iron.

The use of scrap by the gray iron foundries during November totaled 731,825 gross tons, a decrease of 119,633 tons. Pig iron consumption by this industry (396,857 tons) decreased 66,528 tons from October.

Table 1 - Summary of stocks and consumption of iron and steel scrap and pig iron, June 1952 to November 1952, in gross tons

Date	Consumers' stocks at end of month				Consumption during month		
	Scrap			Pig iron 1/	Scrap		Pig Iron
	Purchased	Home	Total		Purchased	Home	
June 1952	4,440,057	1,135,798	5,575,855	1,490,133	1,169,102	879,849	991,043
July 1952	4,724,411	1,159,623	5,884,034	1,508,162	1,156,296	808,711	844,921
Aug. 1952	5,043,204	1,230,859	6,274,063	1,607,633	2,738,593	2,732,103	5,063,246
Sept. 1952	5,051,442	1,238,853	6,290,295	1,664,488	2,862,994	2,919,992	5,363,419
Oct. 1952	5,004,195	1,275,389	6,279,584	1,634,349	3,066,041	3,189,990	5,812,380
Nov. 1952	4,987,392	1,205,622	6,193,014	2,056,630	2,885,008	3,075,427	5,471,710

1/ Suppliers' stocks included with consumers' stocks.

Prepared by James E. Larkin, under the supervision of Norwood B. Melcher, Chief, Ferrous Metals and Alloys Branch, Minerals Division.

Interior - Bureau of Mines, Pittsburgh, Pa.
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The total consumption of ferrous materials (scrap and pig iron) in November totaled 11,432,145 gross tons, a decrease of 636,266 gross tons from the 12,068,411 tons consumed in October.

Table 2 - Consumption of purchased iron and steel scrap in the United States during October and November 1952, in gross tons

	October	November	Year to date
No. 1 heavy melting steel-----	475,073	486,930	4,367,780
No. 2 heavy melting steel-----	466,132	483,071	4,308,950
Bundles-----	683,820	624,317	5,461,429
Low phosphorous scrap-----	415,095	368,809	3,687,442
Cast iron scrap other than borings-----	362,826	323,477	3,667,315
Carbon-machine shop turnings-----	67,242	63,548	682,252
Carbon-short shoveling turnings-----	86,482	84,674	700,031
Carbon-mixed short turnings & borings-----	116,339	102,388	1,044,516
Cast iron borings-----	30,010	31,318	297,072
Rerolling rails-----	44,691	42,544	445,410
Scrap rails-----	35,009	30,978	360,167
High speed steel-----	1,120	626	10,488
Chromium-base stainless steel (10% min. chrome)			
a. Solids-----	6,490	6,564	52,358
b. Turnings-----	449	174	3,602
Chromium-nickel stainless steel			
a. Solids-----	7,813	8,394	71,786
b. Turnings-----	1,153	959	10,955
All other alloy steel			
a. Solids-----	29,031	24,644	242,175
b. Machine shop turnings-----	12,309	12,536	135,930
c. Short turnings-----	4,772	5,852	32,253
All other prepared scrap-----	150,839	134,305	1,364,405
Unprepared scrap-----	69,346	48,900	600,997
Total (all grades)-----	3,066,041	2,885,008	27,547,313

Table 3 - Consumption and inventories of iron and steel scrap and pig iron by major consuming industries during November 1952, in gross tons

	Manufacturers of Steel Ingots and Castings 1/	Manufacturers of Steel Castings 2/	Iron Foundries and Miscel- laneous Users	Total
Purchased scrap:				
Consumption-----	2,289,902	163,872	431,234	2,885,008
Stocks Nov. 30-----	3,827,198	332,762	827,432	4,987,392
Home scrap:				
Consumption-----	2,592,732	115,100	367,595	3,075,427
Stocks Nov. 30-----	1,023,304	62,988	119,330	1,205,622
Pig iron:				
Consumption-----	4,996,980	36,624	438,106	5,471,710
Stocks Nov. 30-----	992,151	71,603	992,876	2,056,630

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

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

Stocks of iron and steel scrap (home and purchased) at the end of November totaled 6,193,014 gross tons compared with 6,279,584 tons on October 31. Home scrap stocks totaled 1,205,622 tons; stocks of purchased scrap totaled 4,987,392 tons and were equivalent to a 52-day supply at the November consumption rate.

