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Mineral Industry Surveys

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IRON AND STEEL SCRAP IN JANUARY 1998

Estimated consumption of iron and steel scrap on a daily average basis in January 1998 was up 6% compared with that in December 1997, according to the U.S. Geological Survey. Compared with December 1997 data, daily average production rose 4%, net receipts rose 3%, and stocks at the end of the month fell slightly. These observations are based upon responses from 70% of the companies surveyed that manufacture pig iron and semi-finished steel products, which represent 63% of the total scrap consumption in those sectors, and estimates for non-respondents of this survey.

On a daily average basis, pig iron production rose 6% and consumption rose slightly from that in December 1997. Stocks of pig iron at month's end rose 19% compared with those at the end of December 1997.

Exports for the month of December 1997 were not available for publication.

Table 7 reveals that Detroit, MI, was the leading customs district for tonnage of imports in December 1997, accounting for 41% of the total imports, followed by Seattle,WA, with 14% and New Orleans, LA, with 13%.

According to the American Iron and Steel Institute (AISI), domestic raw steel production in January 1998 amounted to 8,630,000 metric tons, up 5% from 8,230,000 metric tons in December 1997, and up 9% from 7,930,000 metric tons in January 1997. The electric furnace portion of raw steel production for January 1998 was 41%, up slightly from that in December 1997 and down slightly from that in January 1997.

Raw steel capability utilization (AISI data) in January 1998 was 90%, up 4% from that in December 1997 and up 5% from that in January 1997. Continuous cast steel production in the United States accounted for 95% of total raw steel production in January 1998 and was unchanged from that in December 1997 while up slightly from that in January 1997. Through January, continuous cast steel production represented 95% of total steel production in 1998 compared with 94% in 1997.

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

(Thousand metric tons)

	January 1998		
	Integrated steel producers 3/	Electric furnace steel producers 4/	Total for steel producers
Scrap:			
Receipts from dealers and other sources	820	2,700	3,600
Receipts from other own company plants	W	W	200
Production recirculating scrap	770	440	1,200
Production obsolete scrap	10	3	13
Consumption (by type of furnace):			
Blast furnace	(5/)	--	(5/)
Basic oxygen process	W	W	1,500
Electric furnace	W	W	3,400
Other (including air furnace) 6/	(5/)	--	(5/)
Total consumption	1,500	3,400	4,900
Shipments	140	12	160
Stocks end of month	2,200	2,500	4,600
Pig iron (includes hot metal):			
Receipts	400	220	620
Production	4,300	--	4,300
Consumption (by type of furnace):			
Basic oxygen process	W	W	4,500
Direct castings 7/	(5/)	--	(5/)
Electric furnace	--	(8/)	(8/)
Total consumption	4,500	(8/)	4,500
Shipments	270	1	270
Stocks end of month	W	W	530
Direct-reduced iron: 9/			
Receipts	W	W	99
Consumption (by type of furnace):			
Blast furnace	100	--	100
Basic oxygen process	(5/)	--	(5/)
Electric furnace	--	(8/)	(8/)
Total consumption	100	(8/)	100
Shipments	--	--	--
Stocks end of month	76	85	160

W Withheld to avoid disclosing company proprietary data; included in "Total for steel producers" and/or "Total consumption."

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. January 1998 data are based on returns from 70% of monthly respondents, representing 63% of scrap consumption during this month, and estimates for nonrespondents of this survey.

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

6/ Includes vacuum melting furnaces and miscellaneous uses.

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."

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	January 1998			
	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
Carbon steel:				
Low-phosphorus plate and punchings	36	W	33	26
Cut structural and plate	340	61	380	300
No. 1 heavy melting steel	510	360	910	700
No. 2 heavy melting steel	450	55	490	560
No. 1 and electric furnace bundles	490	W	600	370
No. 2 and all other bundles	86	W	80	71
Electric furnace 1 foot and under (not bundles)	--	W	W	W
Railroad rails	15	W	17	8
Turnings and borings	160	4	190	100
Slag scrap	69	120	190	170
Shredded and fragmentized	590	W	730	520
No. 1 busheling	350	W	370	270
Steel cans (Post consumer)	W	W	W	W
All other carbon steel scrap	220	200	410	330
Stainless steel scrap	64	35	100	43
Alloy steel scrap	23	59	79	110
Ingot mold and stool scrap	W	W	7	21
Machinery and cupola cast iron	W	W	W	3
Cast iron borings	18	W	21	W
Motor blocks	W	--	W	W
Other iron scrap	28	41	74	W
Other mixed scrap	66	45	120	W
Total	3,600	1,200	4,900	4,600

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.

