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DOUGLAS McKAY, Secretary

THOS. H. MILLER, Deputy Director

Iron and Steel Scrap
Monthly Report No. 180

IRON AND STEEL SCRAP IN OCTOBER 1955

Steel production during October, an all time high, reflected a record use of ferrous materials (scrap and pig iron), according to the Bureau of Mines, United States Department of the Interior. The use of scrap in steel furnaces (open-hearth, Bessemer and electric) totaled 4,919,190 gross tons, increasing 7 percent over September; pig iron consumption 5,452,210 tons, increased 5 percent over September, to establish a new high for the use of this commodity during any month in steel-making furnaces. The total steel-furnace melt (10,371,400 gross tons) of scrap and pig iron increased 6 percent over September to reach the largest quantity of these materials used during any month and consisted of 47 percent scrap and 53 percent pig iron. Electric furnaces used 820,642 tons of scrap during October, an increase of 9 percent.

Consumption of scrap and pig iron for all purposes totaled 12,636,861 gross tons, an increase of 6 percent over September, and a new record high. The total charge of these materials consisted of 51 percent scrap and 49 percent pig iron, unchanged from September. Scrap consumption totaled 6,443,349 tons, an increase of 6 percent over the previous month; pig iron consumption set a record high in totaling 6,193,512 tons, an increase of 5 percent over September. The daily consumption rate of ferrous materials in October (407,641 gross tons) was 5 percent higher than the previous month.

Table 1 - Summary of production, receipts, consumption and consumers' stocks of iron and steel scrap and pig iron, May 1955 to October 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/}
May 1955--	3,524,314	2,903,673	6,427,987	6,415,947	6,044,882	6,481,513	1,860,803
June 1955--	3,431,959	2,615,398	6,047,357	6,117,573	5,774,896	6,414,423	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 ^{2/}	6,471,078	6,443,349	6,193,512	6,593,899	2,161,702

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

^{2/} Excludes 230,733 gross tons of scrap shipped, transferred or otherwise disposed of during month.

Prepared by James E. Larkin and James C.O. Harris, December 29, 1955, under the supervision of Hubert W. Davis, Acting Chief, Branch of Ferrous Metals and Ferroalloys, Division of Minerals.

Stocks of ferrous materials (scrap and pig iron) held by consumers at the end of October totaled 8,755,601 gross tons, a slight decrease from the previous month. Stocks of scrap at the end of October totaled 6,593,899 tons, a slight increase over the previous month, and a record high for stocks of scrap held by consumers. Pig iron stocks totaled 2,161,702 tons, a decrease of 3 percent from the previous month.

The use of scrap by gray iron foundries during October totaled 944,685 gross tons, compared with 881,158 tons during September. Pig iron consumed by this industry totaled 470,610 gross tons, compared with 445,099 tons during the previous month.

Total scrap for consumption (home scrap produced plus purchased scrap received) totaled 6,471,078 gross tons during October, compared with 6,059,251 tons in September; home scrap accounted for 3,573,364 tons and purchased 2,897,714 tons. Of the purchases, 83 percent was received from dealers and 17 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 October, and stocks at consumers' plants October 31, 1955, in gross tons.

	Home Scrap Produced	Scrap received		Scrap Stocks Oct. 31
		From Dealers	From Others	
No. 1 heavy melting steel	1,405,103	442,603	101,099	1,714,158
No. 2 heavy melting steel	184,213	378,974	45,710	901,555
Bundles	100,041	606,213	138,531	1,040,771
Low phosphorous scrap	130,615	251,897	26,398	408,682
Cast iron scrap, other than borings	585,569	375,114	61,837	919,103
Turnings and/or borings, alloy free	45,105	213,117	40,297	220,853
Rerolling rails	1,313	35,477	27,542	168,825
Scrap rails	3,830	33,401	4,538	73,708
High speed steel	2,271	560	1,925	4,469
Stainless steel	39,931	16,625	5,855	66,572
All other alloy iron and steel	161,931	31,486	13,010	201,173
All other prepared scrap	577,863	140,130	37,688	502,939
Unprepared scrap	335,779	83,553	14,867	371,089
Total scrap	3,573,364	2,609,150*	519,297*	6,593,899

* Includes 230,733 gross tons of scrap shipped, transferred or otherwise disposed of during month.