Table 4 - Consumers' stocks of scrap iron and steel and pig iron, in gross tons

	October 31	November 30
Iron and steel scrap:		
Prepared scrap-----	4,741,108	4,721,502
Unprepared or partially prepared scrap-----	263,087	265,890
Total purchased scrap-----	5,004,195	4,987,392
Home scrap-----	1,275,389	1,205,622
Total scrap-----	6,279,584	6,193,014
Pig iron 1/-----	1,634,349	2,056,630

1/ Suppliers' stocks included with consumers' stocks.

Table 5 - Stocks of iron and steel scrap and pig iron on hand at consumers' plants November 30, 1952, in gross tons

	Consumers' stocks		
	Purchased	Home	Total
No. 1 heavy melting steel-----	1,051,850	282,065	1,333,915
No. 2 heavy melting steel-----	1,006,146	49,025	1,055,171
Bundles-----	844,820	26,051	870,871
Low phosphorous scrap-----	492,770	44,955	537,725
Cast iron scrap other than borings-----	668,185	342,473	1,010,658
Carbon-machine shop turnings-----	47,154	4,091	51,245
Carbon-short shoveling turnings-----	100,605	4,362	104,967
Carbon-mixed short turnings and borings-----	114,010	2,846	116,856
Cast iron borings-----	16,337	5,252	21,589
Rerolling rails-----	85,897	2,031	87,928
Scrap rails-----	67,511	2,475	69,986
High speed steel-----	3,770	2,300	6,070
Chromium-base stainless steel (10% min. chrome)			
a. Solids-----	6,534	10,955	17,489
b. Turnings-----	1,808	112	1,920
Chromium-nickel stainless steel			
a. Solids-----	11,162	15,490	26,652
b. Turnings-----	3,293	726	4,019
All other alloy steel			
a. Solids-----	38,775	106,566	145,341
b. Machine shop turnings-----	15,584	4,936	20,520
c. Short turnings-----	22,140	830	22,970
All other prepared scrap-----	123,151	164,085	287,236
Unprepared scrap-----	265,890	133,996	399,886
Total scrap November 30-----	4,987,392	1,205,622	6,193,014
Total scrap October 31-----	5,004,195	1,275,389	6,279,584
Pig iron November 30 1/-----	--	--	2,056,630
Pig iron October 31 1/-----	--	--	1,634,349

1/ Includes suppliers' stocks.

Table 6 - Reported 1/ stocks, receipts and shipments of iron and steel scrap on hand at dealers' and automobile wreckers yards, November 30, 1952, in gross tons 2/

	Stocks Oct. 31, 1952	Receipts Nov. 1952	Shipments Nov. 1952	Stocks Nov. 30, 1952
No. 1 heavy melting steel-----	62,141	59,458	89,490	52,414
No. 2 heavy melting steel-----	86,917	227,210	278,038	81,494
Bundles				
Electric furnace bundles-----	1,583	5,553	24,552	1,543
No. 1 bundles-----	5,946	15,406	37,967	5,203
No. 2 bundles-----	39,069	91,381	263,913	41,335
Low phosphorous scrap-----	25,245	145,002	206,253	20,370
Cast iron scrap other than borings-----	163,075	143,304	165,665	166,726
Carbon-machine shop turnings-----	16,644	43,029	37,790	13,474
Carbon-short shoveling turnings-----	14,065	51,854	71,526	10,297
Carbon-mixed short turnings and borings-----	13,540	33,746	39,844	16,083
Cast iron borings-----	4,192	11,529	11,746	4,331
Rerolling rails-----	3,015	2,084	1,257	5,216
Scrap rails-----	10,829	11,557	12,122	10,052
High speed steel-----	143	23	10	115
Chromium-base 10% min. cr. stainless steel				
Solids-----	902	1,672	1,668	981
Turnings-----	502	1,248	1,490	389
Chromium-nickel stainless steel				
Solids-----	1,952	2,454	2,540	1,972
Turnings-----	599	1,148	1,390	496
All other alloy steel				
Solids-----	435	1,978	2,436	291
Machine shop turnings-----	850	2,676	2,787	734
Short turnings-----	1,226	2,085	2,252	1,189
All other prepared scrap-----	33,186	33,794	60,447	27,036
Unprepared scrap-----	660,164	490,905	91,285	657,107
Total (all grades)-----	1,146,220	1,379,096	1,406,468	1,118,848

1/ Reported by a combined total of 2,083 dealers and automobile wreckers.