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	January 1998		
	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	70	4	76
Pennsylvania	370	190	590
Total	440	200	660
North Central:			
Illinois	330	110	460
Indiana	290	360	660
Iowa, Minnesota, Missouri, Nebraska, Wisconsin	250	20	250
Michigan	200	57	250
Ohio	520	180	700
Total	1,600	720	2,300
South Atlantic:			
Delaware, Maryland, Virginia, West Virginia	140	74	220
Florida, Georgia, North Carolina, South Carolina	170	11	180
Total	310	85	400
South Central:			
Alabama, Kentucky, Mississippi, Tennessee	310	60	370
Arkansas, Louisiana, Oklahoma, Texas	580	66	750
Total	890	130	1,100
Mountain and Pacific:			
Arizona, California, Colorado, Oregon, Utah, Washington	320	75	400
Grand total	3,600	1,200	4,900

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	January 1998				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	16	16	W	W	--
Cut structural and plate	50	140	71	50	31
No. 1 heavy melting steel	39	250	27	160	36
No. 2 heavy melting steel	6	190	40	150	64
No. 1 and electric furnace bundles	48	350	28	55	9
No. 2 and all other bundles	9	26	5	34	12
Electric furnace 1 foot and under (not bundles)	--	--	--	--	--
Railroad rails	W	W	--	6	6
Turnings and borings	W	38	21	67	4
Slag scrap	11	31	13	13	1
Shredded and fragmentized	51	170	64	210	97
No. 1 busheling	69	150	27	85	13
Steel cans (Post consumer)	W	W	W	W	(5/)
All other carbon steel scrap	23	140	7	46	7
Stainless steel scrap	55	9	--	--	--
Alloy steel scrap	8	13	--	W	--
Ingot mold and stool scrap	W	W	--	--	--
Machinery and cupola cast iron	--	W	--	W	--
Cast iron borings	W	W	--	7	--
Motor blocks	(5/)	--	W	--	--

See footnotes at end of table.

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

(Thousand metric tons)

Item	January 1998				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Other iron scrap	W	W	W	1	--
Other mixed scrap	W	W	W	W	41
Total	440	1,600	310	890	320

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	January 1998				
	Mid-Atlantic and New England	North Central	South Atlantic	South Central	Mountain and Pacific
Carbon steel:					
Low-phosphorus plate and punchings	17	11	W	W	--
Cut structural and plate	64	140	W	48	W
No. 1 heavy melting steel	79	480	47	210	93
No. 2 heavy melting steel	11	180	W	180	69
No. 1 and electric furnace bundles	48	460	W	49	10
No. 2 and all other bundles	9	26	5	31	W
Electric furnace 1 foot and under (not bundles)	--	W	--	W	--
Railroad rails	W	W	--	W	6
Turnings and borings	W	54	22	80	4
Slag scrap	19	110	19	37	1
Shredded and fragmentized	83	200	80	280	92
No. 1 busheling	78	150	26	W	13
Steel cans (Post consumer)	W	W	W	W	(4/)
All other carbon steel scrap	60	260	18	58	W
Stainless steel scrap	92	12	--	--	--
Alloy steel scrap	19	W	--	W	--
Ingot mold and stool scrap	W	2	--	W	W
Machinery and cupola cast iron	--	W	--	W	(4/)
Cast iron borings	W	W	--	W	--
Motor blocks	(4/)	--	W	--	--
Other iron scrap	W	42	W	W	W
Other mixed scrap	W	41	W	14	51
Total	660	2,300	400	1,100	400

