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DOUGLAS McKAY, Secretary

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Iron and Steel Scrap
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IRON AND STEEL SCRAP IN APRIL 1954

Ferrous scrap consumption during April totaled 4,582,862 gross tons, a slight decrease from the previous month, according to the Bureau of Mines, United States Department of the Interior. Pig iron consumption totaled 4,021,957 gross tons, a decrease of 8 percent from March, and was the lowest, exclusive of strike months, since February 1950. The total melt (8,604,819 gross tons) consisted of 53.3 percent scrap and 46.7 percent pig iron.

Steel-making furnaces (open-hearth, Bessemer, and electric) used 3,417,292 gross tons of scrap, virtually unchanged from the previous month; pig iron consumption totaled 3,504,576 tons, an 8 percent decrease from March. The total melt (6,921,868 tons) of scrap and pig iron in steel-making furnaces, decreased 4 percent from March and consisted of 49 percent scrap and 51 percent pig iron. Electric furnaces used 518,048 tons of scrap during April, a slight increase over March.

Table 1 - Summary of production, receipts, consumption and consumers' stocks of iron and steel scrap and pig iron, November 1953 to April 1954, 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/}
Nov. 1953--	3,100,179	1,989,039	5,089,218	5,064,565	5,324,537	6,085,347	2,375,077
Dec. 1953--	3,099,571	1,889,286	4,988,857	4,690,277	5,091,786	6,385,494	2,500,329
Jan. 1954--	2,894,688	1,947,419	4,842,107	4,574,384	4,933,282	6,253,580	2,467,579
Feb. 1954--	2,714,085	1,577,305	4,291,390	4,385,340	4,293,942	6,196,473	2,525,583
Mar. 1954--	2,840,369	1,715,619	4,555,988	4,637,573	4,367,814	6,081,546	2,551,518
Apr. 1954--	2,654,984	1,713,529 ^{2/}	4,368,513	4,582,862	4,021,957	5,866,976	2,508,155

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

^{2/} Excludes 191,155 gross tons of scrap shipped, transferred, or otherwise disposed of during month.

Prepared by James E. Larkin and James C. O. Harris, July 2, 1954, under the supervision of Norwood B. Melcher, Chief, Ferrous Metals and Alloys Branch, Minerals Division.

Stocks of ferrous materials (scrap and pig iron) held by consumers at the end of April totaled 8,375,131 tons, a decrease of 3 percent from the previous month. Stocks of scrap held by consumers at the end of April totaled 5,866,976 tons, a decrease of 4 percent from the previous month; pig iron stocks totaled 2,508,155 tons, a decrease of 2 percent from the previous month.

The use of scrap by the gray iron foundries during April totaled 748,766 gross tons, a decrease of 4 percent from March. Pig iron consumption by this industry also decreased 4 percent and totaled 375,045 gross tons.

Total scrap for consumption (home scrap produced and purchased scrap received) totaled 4,368,513 gross tons during April, compared with 4,555,988 tons in March. Home scrap accounted for 2,654,984 tons and purchases 1,713,599 tons; of the purchases, 81 percent was received from dealers and 19 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 April, and stocks at consumers' plants April 30, 1954, in gross tons

	Home Scrap Produced	Scrap received		Scrap stocks April 30
		From Dealers	From Others	
No. 1 heavy melting steel-----	1,021,505	270,247	42,946	1,494,643
No. 2 heavy melting steel-----	162,630	198,531	16,122	768,829
Bundles-----	93,099	302,289	103,194	795,687
Low phosphorous scrap-----	86,322	170,050	21,597	489,524
Cast iron scrap, other than borings	452,084	247,656	48,671	831,310
Turnings and/or borings, alloy free-	38,824	156,011	36,477	217,637
Rerolling rails-----	1,627	21,407	15,821	125,587
Scrap rails-----	2,228	22,923	4,036	66,142
High speed steel-----	1,385	543	255	4,905
Stainless steel-----	26,625	10,424	2,493	76,812
All other alloy iron and steel----	101,920	10,565	13,519	244,732
All other prepared scrap-----	401,952	99,354	28,809	392,408
Unprepared scrap-----	264,783	32,014	28,730	358,760
Total scrap-----	2,654,984	1,542,014*	362,670*	5,866,976

* Includes 191,155 gross tons of scrap shipped, transferred or otherwise disposed of during month.