Stocks of iron and steel scrap at the end of October totaled 6,593,899 tons, compared with 6,566,601 tons on September 30, and were equivalent to a 32-day supply at the October 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			
	Mfgrs. of Steel Ingots and Castings	Mfgrs. of Steel Castings	Iron Foundries and Miscellaneous Users	Total	Mfgrs. of Steel Ingots and Castings	Mfgrs. of Steel Castings	Iron Foundries and Miscellaneous Users	Total
May 31, 1955	5,244,960	322,265	914,288	6,481,513	1,335,787	38,324	486,692	1,860,803
June 30, 1955	5,193,555	313,687	907,181	6,414,423	1,275,602	48,791	464,975	1,789,368
July 31, 1955	5,141,988	328,461	897,992	6,367,841	1,391,228	52,405	638,751	2,082,385
Aug. 31, 1955	5,334,960	341,808	892,803	6,568,771	1,312,443	54,599	638,932	2,005,932
Sept. 30, 1955	5,345,201	338,146	883,254	6,566,601	1,351,247	53,723	612,366	2,017,334
Oct. 31, 1955	5,371,835	345,850	876,214	6,593,899	1,479,431	53,731	628,546	2,161,702

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

	September	October	Year to date
No. 1 heavy melting steel	1,839,345	1,927,317	18,336,132
No. 2 heavy melting steel	538,261	574,482	5,447,154
Bundles	773,219	890,810	7,829,394
Low phosphorous scrap	386,741	395,146	3,571,568
Cast iron scrap other than borings	947,498	979,460	9,040,251
Turnings and/or borings, alloy free	251,465	254,597	2,825,742
Rerolling rails	60,345	37,856	529,765
Scrap rails	37,850	38,621	347,270
High speed steel	4,054	4,228	44,710
Stainless steel	60,805	36,347	531,480
All other alloy iron and steel	179,153	201,391	1,696,869
All other prepared scrap	752,517	823,273	7,345,048
Unprepared scrap	227,171	234,821	2,166,385
Total (all grades)	6,060,491	6,423,349	59,716,778

DEALERS AND BROKERS

Data on shipments and stocks of iron and steel scrap for October 1955 were submitted on a voluntary basis by 595 dealers which represented approximately 30 percent of those that reported during January 1953. Based on data reported by 586 identical dealers during these two periods, shipments and stocks of iron and steel scrap in October 1955, increased 12 percent and 76 percent, respectively, over those in January 1953.

Table 5 - Reported 1/ shipments and stocks of iron and steel scrap on hand at dealers and automobile wreckers, as of October 1955, in gross tons

	Shipments during October 1955	Stocks October 31, 1955
No. 1 heavy melting steel	103,124	73,207
No. 2 heavy melting steel	122,833	60,379
Bundles	159,222	44,915
Low phosphorous scrap	50,207	14,371
Cast iron scrap other than borings	83,203	52,410
Turnings and/or borings, alloy free	46,663	24,679
Rerolling rails	1,306	634
Scrap rails	7,577	14,154
High speed steel	53	132
Stainless steel	2,960	3,249
All other alloy iron and steel	2,715	1,227
All other prepared scrap	31,342	21,637
Unprepared scrap	53,134	451,615
Total (all grades)	664,344	762,709

1/ Reported by a combined total of 595 dealers and automobile wreckers.

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in October totaled 6,443,349 gross tons which was at an average daily rate of 207,850 tons or 38 percent greater than for the year 1954.

