

MINERAL INDUSTRY SURVEYS

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IRON AND STEEL SCRAP IN AUGUST 1997

Estimated consumption of iron and steel scrap on a daily average basis in August 1997 was up slightly compared with that in July 1997, according to the U.S. Geological Survey. Compared with July 1997 data, daily average production rose slightly, net receipts rose 3%, and stocks at the end of the month rose slightly. These observations are based upon responses from 70% of the companies surveyed that manufacture pig iron and semi-finished steel products, which represent 59% of the total scrap consumption in those sectors, and estimates for non-respondents of this survey.

On a daily average basis, pig iron production fell slightly and consumption fell slightly from that in July 1997. Stocks of pig iron at month's end rose 5% compared with those at the end of July 1997.

Exports for the month of July were not available at the time of publication.

Table 7 reveals that Detroit, MI, was the leading customs district for tonnage of imports in July 1997, accounting for 36% of the total imports, followed by Seattle, WA, with 15%, and Chicago, IL, with 13%.

According to the American Iron and Steel Institute (AISI), domestic raw steel production in July 1997 amounted to 7,890,000 metric tons, up slightly from 7,860,000 metric tons in June 1997, and up slightly from 7,790,000 metric tons in July 1996. Year-to-date production through July 1997 was 56,500,000 metric tons, up slightly compared with 55,800,000 metric tons for the same period in 1996. The electric furnace portion of raw steel production for July 1997 was 44%, up

slightly from that in June 1997, and up slightly from that in July 1996.

Raw steel capability utilization (AISI data) in July 1997 was 85%, down slightly from that in June 1997, and down slightly from that in July 1996. Continuous cast steel production in the United States accounted for 95% of total raw steel production in July 1997 and was up slightly from that in June 1997, while up slightly from that in July 1996. Through July, continuous cast steel production represented 94% of total steel production in 1997 compared with 93% in 1996.

According to the AISI, domestic raw steel production in August 1997 amounted to 8,000,000 metric tons, up slightly from 7,890,000 metric tons in July 1997, and up slightly from 7,830,000 metric tons in August 1996. Year-to-date production through August 1997 was 64,500,000 metric tons, up slightly compared with 63,600,000 metric tons for the same period in 1996. The electric furnace portion of raw steel production for August 1997 was 44%, unchanged from that in July 1997, and up slightly from that in August 1996.

Raw steel capability utilization (AISI data) in August 1997 was 86%, up slightly from that in July 1997, and down slightly from that in August 1996. Continuous cast steel production in the United States accounted for 95% of total raw steel production in August 1997 and was unchanged from that in July 1997, while up slightly from that in August 1996. Through August, continuous cast steel production represented 94% of total steel production in 1997 compared with 93% in 1996.

TABLE 1
IRON AND STEEL SCRAP, PIG IRON, AND DIRECT-REDUCED IRON STATISTICS 1/ FOR STEEL PRODUCERS 2/

(Thousand metric tons)

	August 1997			Year to date		
	Integrated steel producers 3/	Electric furnace steel producers 4/	Total for steel producers	Integrated steel producers 3/	Electric furnace steel producers 4/	Total for steel producers
Scrap:						
Receipts from dealers and other sources	780	2,700	3,400	5,700	21,000	27,000
Receipts from other own company plants	W	W	190	W	W	1,600
Production recirculating scrap	750	420	1,200	6,000	3,400	9,300
Production obsolete scrap	10	3	13	82	25	110
Consumption (by type of furnace):						
Blast furnace	150	--	150	1,200	--	1,200
Basic oxygen process	W	W	1,300	W	W	10,000
Electric furnace	W	W	3,200	W	W	26,000
Other (including air furnace) 5/	(6/)	--	(6/)	(6/)	--	(6/)
Total consumption	1,500	3,100	4,600	12,000	26,000	37,000
Shipments	140	12	150	1,200	99	1,300
Stocks end of month	2,000	2,700	4,700	XX	XX	XX
Pig iron (includes hot metal):						
Receipts	380	150	540	2,600	1,100	3,700
Production	4,000	--	4,000	33,000	--	33,000
Consumption (by type of furnace):						
Basic oxygen process	W	W	4,100	W	W	33,000
Direct castings 7/	(6/)	--	(6/)	(6/)	--	(6/)
Electric furnace	W	W	100	W	W	1,000
Total consumption	4,100	100	4,200	33,000	1,000	34,000
Shipments	(8/)	--	(8/)	(8/)	--	(8/)
Stocks end of month	W	W	410	XX	XX	XX
Direct-reduced iron: 9/						
Receipts	W	W	77	W	W	750
Consumption (by type of furnace):						
Blast furnace	110	--	110	870	--	870
Basic oxygen process	(10/)	--	(10/)	(10/)	--	(10/)
Electric furnace	--	(8/)	(8/)	--	(8/)	(8/)
Total consumption	110	(8/)	110	870	(8/)	870
Shipments	--	--	--	(8/)	--	(8/)
Stocks end of month	W	W	180	XX	XX	XX