Stocks of iron and steel scrap at the end of April totaled 5,866,976 gross tons, compared with 6,081,546 tons on March 31, and were equivalent to a 38-day supply at the April 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		
	Mfgs. of Steel Ingots and Castings	Mfgs. of Steel Castings	Iron Foundries and Miscel- laneous Users	Mfgs. of Steel Ingots and Castings	Mfgs. of Steel Castings	Iron Foundries and Miscel- laneous Users
Nov. 30, 1953-	4,898,503	334,051	852,793	1,654,520	61,481	659,076
Dec. 31, 1953-	5,220,747	319,659	845,088	1,817,287	52,173	630,869
Jan. 31, 1954-	5,128,559	322,275	802,746	1,828,991	54,774	583,814
Feb. 28, 1954-	5,065,532	326,731	804,210	1,920,518	53,847	551,218
Mar. 31, 1954-	4,940,951	328,154	812,441	2,015,452	49,664	486,402
Apr. 30, 1954-	4,733,027	339,269	794,680	1,971,508	50,189	486,458
						2,375,077
						2,500,329
						2,467,579
						2,525,583
						2,551,518
						2,508,155

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

	March	April	Year to date
No. 1 heavy melting steel-----	1,391,252	1,417,723	5,561,827
No. 2 heavy melting steel-----	452,121	437,851	1,734,123
Bundles-----	498,971	519,777	1,968,062
Low phosphorous scrap-----	285,218	274,401	1,134,491
Cast iron scrap other than borings-----	756,883	733,258	2,899,385
Turnings and/or borings, alloy free-----	198,237	196,239	754,008
Rerolling rails-----	49,486	43,896	170,180
Scrap rails-----	29,809	29,837	119,807
High speed steel-----	2,277	2,035	9,204
Stainless steel-----	42,915	40,941	156,569
All other alloy iron and steel-----	119,913	117,607	477,696
All other prepared scrap-----	616,351	598,450	2,454,536
Unprepared scrap-----	194,140	170,847	740,271
Total (all grades)-----	4,637,573	4,582,862	18,180,159

DEALERS AND BROKERS

Companies reporting during April, indicated that by the end of the month stocks had increased 7 percent over March 31. During April, dealers and automobile wreckers received virtually the same amount of scrap in their yards as during March, with shipments at the same level as the previous month. Receipts in April, however, were 22 percent greater than shipments. Of the scrap handled by dealers during April, five grades (No. 1 and No. 2 heavy melting steel scrap, bundles, low phosphorous, and cast iron scrap other than borings), represented 47 percent of the receipts, 70 percent of the shipments and 31 percent of the stocks at the end of the month. Unprepared scrap received in dealers and automobile wreckers yards and stocks held in their yards constituted 35 percent and 57 percent, respectively, of total receipts and stocks.

Table 5 - Dealers and automobile wreckers, receipts, shipments and stocks of iron and steel scrap as percentage of previous month

	Receipts during April 1954	Shipments during April 1954	Stocks Apr. 30, 1954
No. 1 heavy melting steel-----	133	105	109
No. 2 heavy melting steel-----	96	92	112
Bundles-----	105	110	107
Low phosphorous scrap-----	92	90	120
Cast iron scrap other than borings----	93	79	104
Turnings and/or borings, alloy free----	98	120	109
Rerolling rails-----	246	154	98
Scrap rails-----	70	102	97
High speed steel-----	-	-	100
Stainless steel-----	107	87	129
All other alloy iron and steel-----	92	97	103
All other prepared scrap-----	106	107	92
Unprepared scrap-----	99	115	107
Total (all grades)-----	100	100	107

CONSUMPTION OF SCRAP IRON AND STEEL AND PIG IRON

Consumption of scrap in April totaled 4,582,862 gross tons which was at an average daily rate of 152,762 tons or 19 percent less than for the year 1953.

In April, open-hearth furnaces used 63 percent of the total scrap, and 83 percent of the pig iron, compared with 62 and 82 percent, respectively, in March; electric furnaces in April used 6 percent of the ferrous materials (scrap and pig iron) charged to all furnaces, with open-hearth using 72 percent. During 1953, these percentages were 6 and 73, respectively. Blast furnaces used 6 percent of the total purchased scrap; the corresponding percentage for the year 1953 was 6.