In October, open-hearth furnaces used 63 percent of the total scrap, and 82 percent of the pig iron, the same percentages as in September; electric furnaces in October 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 October, 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 September. 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 October 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 October 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-----	3,995,578	5,066,670	64,487	10,711	-	-	4,060,065	5,077,381
Bessemer*-----	36,173	351,404	1,844	75	466	22	38,483	351,501
Electric-----	674,837	19,458	135,120	2,524	10,685	1,346	820,642	23,328
Total steel-making furnaces-----	4,706,588	5,437,532	201,451	13,310	11,151	1,368	4,919,190	5,452,210
Cupola-----	80,793	66,025	41,536	2,422	822,356	402,163	944,685	470,610
Air-----	2,703	1,284	28,818	4,472	81,890	16,903	113,411	22,659
Blast 3/-----	357,419	-	-	-	-	-	357,419	-
Direct casting-----	-	142,943	-	-	-	105,090	-	248,033
Ferro-alloy-----	-	-	-	-	-	-	26,810	-
Miscellaneous-----	27,289	-	-	-	54,545	-	81,834	-
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	988,978	509,153	6,117,573	5,774,896
Total May 1955-----	5,183,562	5,511,788	244,320	17,989	988,065	515,105	6,415,947	6,044,882

* 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 Oct. 31 1955	Pig Iron Consumed
	Home Scrap Produced	Purchased Scrap Received	Consumed		
United States, total-----	3,573,364	3,128,447 ^{1/}	6,443,349	6,593,899	6,193,512
New England, total-----	32,177	48,015	76,352	98,361	22,573
Connecticut-----	10,000	19,294	27,711	14,567	4,697
Maine-----	288	601	583	860	292
Massachusetts-----	16,370	20,372	35,893	71,336	11,939
New Hampshire-----	676	1,377	1,400	1,390	305
Rhode Island-----	3,862	4,844	8,421	7,877	4,461
Vermont-----	981	1,527	2,344	2,331	879
Middle Atlantic, total-----	1,076,948	829,361	1,875,282	1,949,811	2,051,408
New Jersey-----	17,555	39,935	56,558	79,273	18,481
New York-----	157,296	156,887	328,879	399,317	318,237
Pennsylvania (East)-----	263,125	303,771	564,706	586,889	485,526
Pennsylvania (West)-----	638,972	328,768	925,139	884,332	1,229,164
East North Central, total-----	1,738,907	1,420,208	3,040,092	2,779,354	2,813,596
Illinois-----	325,178	373,283	636,556	669,919	472,746
Indiana-----	411,895	286,266	650,709	764,003	749,436
Michigan-----	275,794	274,635	532,498	367,621	359,566
Ohio (East)-----	585,511	343,033	956,224	679,174	1,066,306
Ohio (West)-----	98,452	100,503	189,994	234,750	144,624
Wisconsin-----	42,077	42,488	74,111	63,887	20,918
West North Central, total-----	56,685	141,567	179,987	327,167	58,408
Iowa-----	13,870	26,541	35,043	32,964	6,768
Kansas and Nebraska-----	1,749	5,769	6,410	10,412	514
Minnesota-----	24,730	33,994	54,697	141,831	46,786
Missouri-----	16,336	75,263	83,837	141,960	4,340
South Atlantic, total-----	248,116	167,870	403,574	370,167	500,521
Delaware, District of Columbia and Maryland-----	173,278	65,779	239,644	166,431	338,642
Florida and Georgia-----	5,274	13,338	21,513	20,521	3,281
North Carolina-----	2,037	2,338	4,491	6,057	1,998
South Carolina-----	834	812	2,162	1,647	1,037
Virginia and West Virginia-----	66,693	85,603	135,764	175,511	155,563
East South Central, total-----	191,778	184,528	348,550	256,399	454,364
Alabama-----	137,511	99,051	214,946	156,895	364,784
Kentucky, Mississippi and Tennessee-----	54,267	85,477	133,604	99,504	89,580
West South Central, total-----	58,641	104,534	151,122	288,605	57,030
Arkansas, Louisiana and Oklahoma-----	4,262	12,662	16,621	23,794	717
Texas-----	54,379	91,872	134,501	264,811	56,313
Rocky Mountain, total-----	86,803	47,126	123,998	141,979	175,798
Arizona and Nevada-----	619	3,997	4,610	12,725	5
Colorado and Utah-----	85,707	41,359	117,234	121,860	175,781
Idaho-----	87	696	762	2,407	-
Montana-----	390	1,074	1,392	4,987	12
Pacific Coast, total-----	83,309	185,238	244,392	382,056	59,814
California-----	72,578	145,898	200,776	287,315	57,361
Oregon-----	3,001	17,004	16,290	30,081	114
Washington-----	7,730	22,336	27,326	64,660	2,339

^{1/} Includes 230,733 gross tons that was shipped, transferred or otherwise disposed of during October.