W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and/or "Total consumption." XX Not applicable.

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings. August 1997 data are based on returns from 70% of monthly respondents, representing 59% of scrap consumption during this month, and estimates for non-respondents of this survey. Year to date data are based on returns from 77% of respondents, representing 64% of scrap consumption and estimates for nonrespondents.

3/ Includes data for electric furnaces operated by integrated steel producers.

4/ Includes minimill and specialty steel producers; includes data for other furnaces operated by these steel producers.

5/ Includes vacuum melting furnaces and miscellaneous uses.

6/ Withheld to avoid disclosing company proprietary data; included in "Consumption: Basic oxygen process."

7/ Includes ingot molds and stools.

8/ Withheld to avoid disclosing company proprietary data.

9/ Includes direct-reduced iron, hot-briquetted iron, and iron carbide. Domestic production data are included in "Receipts."

10/ Withheld to avoid disclosing company proprietary data; included in "Consumption: Blast furnace."

TABLE 2
RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, CONSUMPTION, AND STOCKS OF IRON AND STEEL SCRAP, BY GRADE, 1/ FOR STEEL PRODUCERS 2/

(Thousand metric tons)

Item	August 1997				Year to date		
	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap 3/	Ending stocks	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap 3/
Carbon steel:							
Low-phosphorus plate and punchings	30	W	32	18	260	W	250
Cut structural and plate	310	58	370	310	2,400	450	2,800
No. 1 heavy melting steel	500	310	800	720	4,100	2,500	6,700
No. 2 heavy melting steel	420	60	450	530	3,300	390	3,600
No. 1 and electric furnace bundles	420	W	530	360	3,400	W	4,300
No. 2 and all other bundles	130	W	130	76	750	W	790
Electric furnace 1 foot and under (not bundles)	(4/)	12	W	1	W	W	W
Railroad rails	10	W	14	7	85	W	110
Turnings and borings	150	4	170	120	1,300	43	1,500
Slag scrap	56	110	170	170	500	930	1,500
Shredded and fragmentized	580	W	690	470	4,600	W	5,700
No. 1 busheling	340	12	340	230	2,600	W	2,700
Steel cans (Post consumer)	W	W	W	W	220	W	370
All other carbon steel scrap	210	210	410	470	1,800	2,000	3,500
Stainless steel scrap	57	36	86	48	490	290	780
Alloy steel scrap	25	54	78	83	210	430	640
Ingot mold and stool scrap	W	11	7	22	3	W	64
Machinery and cupola cast iron	W	W	W	7	W	W	W
Cast iron borings	17	W	19	W	150	W	150
Motor blocks	W	--	W	W	W	--	W
Other iron scrap	30	41	72	W	230	330	590
Other mixed scrap	110	46	120	W	660	410	1,000
Total	3,400	1,200	4,600	4,700	27,000	9,300	37,000

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings.

3/ Includes recirculating scrap and home-generated obsolete scrap.

4/ Less than 1/2 unit.