2/ Data from form NPAP-32, a questionnaire for use by the Bureau of the Census, Bureau of Mines and National Production Authority.

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in November totaled 5,960,435 gross tons which was at an average daily rate of 198,681 tons or 6 percent greater than for the year 1951.

In November, open-hearth furnaces used 57 percent of the purchased scrap, 72 percent of the home scrap and 82 percent of the pig iron compared with 56, 71 and 82 percent, respectively, 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 73 percent. During 1951, these percentages were 6 and 70, respectively. Blast furnaces used 7 percent of the total purchased scrap; the corresponding percentage for the year 1951 was 7.

During November, steel-making furnaces (open-hearth, Bessemer and electric) accounted for 75 percent of the purchased scrap, 81 percent of the home scrap and 88 percent of the pig iron consumed, compared with 74, 80 and 88, respectively, during October. In 1951, steel-making furnaces used 71 percent of the purchased scrap, 77 percent of the home scrap and 86 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 7 - Consumption of iron and steel scrap and pig iron, by type of furnace, during November 1952, in gross tons

Type of furnace or equipment	Scrap			Pig Iron
	Purchased	Home	Total	
Open-hearth-----	1,652,922	2,221,071	3,873,993	4,485,306
Bessemer-----	3,034	18,534	21,568	339,576
Electric-----	518,320	261,722	780,042	12,024
Cupola-----	379,950	351,875	731,825	396,857
Air and Brackelsberg-----	30,502	49,726	80,228	20,817
Blast-----	213,747	167,638	381,385	--
Direct castings-----	--	--	--	217,130
Ferro-alloy-----	24,950	964	25,914	--
Miscellaneous-----	61,583	3,897	65,480	--
Total November 1952----	2,885,008	3,075,427	5,960,435	5,471,710
Total October 1952----	3,066,041	3,189,990	6,256,031	5,812,380

Table 8 - Consumption of iron and steel scrap and pig iron by manufacturers of steel ingots and castings 1/, during November 1952, by type of furnace, in gross tons

Type of furnace or equipment	Scrap			Pig Iron
	Purchased	Home	Total	
Open-hearth-----	1,593,609	2,181,590	3,775,199	4,468,066
Bessemer-----	1,365	17,635	19,000	339,319
Electric-----	445,174	200,072	645,246	9,262
Cupola-----	15,930	20,848	36,778	43,549
Air and Brackelsberg-----	1,534	1,518	3,052	1,097
Blast <u>2/</u> -----	213,747	167,638	381,385	--
Direct castings-----	--	--	--	135,687
Miscellaneous-----	18,543	3,431	21,974	--
Total November-----	2,289,902	2,592,732	4,882,634	4,996,980
Total October-----	2,370,673	2,622,325	4,992,998	5,262,438

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

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

Table 9 - Consumption of iron and steel scrap and pig iron by manufacturers of steel castings 1/, during November 1952, by type of furnace, in gross tons

Type of furnace or equipment	Scrap			Pig Iron
	Purchased	Home	Total	
Open-hearth-----	59,313	39,481	98,794	17,240
Bessemer-----	1,256	782	2,038	220
Electric-----	61,197	50,185	111,382	1,790
Cupola-----	33,558	12,894	46,452	12,858
Air and Brackelsberg-----	8,548	11,758	20,306	4,516
Total November-----	163,872	115,100	278,972	36,624
Total October-----	205,753	136,085	341,838	44,132

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

Table 10 - Consumption of iron and steel scrap and pig iron by iron foundries and miscellaneous users, during November 1952, by type of furnace, in gross tons