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 October 1955		
	Total scrap	Pig iron	Total Charge
United States, total-----	4,060,065	5,077,381	9,137,446
New England, total-----	35,712	7,233	42,945
Connecticut, Massachusetts, and Rhode Island-----	35,712	7,233	42,945
Middle Atlantic, total-----	1,390,791	1,803,263	3,194,054
New Jersey and New York-----	255,375	305,226	560,601
Pennsylvania (East)-----	427,117	437,899	865,016
Pennsylvania (West)-----	708,299	1,060,138	1,768,437
East North Central, total-----	1,777,081	2,203,341	3,980,422
Illinois-----	340,236	367,987	708,223
Indiana-----	570,083	724,091	1,294,174
Michigan and Wisconsin-----	165,952	225,456	391,408
Ohio (East)-----	614,774	762,624	1,377,398
Ohio (West)-----	86,036	123,183	209,219
West North Central, total-----	79,659	43,528	123,187
Minnesota and Missouri-----	79,659	43,528	123,187
South Atlantic, total-----	304,017	449,331	753,348
Delaware and Maryland-----	204,647	302,489	507,136
Georgia and West Virginia-----	99,370	146,842	246,212
East South Central, total-----	160,391	323,469	483,860
Alabama, Kentucky and Tennessee-----	160,391	323,469	483,860
West South Central, total-----	90,021	41,695	131,716
Oklahoma and Texas-----	90,021	41,695	131,716
Rocky Mountain, total-----	98,557	160,506	259,063
Colorado and Utah-----	98,557	160,506	259,063
Pacific Coast, total-----	123,836	45,015	168,851
California and Washington-----	123,836	45,015	168,851

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 396,706 gross tons in October and 371,485 tons in September. These figures incorporate revisions in exports for February, April, May, June, July and August. Exports of pig iron during October totaled 2,846 tons and 85 tons in September. Imports of scrap totaled 17,667 gross tons in October compared with 26,390 tons in September. Imports of pig iron totaled 40,574 gross tons in October and 34,688 tons in September. In addition to the above imports of pig iron during October there was 471 tons of sponge iron, valued at \$62,671, imported, of which 44 tons came from Canada and 427 tons from Sweden.

Table 9 - Imports of iron and steel scrap into the United States
in October 1955 and year 1955 by countries
(U. S. Department of Commerce)

Country	October 1955		January to October 1955	
	Gross tons	Value	Gross tons	Value
Canada and Newfoundland	16,860	\$628,920	157,091	\$5,370,933
Japan	99	18,060	373	99,534
Peru	-	-	9,423	125,000
Union of South Africa	-	-	551	15,699
All others	768	10,081	5,341	105,753
Total	17,667	\$657,061	172,779	\$5,716,919

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

Country	October 1955		January to October 1955	
	Gross tons	Value	Gross tons	Value
Argentina	15,017	\$927,798	91,721	\$4,459,749
Austria	22	5,758	62,292	2,303,540
Belgium and Luxembourg	24,921	1,863,300	105,697	4,013,563
Canada	41,426	1,588,104	302,228	10,839,670
Finland	-	-	11,764	382,248
France	-	-	210,028	7,516,457
Italy	103,496	4,495,568	758,035	27,892,265
Japan	69,460	3,263,878	551,990	23,798,668
Mexico	27,578	1,062,729	199,933	7,123,669
Netherlands	48	4,008	37,892	1,322,874
Spain	-	-	22,846	837,763
Sweden	-	-	22,541	858,673
United Kingdom	85,613	3,331,434	797,624	27,982,545
West Germany	28,135	1,243,230	567,544	20,866,539
Yugoslavia	-	-	6,223	217,805
All others	990	87,097	8,105	582,256
Total	396,706	\$17,072,904	3,756,483	\$140,998,294

Table 11 - Exports of iron and steel scrap from the United States
by grades
(U. S. Department of Commerce)