TABLE 3
 RECEIPTS FROM OUTSIDE SOURCES, PRODUCTION, AND CONSUMPTION OF IRON AND STEEL SCRAP, 1/
 BY REGION AND STATE, FOR STEEL PRODUCERS 2/

(Thousand metric tons)

Region and State	August 1997			Year to date		
	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap 3/	Receipts of scrap from brokers, dealers, and other outside sources	Production of home scrap (recirculating scrap resulting from current operations)	Consumption of purchased and home scrap 3/
Mid-Atlantic and New England:						
New Jersey, New York	130	7	140	990	58	1,100
Pennsylvania	310	180	500	2,600	1,600	4,300
Total	440	180	640	3,600	1,600	5,400
North Central:						
Illinois	350	120	420	2,700	790	3,300
Indiana	290	360	640	2,300	2,900	5,200
Iowa, Minnesota, Missouri, Nebraska, Wisconsin	220	15	200	1,800	130	1,600
Michigan	210	55	230	1,500	480	1,900
Ohio	470	150	680	3,600	1,200	5,200
Total	1,500	700	2,200	12,000	5,500	17,000
South Atlantic:						
Delaware, Maryland, Virginia, West Virginia	130	78	220	1,000	600	1,600
Florida, Georgia, North Carolina, South Carolina	160	13	170	1,400	130	1,500
Total	290	91	390	2,400	730	3,100
South Central:						
Alabama, Kentucky, Mississippi, Tennessee	290	63	350	2,500	510	3,000
Arkansas, Louisiana, Oklahoma, Texas	570	59	650	4,500	450	5,600
Total	860	120	1,000	7,000	960	8,600
Mountain and Pacific:						
Arizona, California, Colorado, Oregon, Utah, Washington	300	67	390	2,400	510	2,900
Grand total	3,400	1,200	4,600	27,000	9,300	37,000

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ Includes manufacturers of raw steel that also produce steel castings.

3/ Includes recirculating scrap and home-generated obsolete scrap.

TABLE 4
 RECEIPTS OF IRON AND STEEL SCRAP, 1/ BY REGION 2/ AND GRADE, FOR STEEL PRODUCERS 3/ 4/

(Thousand metric tons)

Item	August 1997					Year to date				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:										
Low-phosphorus plate and punchings	18	10	W	W	--	140	110	W	W	--
Cut structural and plate	45	110	68	49	34	360	920	460	430	230
No. 1 heavy melting steel	50	230	23	160	31	400	1,800	240	1,400	310
No. 2 heavy melting steel	16	140	38	150	62	140	1,100	300	1,200	490
No. 1 and electric furnace bundles	40	300	27	41	9	340	2,400	210	320	65
No. 2 and all other bundles	9	78	6	24	11	82	330	46	210	84
Electric furnace 1 foot and under (not bundles)	--	(5/)	--	--	--	--	W	--	--	7
Railroad rails	W	W	--	W	3	W	W	--	35	22
Turnings and borings	28	35	18	64	3	240	280	190	600	31
Slag scrap	10	21	W	12	1	77	220	W	90	11
Shredded and fragmented	61	190	63	190	79	450	1,500	520	1,500	640
No. 1 busheling	64	150	26	94	12	520	1,200	190	680	86
Steel cans (Post consumer)	W	W	W	W	(5/)	W	W	21	W	3
All other carbon steel scrap	19	140	5	35	10	160	1,200	39	240	83
Stainless steel scrap	48	9	--	--	--	430	59	--	--	--
Alloy steel scrap	8	W	--	W	--	67	W	1	W	--
Ingot mold and stool scrap	W	W	--	--	--	(5/)	W	--	W	--
Machinery and cupola cast iron	--	W	--	W	(5/)	--	W	W	W	1
Cast iron borings	W	W	--	8	--	W	W	--	57	--
Motor blocks	(5/)	--	W	--	--	(5/)	--	W	--	--
Other iron scrap	W	W	W	6	--	W	W	W	44	(5/)
Other mixed scrap	W	48	W	W	47	W	W	W	W	370
Total	440	1,500	290	860	300	3,600	12,000	2,400	7,000	2,400

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Scrap received from brokers, dealers, and other outside sources.

2/ A breakout of the States within each region is provided in Table 3.

3/ Includes manufacturers of raw steel that also produce steel castings.

4/ Data are rounded to two significant digits; may not add to totals shown.

5/ Less than 1/2 unit.

