



MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON, D. C. 20240



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Iron and Steel Scrap, Monthly

IRON AND STEEL SCRAP IN AUGUST 1969

Consumption of ferrous scrap and pig iron turned upward in August, increasing 3 and 1 percent, respectively, over that for July, according to the Bureau of Mines, U.S. Department of the Interior. The increase in domestic demand was met by withdrawals from consumer inventories; available supply of both scrap and pig iron decreased. A high demand for scrap in Japan, presumably because of a coking-coal shortage, pushed exports of scrap in August to a near-record monthly total.

The Jeffrey Manufacturing Co., a division of Jeffrey Galion, Inc., of Columbus, Ohio, and a company with 90 years of experience in crushing, conveying, and magnetic separating, has introduced two automobile shredding systems - a large system with a capacity range of 4,000 to 5,000 tons per month and a small system with a capacity of about 1,500 tons per month. In addition to a prototype installation at the Industrial Scrap and Waste Company, Inc., Greenville, South Carolina, two high-capacity systems are being installed in East Providence, Rhode Island, for the Metal Processing Company, a subsidiary of Steelmet, Inc., and in Jacksonville, Florida, for Associated Iron and Metal Co., Inc. A prototype of the small shredding system was developed and is operating in Vancouver, British Columbia, at the N and S Steel Company, Ltd.

Aid in coping with Colorado's air and land pollution problems was provided with the dedication of a \$2 million automobile shredder in Denver by National Metal Processing Co. The new hammer mill, claimed to be the largest of its kind in the Rocky Mountain area, has an estimated capacity of 500 junk cars a day and presents no smog hazard since preburning of cars is not required. National Metal Processing Co. will operate the auto shredding plant in association with Newell Manufacturing Co., San Antonio, Texas, manufacturer of the hammer mill. Prime customer for the plant output will be CF&I Steel Corporation, as well as local foundries.

Eastman Kodak Company has ordered a 45-ton solid waste shredder from Eidal International Corporation, Albuquerque, New Mexico, for incorporation in a solid waste disposal system at the Kodak Industrial Park, Rochester, New York. All solid waste material from the various plants in the complex will be dumped into the shredder for grinding, then pneumatically conveyed to a new type of furnace for "suspension firing" at high temperature. Steam generated in the boiler tubes of the furnace will be fed to turbo-electric generators to furnish electrical power for the Kodak plants.

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Vollrath and Meinhardt, a scrap processor at Bremen, West Germany, has put into full operation a new shearing/shredding system to produce fist-size ferrous pellets claimed to be 98-percent free of foreign materials. Input to the system consists of compacted automobiles, refrigerators, stoves, and general scrap including "black bales" (the European term for baled scrap with a high nonferrous content). The installation processes over 10 tons of scrap per hour and complies with strict air pollution laws of the vicinity.

TABLE 1. - U.S. receipts, production, consumption, shipments and stocks of iron and steel scrap and pig iron, by type of manufacturer, August 1969
(Short tons)

	Mfgs. of steel ingots and castings 1/	Mfgs. of steel castings 2/	Iron foundries and miscel- laneous users	Total	Total Year to date 3/
SCRAP:					
Receipts -----	2,468,360	139,243	687,057	3,294,660	28,801,148
Production -----	3,999,306	81,462	429,011	4,509,779	36,918,741
Consumption by grades:					
Carbon steel -					
Low phosphorous plate and punchings	30,213	56,866	61,324	148,403	1,363,927
Cut structural and plate -----	28,277	16,876	76,031	121,184	1,035,432
No. 1 heavy melting steel -----	2,090,123	22,372	18,076	2,130,571	18,073,389
No. 2 heavy melting steel -----	518,346	296	13,451	532,093	4,290,900
No. 1 and electric furnace bundles	558,025	6,387	31,959	596,371	5,034,653
No. 2 and all other bundles -----	292,543	3,183	41,713	337,439	2,854,239
Turnings and borings -----	203,026	6,052	39,231	248,309	1,956,589
Slag scrap (Fe content) -----	308,484	232	2,783	311,499	2,495,531
Shredded or fragmented -----	52,447	1,927	7,378	61,752	533,890
All other carbon steel scrap -----	1,264,388	60,131	125,200	1,449,719	11,736,702
Stainless steel -----	63,050	2,655	2,561	68,266	665,553
Alloy steel (except stainless) -----	235,182	10,755	9,664	255,601	2,198,265
Cast iron (include borings) -----	500,206	23,711	634,673	1,158,590	9,410,692
Other grades of scrap -----	32,449	11,558	42,257	86,264	696,217
Total consumption -----	6,176,759	223,001	1,106,301	7,506,061	62,345,979
Shipments -----	455,225	7,499	32,511	495,235	4,307,009
Stocks end of month -----	5,914,444	288,558	811,668	7,014,670	---
PIG IRON:					
Receipts -----	369,354	10,081	285,768	665,203	5,660,886
Production -----	7,556,130	-	-	7,556,130	62,038,894
Consumption -----	7,434,697	8,337	298,618	7,741,652	62,612,583
Shipments -----	577,697	82	90	577,869	5,377,980
Stocks end of month -----	1,653,234	19,204	221,073	1,893,511	---

1/ Includes only those castings made by companies producing steel ingots. 2/ Excludes companies that produce both steel ingots and castings. 3/ Year to date totals may not agree with a summation of prior monthly totals due to revisions after publication of monthly data.