	October 1955		January to October 1955	
	Gross tons	Value	Gross tons	Value
No. 1 and No. 2 heavy melting steel scrap	246,558	\$10,958,127	2,304,542	\$87,742,381
Baled sheet melting scrap	97,789	3,995,941	994,909	35,112,721
Borings, shovellings and turnings	2,223	61,088	67,422	2,431,198
Iron scrap	41,703	1,565,990	297,696	10,657,218
Reolling material	3,360	165,635	27,193	1,323,585
All other scrap 2/	5,073	326,123	64,721	3,731,191
Total	396,706	\$17,072,904	3,756,483	\$140,998,294

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

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

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

	February 1955		April 1955		May 1955		June 1955		July 1955		August 1955	
	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value
No. 1 and No. 2 heavy melting steel scrap	*205,133	*7,232,589	*183,163	*6,827,582	*276,374	*10,320,847	*297,943	*11,036,798	*252,104	*9,509,260	183,652	7,093,695
Baled sheet melting scrap	86,810	2,794,681	*89,120	*3,158,906	*121,679	*4,270,030	*101,762	*3,642,395	*104,969	*3,626,894	*79,876	*2,760,188
Borings, shovels and turnings	10,097	288,482	10,079	386,059	571	16,962	19,846	822,215	1,398	32,673	326	15,276
Iron scrap	14,760	565,513	*31,537	*1,139,351	*42,188	*1,536,153	44,146	1,484,474	38,802	1,255,758	23,423	835,344
Re-rolling material	3,821	174,360	1,017	51,236	1,878	92,237	1,660	81,691	3,982	212,855	5,475	269,937
All other scrap 1/	3,704	254,667	18,865	821,668	5,487	324,157	4,875	308,171	6,345	390,911	4,161	266,285
Total	*324,325	*11,310,292	*333,781	*12,384,802	*448,177	*16,560,386	*470,232	*17,375,744	*407,600	*15,028,351	*296,913	*11,240,725

1/ Includes terms 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, April, May, June, July and August
(U. S. Department of Commerce)

Country	February 1955		April 1955		May 1955		June 1955		July 1955		August 1955	
	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value	Gross Tons	Value
Argentina	13,075	509,703	10,531	422,134	1,593	65,919	4,122	226,623	7,831	483,808	16,559	795,814
Austria	8,905	285,135	*11,399	*456,601	*9,000	*336,066	-	-	17,553	656,276	-	-
Belgium and Luxembourg	26,060	912,282	17,320	659,842	11,414	410,791	8,349	287,203	-	-	-	-
Canada	4,917	164,881	35,065	1,257,602	41,854	1,463,764	65,387	2,196,662	*34,988	*1,232,591	33,347	1,245,673
Finland	137	12,205	-	-	-	-	-	-	-	-	-	-
France	18,916	632,997	18,317	696,690	26,833	966,937	-	-	35,223	1,187,361	8,729	304,858
Italy	57,661	1,943,196	*58,571	*2,127,466	*87,250	*3,174,840	*97,680	*3,403,441	83,689	2,771,822	68,779	2,470,148
Japan	*17,223	*648,944	16,468	780,726	*58,794	*2,524,294	*78,724	*3,513,883	113,064	4,639,381	*60,154	*2,598,796
Mexico	19,023	649,869	16,471	564,078	19,171	670,610	23,196	806,694	23,265	845,730	20,364	742,979
Netherlands	13,711	477,830	45	7,350	28	3,197	-	-	-	-	-	-
Spain	9,553	352,811	*5,843	*213,161	1,232	44,950	-	-	-	-	-	-
Sweden	-	-	-	-	14,063	506,409	-	-	-	-	-	-
United Kingdom	66,935	2,331,496	74,551	2,508,375	84,995	3,032,456	64,619	2,255,429	73,931	2,507,596	76,291	2,509,095
West Germany	67,051	2,304,949	*68,677	*2,642,836	*90,884	*3,267,175	127,296	4,612,177	17,636	678,453	12,233	530,087
Yugoslavia	-	-	-	-	-	-	-	-	-	-	-	-
All others	1,158	83,994	523	47,941	1,066	72,978	859	73,632	420	25,333	457	43,275
Total	*324,325	*11,310,292	*333,781	*12,384,802	*448,177	*16,560,386	*470,232	*17,375,744	*407,600	*15,028,351	*296,913	*11,240,725

* Revised.