During April, steel-making furnaces (open-hearth, Bessemer and electric) accounted for 75 percent of the total scrap, and 87 percent of the pig iron consumed, compared with 74 and 87, respectively, during March. In 1953, steel-making furnaces used 77 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 April 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 April 1954, by type of furnace, in gross tons

Type of furnace	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-----	2,839,959	3,321,450	45,885	6,834	-	-	2,885,844	3,328,284
Bessemer-----	11,723	165,695	1,259	86	418	14	13,400	165,795
Electric-----	408,923	7,631	94,830	1,560	14,295	1,306	518,048	10,497
Total steel-making furnaces	3,260,605	3,494,776	141,974	8,480	14,713	1,320	3,417,292	3,504,576
Cupola-----	57,263	53,645	46,544	12,417	644,959	308,983	748,766	375,045
Blast 3/-----	252,295	-	-	-	-	-	252,295	-
Direct castings-----	-	74,231	-	-	-	41,552	-	115,783
Air-----	2,724	1,069	17,779	4,446	58,680	21,038	79,183	26,553
Ferro-alloy-----	-	-	-	-	22,996	-	22,996	-
Miscellaneous-----	19,032	-	-	-	43,298	-	62,330	-
Total April 1954-----	3,591,919	3,623,721	206,297	25,343	781,646	372,893	4,582,862	4,021,957
Total March 1954-----	3,589,446	3,947,482	228,932	26,420	819,195	393,912	4,637,573	4,367,814
Total February 1954-----	3,449,686	3,908,997	205,178	25,309	730,476	359,636	4,385,340	4,293,942
Total January 1954-----	3,630,319	4,536,898	210,694	25,826	733,371	370,558	4,574,384	4,933,282
Total December 1953-----	3,682,368	4,659,947	232,260	30,954	775,649	400,885	4,690,277	5,091,786
Total November 1953-----	4,150,387	4,899,593	200,630	25,972	713,548	398,972	5,064,565	5,324,537

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 Apr. 30, 1954	Pig iron Consumed
	Home Scrap Produced	Purchased Scrap Received	Consumed		
United States, total-----	2,654,984	1,904,684 ^{1/}	4,582,862	5,866,976	4,021,957
Undistributed-----	379	7,164	4,966	25,308	—
New England, total-----	26,566	24,254	55,404	106,661	18,484
Connecticut-----	6,600	4,437	14,488	22,640	3,872
Maine-----	300	577	625	1,967	258
Massachusetts-----	15,534	13,592	30,959	66,982	10,129
New Hampshire-----	749	810	1,365	1,197	332
Rhode Island-----	2,508	4,169	5,941	9,427	3,176
Vermont-----	875	669	2,026	4,448	717
Middle Atlantic, total-----	754,785	445,417	1,176,411	1,869,649	1,269,224
New Jersey-----	15,046	36,128	47,745	57,828	16,980
New York-----	108,540	90,189	193,893	353,197	205,160
Pennsylvania (East)-----	149,404	104,824	275,787	553,504	237,522
Pennsylvania (West)-----	481,795	214,276	658,986	905,120	809,562
East North Central, total-----	1,277,025	923,742	2,234,375	2,433,290	1,778,660
Illinois-----	236,671	210,712	463,951	544,167	281,886
Indiana-----	347,667	187,352	521,125	560,788	560,458
Michigan-----	197,798	225,244	401,697	351,490	201,548
Ohio (East)-----	385,892	208,365	653,080	721,795	630,431
Ohio (West)-----	73,616	66,135	137,000	162,657	88,058
Wisconsin-----	35,381	25,934	57,522	52,393	16,279
West North Central, total-----	45,990	83,093	134,310	296,713	46,002
Iowa-----	13,702	22,055	31,297	33,669	6,561
Kansas and Nebraska-----	1,461	4,013	4,739	12,657	514
Minnesota-----	17,675	11,900	36,165	120,033	36,130
Missouri-----	13,152	45,125	62,109	130,354	2,797
South Atlantic, total-----	194,776	94,630	293,958	278,956	408,088
Delaware, District of Columbia and Maryland-----	133,596	29,195	173,115	137,447	277,917
Florida and Georgia-----	4,010	11,967	14,725	9,748	1,105
North Carolina-----	4,004	2,895	4,436	4,046	1,033
South Carolina-----	858	590	1,638	2,424	977
Virginia and West Virginia-----	52,308	49,983	100,044	125,291	127,056
East South Central, total-----	142,055	110,721	245,836	205,266	268,868
Alabama-----	99,184	70,657	161,808	137,237	220,662
Kentucky, Mississippi, and Tennessee-----	42,871	40,064	84,028	68,029	48,206
West South Central, total-----	45,487	65,328	107,749	190,125	48,274
Arkansas, Louisiana, and Oklahoma-----	2,955	9,826	11,747	21,780	698
Texas-----	42,532	55,502	96,002	168,345	47,576
Rocky Mountain, total-----	80,472	33,638	134,133	96,097	125,552
Arizona and Nevada-----	454	7,877	4,895	19,629	5
Colorado and Utah-----	79,644	24,376	127,168	68,715	125,521
Idaho-----	61	639	806	2,443	18
Montana-----	313	746	1,264	5,310	8
Pacific Coast, total-----	87,449	116,697	195,720	364,911	58,805
California-----	78,692	87,884	160,278	291,104	58,533
Oregon-----	2,746	12,524	14,030	20,071	94
Washington-----	6,011	16,289	21,412	53,736	178