TABLE 2. - U.S. salient iron and steel scrap and pig iron statistics, August 1969
(Short tons)

State	Receipts	Production	Consumption	Shipments	Stocks end of month	Pig iron consumption
Alabama -----	144,764	167,687	299,714	22,913	211,823	365,164
Arizona -----	W	W	W	W	W	-
Arkansas -----	W	-	W	-	W	-
California -----	125,292	112,513	248,115	3,799	208,428	198,031
Colorado -----	W	W	W	W	-	W
Connecticut ----	5,366	4,111	8,925	548	13,916	1,405
Delaware -----	W	W	W	W	W	W
Florida -----	W	W	W	-	W	W
Georgia -----	W	W	W	W	W	-
Illinois -----	299,414	408,530	693,218	27,831	844,478	621,834
Indiana -----	267,023	701,198	918,188	109,531	677,838	1,057,441
Iowa -----	27,510	9,021	38,127	70	40,231	2,535
Kansas -----	5,200	3,509	8,652	-	4,700	152
Kentucky -----	69,759	65,098	117,893	9,050	108,427	W
Louisiana -----	W	W	W	W	W	W
Maine -----	W	W	W	-	W	W
Maryland -----	63,234	206,523	278,029	8,889	108,782	W
Massachusetts --	3,593	4,472	8,367	87	3,777	2,030
Michigan -----	330,567	332,294	681,011	9,301	466,418	565,417
Minnesota -----	21,395	21,302	40,746	1,608	71,816	W
Mississippi ----	W	W	W	-	W	-
Missouri -----	63,429	19,548	84,005	568	179,560	2,026
Montana -----	W	W	W	W	W	W
Nebraska -----	W	W	W	W	W	W
Nevada -----	W	-	W	-	W	W
New Hampshire --	W	W	W	-	W	W
New Jersey -----	47,826	11,690	48,178	2,204	84,496	4,923
New York -----	104,344	224,937	307,981	5,132	296,679	474,919
North Carolina -	12,654	3,137	14,577	-	23,106	2,971
Ohio -----	637,326	761,778	1,328,136	115,345	1,036,770	1,333,603
Oklahoma -----	15,617	4,207	10,552	-	23,768	1,273
Oregon -----	13,559	3,472	12,712	874	29,061	W
Pennsylvania ---	583,484	1,019,591	1,462,352	150,505	1,685,951	1,912,741
Rhode Island ---	6,324	4,251	11,911	168	12,810	851
South Carolina -	1,531	2,091	3,667	-	1,343	W
Tennessee -----	20,563	16,958	37,265	966	14,959	11,041
Texas -----	151,485	123,964	273,252	17,952	271,565	20,275
Utah -----	11,814	69,101	96,034	267	226,098	130,785
Vermont -----	857	797	1,929	-	2,963	572
Virginia -----	13,446	11,942	21,954	772	23,104	W
Washington -----	32,612	13,257	46,623	994	76,746	W
West Virginia --	55,380	82,717	144,923	43	81,451	243,051
Wisconsin -----	36,801	39,891	71,677	4,561	40,029	12,195
Undistributed --	122,491	60,192	187,348	1,257	143,577	776,417
Total U. S. ----	3,294,660	4,509,779	7,506,061	495,235	7,014,670	7,741,652

W Withheld to avoid disclosing individual company confidential data; included in Undistributed.

TABLE 3. - U.S. consumption of iron and steel scrap by grades, August 1969
(Short tons)