TABLE 5
CONSUMPTION OF IRON AND STEEL SCRAP 1/ BY REGION 2/ AND GRADE, FOR STEEL PRODUCERS 3/

(Thousand metric tons)

Item	August 1997					Year to date				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:										
Low-phosphorus plate and punchings	16	13	W	W	--	140	99	W	W	--
Cut structural and plate	57	120	100	59	33	470	930	710	500	220
No. 1 heavy melting steel	96	410	43	170	85	760	3,200	420	1,600	690
No. 2 heavy melting steel	21	150	37	160	82	210	1,200	310	1,300	500
No. 1 and electric furnace bundles	39	400	32	51	11	380	3,200	250	410	63
No. 2 and all other bundles	10	79	5	27	11	84	350	48	220	84
Electric furnace 1 foot and under (not bundles)	--	12	--	W	--	--	W	--	W	7
Railroad rails	W	W	--	3	3	W	W	--	32	22
Turnings and borings	29	44	21	71	4	260	360	190	630	32
Slag scrap	17	110	20	29	1	160	910	160	240	11
Shredded and fragmentized	94	210	74	230	80	730	1,600	610	2,000	660
No. 1 busheling	75	150	26	81	12	570	1,200	190	700	84
Steel cans (Post consumer)	W	W	W	W	(4/)	W	210	16	W	3
All other carbon steel scrap	43	260	16	78	W	380	2,300	130	560	W
Stainless steel scrap	75	11	--	--	--	700	81	--	--	--
Alloy steel scrap	19	55	--	4	--	150	450	1	30	--
Ingot mold and stool scrap	W	2	--	W	W	W	16	--	W	W
Machinery and cupola cast iron	--	W	--	W	(4/)	--	W	W	W	(4/)
Cast iron borings	W	W	--	7	--	W	W	--	57	--
Motor blocks	(4/)	--	W	--	--	(4/)	--	W	--	--
Other iron scrap	17	41	W	W	W	140	320	W	81	W
Other mixed scrap	13	44	W	12	48	120	380	W	97	390
Total	640	2,200	390	1,000	390	5,400	17,000	3,100	8,600	2,900

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to two significant digits; may not add to totals shown.

2/ A breakout of the States within each region is provided in Table 3.

3/ Includes manufacturers of raw steel that also produce steel castings.

4/ Less than 1/2 unit.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP 1/ 2/
BY SELECTED COUNTRY

(Thousand metric tons and thousand dollars)

Country	July 1997		Year to date	
	Quantity	Value	Quantity	Value
Brazil	5	347	11	837
Canada	204	26,400	1,120	148,000
Japan	4	588	23	3,120
Mexico	10	3,210	116	17,500
United Kingdom	29	4,070	139	19,600
Other	1	597	164	19,400
Total	253	35,200	1,580	208,000

1/ Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON AND STEEL SCRAP 1/ 2/
BY SELECTED CUSTOMS DISTRICT

(Thousand metric tons and thousand dollars)

Customs district	July 1997		Year to date	
	Quantity	Value	Quantity	Value
Baltimore, MD	5	361	33	1,720
Buffalo, NY	28	3,960	206	32,700
Chicago, IL	33	3,640	34	4,760
Cleveland, OH	13	1,140	53	4,930
Detroit, MI	90	13,000	601	79,100
El Paso, TX	4	421	23	2,740
Laredo, TX	4	2,280	84	11,800
New Orleans, LA	29	4,070	258	34,200
Ogdensburg, NY	2	492	12	2,950
Seattle, WA	39	4,150	227	23,400
Other	6	1,720	49	9,830
Total	253	35,200	1,580	208,000

1/ Includes tinplate and terneplate; excludes used rails for rerolling and other uses and ships, boats and other vessels for scrapping. Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS OF IRON AND STEEL SCRAP AND OTHER FERROUS PRODUCTS BY GRADE 1/ 2/

(Thousand metric tons and thousand dollars)