^{1/} Includes 191,155 gross tons that was shipped, transferred or otherwise disposed of during April.

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 April 1954		
	Total scrap	Pig iron	Total charge
United States, total-----	2,885,844	3,328,284	6,214,128
New England, total-----	18,596	5,781	24,377
Connecticut, Massachusetts, and Rhode Island-----	18,596	5,781	24,377
Middle Atlantic, total-----	832,387	1,127,328	1,959,715
New Jersey and New York-----	138,574	191,630	330,204
Pennsylvania (East)-----	192,564	211,126	403,690
Pennsylvania (West)-----	501,249	724,572	1,225,821
East North Central, total-----	1,364,920	1,426,613	2,791,533
Illinois-----	265,077	214,363	479,440
Indiana-----	450,839	538,845	989,684
Michigan and Wisconsin-----	153,348	119,870	273,218
Ohio (East)-----	434,782	482,238	917,020
Ohio (West)-----	60,874	71,297	132,171
West North Central, total-----	52,873	33,722	86,595
Minnesota and Missouri-----	52,873	33,722	86,595
South Atlantic, total-----	223,065	367,812	590,877
Delaware and Maryland-----	147,531	248,037	395,568
Georgia and West Virginia-----	75,534	119,775	195,309
East South Central, total-----	111,855	169,125	280,980
Alabama and Kentucky-----	111,855	169,125	280,980
West South Central, total-----	61,470	36,400	97,870
Oklahoma and Texas-----	61,470	36,400	97,870
Rocky Mountain, total-----	111,499	112,937	224,436
Colorado and Utah-----	111,499	112,937	224,436
Pacific Coast, total-----	109,179	48,566	157,745
California and Washington-----	109,179	48,566	157,745

FOREIGN TRADE 1/

According to the Bureau of the Census, exports of iron and steel scrap totaled 59,425 gross tons in April and 92,799 tons in March; exports of pig iron during April totaled 741 tons and 410 tons in March. Imports of scrap totaled 5,051 gross tons in April compared with 3,449 tons in March. Imports of pig iron totaled 21,187 gross tons in April and 4,601 tons in March. In addition to the above imports of pig iron during April there was 784 tons of sponge iron, valued at \$146,575, imported, of which 747 tons came from Sweden and 37 tons from Canada.

Table 9 - Imports of iron and steel scrap into the United States
in April 1954 and year 1954 by countries

Country	April 1954		January to April 1954	
	Gross tons	Value	Gross tons	Value
Canada and Newfoundland-----	4,513	\$151,139	12,418	\$424,369
Cuba-----	137	385	480	1,406
French Morocco-----	145	5,164	397	14,118
Japan-----	-	-	115	19,847
Union of South Africa-----	47	1,301	308	8,957
All others-----	209	22,712	948	83,813
Total-----	5,051	\$180,701	14,666	\$552,510

Table 10 - Exports of iron and steel scrap from the United States
by countries

Country	April 1954		January to April 1954	
	Gross tons	Value	Gross tons	Value
Canada and Newfoundland-----	6,552	\$206,767	14,190	\$420,610
Mexico-----	17,113	469,606	63,567	1,831,548
Japan-----	34,693	1,282,459	177,275	6,996,326
All other-----	1,067	91,906	11,376	561,406
Total-----	59,425	\$2,050,738	266,408	\$9,809,890

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