Type of furnace or equipment	Scrap			Pig Iron
	Purchased	Home	Total	
Bessemer-----	413	117	530	37
Electric-----	11,949	11,465	23,414	972
Cupola-----	330,462	318,133	648,595	340,450
Air and Brackelsberg-----	20,420	36,450	56,870	15,204
Direct castings-----	--	--	--	81,443
Ferro-alloy-----	24,950	964	25,914	--
Miscellaneous-----	43,040	466	43,506	--
Total November-----	431,234	367,595	798,829	438,106
Total October-----	489,615	431,580	921,195	505,810

Table 11 - Consumption of ferrous scrap and pig iron and consumers' stocks of scrap in the United States, by States and Regions, in gross tons

State and Region	Consumption during November 1952				Scrap stocks Nov. 30, 1952
	Scrap			Pig Iron	
	Purchased	Home	Total		
United States, total-----	2,885,008	3,075,427	5,960,435	5,471,710	6,193,014
Undistributed-----	5,811	—	5,811	—	22,790
New England, total-----	43,807	25,450	69,257	21,934	123,152
Connecticut-----	15,591	8,131	23,722	3,957	25,329
Maine-----	381	297	678	272	1,838
Massachusetts-----	20,519	13,068	33,587	12,838	77,621
New Hampshire-----	822	534	1,356	323	2,127
Rhode Island-----	5,420	2,622	8,042	3,918	7,917
Vermont-----	1,074	798	1,872	626	8,320
Middle Atlantic, total-----	873,808	991,745	1,865,553	1,797,742	1,950,559
New Jersey-----	34,546	16,359	50,905	16,547	64,652
New York-----	152,802	132,069	284,871	280,587	440,145
Pennsylvania (East)-----	233,562	184,108	417,670	271,425	362,574
Pennsylvania (West)-----	452,898	659,209	1,112,107	1,229,183	1,083,188
East North Central, total-----	1,269,771	1,406,522	2,676,293	2,465,842	2,594,413
Illinois-----	294,724	280,222	574,946	432,751	638,701
Indiana-----	192,950	360,741	553,691	670,092	512,818
Michigan-----	234,457	202,878	437,335	276,219	289,064
Ohio (East)-----	393,214	465,407	858,621	988,009	857,149
Ohio (West)-----	125,236	63,389	188,625	78,369	217,293
Wisconsin-----	29,190	33,885	63,075	19,502	79,388
West North Central, total-----	126,601	64,158	190,759	57,068	354,435
Iowa-----	23,204	16,189	39,393	6,848	50,879
Kansas-----	4,789	2,128	6,917	488	13,838
Nebraska-----	33,033	29,484	62,517	43,225	171,736
Minnesota-----	65,575	16,357	81,932	6,507	117,982
Missouri-----	191,190	196,664	387,854	447,069	227,239
South Atlantic, total-----	98,180	131,023	229,203	283,349	74,337
Delaware-----	15,052	7,157	22,209	4,895	11,476
District of Columbia-----	1,633	1,641	3,274	1,677	2,773
Maryland-----	735	958	1,693	1,014	4,364
Florida-----	75,590	55,885	131,475	156,134	134,289
Georgia-----	112,315	188,996	301,311	369,069	208,209
North Carolina-----	56,837	135,723	192,560	295,671	154,052
South Carolina-----	55,478	53,273	108,751	73,398	54,157
Tennessee-----	59,756	35,934	95,690	31,513	146,903
West South Central, total-----	8,385	3,289	11,674	865	10,991
Alabama-----	51,371	32,645	84,016	30,648	135,912
Kentucky-----	45,191	77,404	122,595	181,355	161,266
Mississippi-----	4,764	1,292	6,056	15	20,198
Texas-----	38,836	75,566	114,402	181,303	132,968
Arkansas-----	799	135	934	24	3,206
Louisiana-----	792	411	1,203	13	4,894
Mountain, total-----	156,758	88,554	245,312	100,118	404,048
Arizona-----	119,428	80,012	199,440	98,670	320,450
Nevada-----	9,985	2,485	12,470	208	21,208
Colorado-----	27,345	6,057	33,402	1,240	62,390
Utah-----					
Idaho-----					
Montana-----					
Pacific, total-----					
California-----					
Oregon-----					
Washington-----					