Item	July 1997		Year to date	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	14	1,900	54	6,970
No. 2 heavy melting steel	1	135	8	891
No. 1 bundles	19	2,470	160	20,300
No. 2 bundles	3	424	16	1,940
Shredded steel scrap	24	3,360	179	24,000
Borings, shovelings and turnings	8	873	84	8,750
Cut plate and structural	4	497	27	3,510
Tinned iron or steel	1	182	30	4,060
Remelting scrap ingots	(3/)	31	40	3,080
Cast iron	28	3,360	104	13,300
Other iron and steel	107	13,800	597	71,900
Total carbon steel and cast iron	209	27,000	1,300	159,000
Stainless steel	7	3,620	39	22,000
Other alloy steel	37	4,560	241	27,500
Total stainless and alloy steel	44	8,190	280	49,500
Total carbon, stainless, alloy steel and cast iron	253	35,200	1,580	208,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	(3/)	39
Used rails for rerolling and other uses	18	6,430	165	33,900
Total scrap imports	271	41,700	1,740	242,000
Imports of manufactured ferrous products:				
Pig iron < or = 0.5% phosphorus	211	31,200	1,510	215,000
Pig iron > 0.5% phosphorus	--	--	--	--
Alloy pig iron	--	(3/)	18	2,550
Total pig iron	211	31,200	1,530	218,000
Direct-reduced iron (DRI)	32	3,700	498	63,200
Spongy iron products, not DRI	(3/)	49	26	3,130
Granules for abrasive cleaning and other uses	2	1,060	14	7,280
Powders of alloy steel	2	3,380	13	19,800
Other ferrous powders	7	6,720	49	46,900
Total DRI, granules and powders	43	14,900	600	140,000
Grand total	525	87,800	3,880	600,000

1/ Import valuation is on a customs basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 9
U.S. RAW STEEL PRODUCTION, RAW STEEL CAPABILITY UTILIZATION,
AND CONTINUOUS CAST STEEL PRODUCTION

Period	Raw steel production, thousand metric tons 1/		Raw steel capability utilization, percent		Continuous cast steel production, percent	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
1996:						
August	7,830	63,600	87.1%	90.8%	93.6%	93.2%
September	7,630	71,200	87.7%	90.5%	93.2%	93.1%
October	7,900	79,300	88.0%	90.4%	92.9%	93.1%
November	7,510	86,800	86.5%	90.0%	93.6%	93.2%
December	7,880	94,700	87.9%	89.9%	94.0%	93.2%
1997						
January	7,930	7,930	85.3%	85.3%	94.0%	94.0%
February	7,500	15,400	89.3%	85.8%	94.3%	94.2%
March	8,320	23,800	89.6%	88.3%	94.4%	94.2%
April	8,060	32,200	89.2%	89.5%	94.2%	94.3%
May	8,210	40,400	87.9%	89.2%	94.4%	94.3%
June	7,860	48,300	87.0%	88.8%	94.3%	94.3%
July	7,890	56,500	85.1%	88.7%	95.0%	94.4%
August	8,000	64,500	86.4%	88.4%	94.7%	94.4%

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: American Iron and Steel Institute.

TABLE 10
COMPOSITE PRICES FOR NO. 1 HEAVY MELTING STEEL SCRAP AND PIG IRON

Period	American Metal Market No. 1 HMS		Iron Age No. 1 HMS		Iron Age Pig Iron	
	\$/t	\$/t	\$/t	\$/t	\$/t	\$/t
1996:						
September	136.23	134.08	130.33	128.21	NA	NA
October	127.49	125.47	121.58	119.65	NA	NA
November	115.14	113.32	108.67	106.95	NA	NA
December	116.79	114.95	109.84	108.10	NA	NA
Average through December	123.91	130.60	117.61	115.73	NA	NA
1997:						
January	127.44	125.43	120.75	118.84	169.12	166.45
February	134.04	131.92	127.50	125.49	170.29	167.60
March	128.75	126.72	120.70	118.79	173.04	170.31
April	123.76	121.80	118.25	116.38	170.80	168.10
May	130.08	128.03	125.80	123.81	172.48	169.76
June	130.79	128.73	127.70	125.68	176.40	173.61
July	136.00	133.85	131.67	129.59	179.76	176.92
August	137.67	135.49	134.25	132.13	179.76	176.92
September	NA	NA	128.27	126.24	179.76	176.92
Average through September	NA	NA	126.10	124.11	174.60	171.84

NA Not available.

Note: Long tons = lt; metric tons = t.