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	December 1997		Year to date	
	Quantity	Value	Quantity	Value
Canada	202	24,800	2,070	269,000
Haiti	2	280	9	1,150
Japan	3	525	50	6,980
Mexico	10	2,750	171	31,300
United Kingdom	31	4,710	336	47,600
Other	1	379	232	27,900
Total	249	33,400	2,870	384,000

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	December 1997		Year to date	
	Quantity	Value	Quantity	Value
Buffalo, NY	32	5,040	394	61,200
Chicago, IL	25	930	103	9,690
Cleveland, OH	3	364	90	9,300
Detroit, MI	101	13,900	1,100	145,000
El Paso, TX	4	592	44	5,470
Laredo, TX	4	1,650	106	20,400
New Orleans, LA	34	4,860	480	65,000
Ogdensburg, NY	2	482	20	4,970
Pembina, ND	6	768	23	4,950
Seattle, WA	36	3,700	394	40,500
Other	3	1,200	108	17,700
Total	249	33,400	2,870	384,000

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	December 1997		Year to date	
	Quantity	Value	Quantity	Value
No. 1 heavy melting steel	22	2,530	122	15,100
No. 2 heavy melting steel	6	586	19	2,100
No. 1 bundles	19	2,160	270	33,600
No. 2 bundles	1	135	42	5,640
Shredded steel scrap	14	1,800	325	44,200
Borings, shovelings and turnings	6	510	127	13,300
Cut plate and structural	3	472	68	6,670
Tinned iron or steel	1	242	34	5,120
Remelting scrap ingots	(3/)	136	53	5,270
Cast iron	15	1,930	216	27,700
Other iron and steel	129	16,300	1,150	142,000
Total carbon steel and cast iron	216	26,800	2,430	301,000
Stainless steel	5	2,170	64	33,700
Other alloy steel	28	4,500	373	49,600
Total stainless and alloy steel	33	6,670	438	83,200
Total carbon, stainless, alloy steel and cast iron	249	33,400	2,870	384,000
Ships, boats, and other vessels for breaking up (for scrapping)	--	--	(3/)	43
Used rails for rerolling and other uses	46	7,540	328	63,000
Total scrap imports	295	41,000	3,190	447,000
Imports of manufactured ferrous products:				
Pig iron < or = 0.5% phosphorus	242	40,100	3,030	447,000
Pig iron > 0.5% phosphorus	37	5,360	92	13,800
Alloy pig iron	--	--	28	4,250
Total pig iron	278	45,500	3,150	465,000
Direct-reduced iron (DRI)	115	15,300	987	127,000
Spongy iron products, not DRI	25	3,660	127	15,300
Granules for abrasive cleaning and other uses	2	1,120	23	12,400
Powders of alloy steel	2	3,250	23	34,700
Other ferrous powders	6	6,960	87	85,500
Total DRI, granules and powders	150	30,200	1,250	275,000
Grand total	724	117,000	7,590	1,190,000

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
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%
September	8,170	72,700	91.2%	88.8%	95.1%	94.6%
October	8,280	81,000	86.9%	88.6%	94.8%	94.6%
November	8,270	89,300	89.6%	88.7%	95.1%	94.6%
December	8,230	97,500	86.3%	88.5%	95.2%	94.7%
1998:						
January	8,630	8,630	90.0%	90.0%	94.9%	94.9%

1/ Data are rounded to three significant digits.
2/ Includes revisions for previous months.

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	
	$/lt	$/t	$/lt	$/t	$/lt	$/t
1997:						
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	132.03	129.95	128.27	126.24	179.76	176.92
October	133.23	131.13	129.92	127.87	179.76	176.92
November	138.33	136.15	134.67	132.54	179.76	176.92
December	138.33	136.15	134.40	132.27	180.66	177.80
Average through December	132.54	130.45	127.82	125.80	175.97	173.19
1998:						
January	138.07	135.89	132.92	130.82	180.88	178.02
February	NA	NA	126.71	124.71	180.88	178.02
Average through February	NA	NA	129.82	127.77	180.88	178.02

NA Not available.

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