Table 12 - Consumption of ferrous scrap and pig iron in open-hearth furnaces in the United States, by States and Regions, in gross tons

State and Region	Consumption during November 1952			Pig Iron
	Purchased	Home	Total	
United States, total-----	1,652,922	2,221,071	3,873,993	4,485,306
New England, total-----	26,345	8,511	34,856	9,297
Connecticut-----				
Massachusetts-----	26,345	8,511	34,856	9,297
Rhode Island-----				
Middle Atlantic, total-----	585,946	784,494	1,370,440	1,560,611
New Jersey-----	89,458	113,586	203,044	261,700
New York-----	180,808	145,109	325,917	233,430
Pennsylvania (East)-----	315,680	525,799	841,479	1,065,481
Pennsylvania (West)-----				
East North Central, total-----	664,732	970,356	1,635,088	1,956,046
Illinois-----	144,031	186,413	330,444	326,143
Indiana-----	159,946	325,184	485,130	647,313
Michigan-----	61,291	82,927	144,218	196,596
Wisconsin-----	230,464	343,143	573,607	721,450
Ohio (East)-----	69,000	32,689	101,689	64,544
Ohio (West)-----				
West North Central, total-----	60,987	26,991	87,978	41,815
Minnesota-----	60,987	26,991	87,978	41,815
Missouri-----				
South Atlantic, total-----	133,896	165,392	299,288	372,132
Delaware-----				
Maryland-----	74,091	116,207	190,298	249,568
Georgia-----	59,805	49,185	108,990	122,565
West Virginia-----				
East South Central, total-----	41,255	119,417	160,672	271,713
Alabama-----	41,255	119,417	160,672	271,713
Kentucky-----				
West South Central, total-----	32,474	19,090	51,564	21,860
Oklahoma-----	32,474	19,090	51,564	21,860
Texas-----				
Mountain, total-----	30,151	69,876	100,027	166,407
Colorado-----	30,151	69,876	100,027	166,407
Utah-----				
Pacific, total-----	77,136	56,944	134,080	85,424
California-----	77,136	56,944	134,080	85,424
Washington-----				

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 18,226 gross tons in November and 36,169 tons in October; exports of pig iron during November totaled 3,858 tons and 483 tons in October. Imports of scrap totaled 13,447 gross tons in November compared with 8,367 tons in October. Imports of pig iron totaled 22,604 gross tons in November and 22,371 tons in October. In addition to the above imports of pig iron during November there was 611 tons of sponge iron, valued at \$141,424, imported, of which 558 tons came from Sweden, 51 tons from Canada and 2 tons from Germany.

Table 13 - Imports of iron and steel scrap into the United States in November 1952 and year 1952 by countries

Country	November 1952		January to November 1952	
	Gross tons	Value	Gross tons	Value
Australia-----	235	\$8,454	6,430	\$215,795
Canada and Newfoundland-----	3,728	135,562	44,958	1,813,172
Cuba-----	598	14,867	19,445	671,399
French Morocco-----	315	13,446	1,952	91,790
India-----	-	-	11,831	479,968
Japan-----	49	7,795	1,078	281,040
Union of South Africa-----	292	8,372	4,898	205,175
All other-----	8,230	231,454	35,903	1,218,690
Total-----	13,447	\$419,950	126,495	\$4,977,029

Table 14 - Exports of iron and steel scrap from the United States by countries

Country	November 1952		January to November 1952	
	Gross tons	Value	Gross tons	Value
Canada and Newfoundland-----	10,734	\$432,496	163,822	\$6,266,410
Mexico-----	5,431	188,842	115,847	3,879,853
Japan-----	401	39,554	3,318	359,313
All other-----	1,660	103,127	12,509	1,222,485
Total-----	18,226	\$763,959	295,496	\$11,722,061

1/ To conform with other data in this report foreign trade data includes tin plate scrap.