State	CARBON STEEL						Stainless & alloy steel	Cast iron (include borings)	Other grades of scrap including slag
	Low phos., cut struc- tural, and plate	No. 1 & 2 heavy melt- ing steel	No. 1-2 & all other bundles	Turnings & borings	Shredded or fragmentized	All other carbon steel			
Alabama -----	17,557	108,251	49,012	1,255	303	48,413	3,238	64,157	7,528
Arizona -----	W	-	-	-	-	W	W	W	W
Arkansas -----	-	-	-	-	-	W	-	-	-
California -----	3,109	45,260	33,240	4,014	10,061	95,230	726	40,450	16,025
Colorado -----	W	W	-	W	-	-	W	W	W
Connecticut -----	2,100	500	22	-	-	410	2,030	3,558	W
Delaware -----	W	W	W	W	W	W	W	W	-
Florida -----	W	W	W	-	-	W	-	W	-
Georgia -----	35,127	217,251	111,905	20,624	5,000	194,875	14,172	87,055	7,209
Illinois -----	11,305	470,438	105,164	26,044	-	149,787	14,338	81,991	59,121
Indiana -----	4,339	2,493	4,626	13,429	1,013	1,839	65	6,428	3,895
Iowa -----	4,424	-	-	-	W	W	-	942	W
Kansas -----	-	67,765	10,758	4,222	-	18,894	5,321	8,394	2,539
Kentucky -----	W	-	-	-	-	W	-	-	-
Louisiana -----	-	-	-	-	-	-	-	W	-
Maine -----	2,706	W	33,293	W	-	W	7,159	36,859	28,334
Maryland -----	1,279	36	W	W	-	571	W	5,847	W
Massachusetts -----	18,987	44,462	104,135	12,584	9,227	229,905	6,947	222,454	32,310
Michigan -----	1,780	19,168	W	W	W	2,478	W	7,181	W
Minnesota -----	-	-	W	-	W	W	-	-	-
Mississippi -----	-	54,049	W	W	W	2,472	944	13,591	811
Missouri -----	1,382	W	W	W	-	-	-	W	W
Montana -----	W	W	-	-	-	W	-	W	W
Nebraska -----	W	-	-	-	-	-	-	W	-
Nevada -----	W	W	-	-	-	-	-	W	-
New Hampshire -----	-	-	-	-	-	-	-	-	-
New Jersey -----	7,316	2,206	13,455	W	W	8,454	744	13,838	418
New York -----	5,354	128,376	17,367	6,614	1,258	44,202	10,443	63,624	30,743
North Carolina -----	W	-	W	-	-	W	-	7,353	-
Ohio -----	77,052	439,087	182,289	78,512	-	226,497	78,519	191,575	54,605
Oklahoma -----	-	W	-	-	-	W	-	W	W
Oregon -----	-	W	W	-	-	W	W	-	-
Pennsylvania -----	34,652	840,792	127,111	40,748	-	196,335	166,682	156,888	99,144
Rhode Island -----	-	W	W	-	-	1,935	W	4,127	W
South Carolina -----	W	-	-	62	-	W	-	3,163	-
Tennessee -----	8,000	W	W	-	-	W	-	20,828	6,174
Texas -----	5,393	91,437	24,012	27,140	W	66,016	3,587	37,373	5,700
Utah -----	W	W	W	W	-	W	W	W	-
Vermont -----	-	W	-	-	-	W	-	W	-
Virginia -----	4,675	W	W	-	W	5,069	W	10,995	-
Washington -----	2,455	21,740	W	638	W	2,305	820	4,648	W
West Virginia -----	W	11,016	W	212	-	W	663	2,790	W
Wisconsin -----	17,308	904	-	1,584	-	13,547	155	29,108	9,071
Undistributed -----	3,287	297,433	117,421	10,607	34,890	140,485	7,314	33,373	34,136
U.S. Total -----	269,587	2,662,664	933,810	248,309	61,752	1,449,719	323,867	1,158,590	397,763

W Withheld to avoid disclosing individual company confidential data; included in Undistributed.

FOREIGN TRADE

Exports of iron and steel scrap totaled 1,184,729 short tons in August compared with 789,833 tons in July. Exports of pig iron during August totaled 352 tons and 2,495 tons in July. Imports of scrap totaled 21,075 short tons in August compared with 22,331 tons in July. Of the scrap imported during August, 20,666 short tons came from Canada and 409 tons from other sources. Imports of pig iron totaled 38,923 short tons in August and 33,312 tons in July. In addition to the foregoing imports of pig iron during August there were 1,321 tons of sponge iron, valued at \$157,937 imported, of which 436 tons came from Canada and 885 tons from Sweden.

TABLE 4. - U.S. exports of iron and steel scrap, by countries

Country	August 1969		Year to date	
	Short tons	Value	Short tons	Value
Canada-----	42,579	\$1,054,917	362,363	\$8,560,650
Hong Kong-----	4	2,694	372	145,376
Italy-----	124,646	4,138,433	556,595	16,352,397
Japan-----	612,529	18,765,267	2,526,826	70,981,952
Korea-----	50,674	1,831,737	416,416	14,307,244
Mexico-----	66,964	2,333,532	381,905	12,714,991
Spain-----	150,951	4,440,296	615,753	14,592,491
Sweden-----	16,727	4,825,790	92,401	14,026,287
Taiwan-----	8,258	251,220	48,605	1,865,674
United Kingdom-----	19,301	639,372	206,374	6,501,408
West Germany-----	4,993	497,809	17,882	1,979,865
Other countries-----	87,103	2,856,053	215,470	8,518,801
Total-----	1,184,729	41,637,120	5,440,962	170,547,136

TABLE 5. - U.S. exports of iron and steel scrap, by grades

Grades of scrap	August 1969		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	424,091	\$14,766,390	2,122,478	\$66,286,112
No. 2 heavy melting steel scrap-----	131,630	4,102,109	605,345	16,674,744
No. 1 bundles-----	75,294	2,474,612	298,045	9,079,347
No. 2 bundles-----	174,085	4,085,360	714,993	14,027,296
Borings, shovelings & turnings-----	101,639	2,053,997	396,771	7,112,743
Iron scrap-----	112,154	3,732,963	357,826	11,192,688
Stainless steel scrap--	18,143	6,119,208	64,081	18,863,718
All other scrap 1/--	147,693	4,302,481	881,423	27,310,488
Total-----	1,184,729	41,637,120	5,440,962	170,547,136

1/ Includes tin plate and terne plate.