



MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON, D.C. 20241



Cecil D. Andrus, Secretary

For information call K. W. Palmer
Telephone: 202-634-1029

Iron and Steel Scrap, Monthly

IRON AND STEEL SCRAP IN JANUARY 1978

Returns from 77% of reporting consumers, representing 95% of total scrap consumption, indicated that consumption of iron and steel scrap in January on a daily average basis was 2% above that in December, according to the Bureau of Mines, U.S. Department of the Interior. Compared with December, daily average production and net receipts were down 4% and up 2%, respectively, and stocks at the end of the month were down 5%.

Exports of ferrous scrap during the month were 43% above those for December 1977 and 31% above those for January 1977. Japan was the largest importer of U.S. scrap, taking 34% of the total exported in January 1978. The next largest importers were the Republic of Korea and Italy, which received 20% and 13%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of January was \$70.83 per long ton, down 2% from the price of \$72.17 at the end of January 1977.

Pig iron production and consumption on a daily average basis during January were down 2% and relatively unchanged, respectively, from those of the previous month. Stocks of pig iron decreased 4% during January compared with those at the end of December 1977.

Prepared in the Division of Ferrous Metals, March 29, 1978.

TABLE 1. - U.S. RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF IRON AND STEEL SCRAP AND PIG IRON, BY TYPE OF MANUFACTURER (SHORT TONS)

JANUARY 1978 (PRELIMINARY) 1/						
MFRS. OF						
	PIG IRON AND STEEL INGOTS & CASTINGS 2/	MFRS. OF STEEL CASTINGS 3/	IRON FOUNDRIES AND MISCEL- LANEOUS USERS	TOTAL FOR MONTH OF JAN 1978	TOTAL FOR MONTH OF DEC 1977 4/	
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,064,075	153,374	762,657	2,980,106		2,967,312
RECEIPTS FROM OTHER OWN COMPANY PLANTS-	441,297	8,067	275,869	725,233		762,096
PRODUCTION RECIRCULATING SCRAP-----	3,091,176	78,156	450,414	3,619,746		3,761,581
PRODUCTION OBSOLETE SCRAP-----	195,592	1,559	9,634	206,785		206,449
CONSUMPTION-----	5,771,936	245,908	1,520,889	7,538,733		7,368,445
SHIPMENTS-----	417,121	1,260	30,221	448,602		543,451
STOCKS END OF MONTH-----	7,607,035	247,545	1,064,827	8,919,407		9,359,511
PIG IRON:						
RECEIPTS-----	431,465	3,733	182,241	617,439		615,280
PRODUCTION-----	6,314,384	--	--	6,314,384		6,412,067
CONSUMPTION-----	6,277,525	3,550	185,666	6,467,741		6,494,680
SHIPMENTS-----	503,876	71	1,430	505,377		606,025
STOCKS END OF MONTH-----	1,142,029	6,271	117,360	1,265,660		1,315,868
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS-----	--	--	--	18,420		17,801
PRODUCTION-----	--	--	--	--		--
CONSUMPTION-----	--	--	--	18,665		18,497
SHIPMENTS-----	--	--	--	--		--
STOCKS END OF MONTH-----	--	--	--	1,984		2,546

1/ BASED ON RETURNS FROM 77% OF REPORTING CONSUMERS, REPRESENTING 95% OF SCRAP CONSUMPTION.

2/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.

3/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.

4/ BASED ON RETURNS FROM 82% OF REPORTING CONSUMERS, REPRESENTING 97% OF SCRAP CONSUMPTION.

TABLE 2. - MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, JANUARY 1978 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER COMPANY PLANTS	RECYCLING SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOT MOULDS, STOOLES AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	OF BOTH PURCHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS	
SCRAP:							
CARBON STEEL--							
LOW-PHOSPHORUS PLATE AND PUNCHINGS--	37,427	1,105	2,405	464	44,032	2,526	102,837
CUT STRUCTURAL AND PLATE--	21,040	--	22,508	--	58,714	--	48,217
NO.1 HEAVY MELTING STEEL--	455,165	242,901	1,422,363	4,632	2,006,576	196,745	2,389,020
NO.2 HEAVY MELTING STEEL--	154,828	14,096	102,017	136	302,813	11,089	453,162
NO.1 AND ELECTRIC FURNACE BUNDLES--	534,193	48,313	221,083	15	821,940	10,769	1,710,587
NO.2 AND ALL OTHER BUNDLES--	131,020	4,834	1,091	--	164,432	1,384	250,712
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)--	1,839	--	150	--	3,187	--	2,323
RAILROAD RAILS--	7,007	--	--	--	9,886	--	631
TURNINGS AND BORINGS--	115,361	4,197	23,602	103	142,768	8,926	98,509
SLAG SCRAP (FE CONTENT 70 PERCENT)--	89,694	633	145,787	320	240,029	18,512	150,195
SHREDDED OR FRAGMENTIZED--	114,035	35,751	--	--	194,822	--	155,550
NO. 1 BUSHING--	105,515	2,800	1,114	--	110,565	6	176,754
ALL OTHER CARBON STEEL SCRAP--	154,090	11,603	827,682	30,533	991,164	87,439	909,495
STAINLESS STEEL SCRAP--	28,814	1,894	49,176	--	78,977	2,582	87,879
ALLOY STEEL (EXCEPT STAINLESS)--	12,283	14,578	131,355	113	153,613	6,780	305,643
INGOT MOLD AND STUOL SCRAP--	27,991	38,386	62,825	150,235	304,359	48,247	594,794
MACHINERY AND CUPOLA CAST IRON--	325	--	8,051	--	7,824	--	5,111
CAST IRON BORINGS--	13,881	2,341	18,429	5,922	44,847	3,167	70,295
MOTOR BLOCKS--	1	--	69	--	--	--	1,639
OTHER IRON SCRAP--	15,751	15,138	39,824	3,108	51,977	10,831	148,221
OTHER MIXED SCRAP--	23,815	2,127	11,655	11	33,411	8,118	45,057
TOTAL SCRAP--	2,064,075	441,297	3,091,176	195,592	5,771,936	417,121	7,607,035
TOTAL SCRAP THROUGH JANUARY 1978--	2,064,075	441,297	3,091,176	195,592	5,771,936	417,121	7,607,035
PIG IRON							
PIG IRON THROUGH JANUARY 1978--	431,465	431,465	6,314,384	6,277,525	503,876	1,142,029	1,142,029

11/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
2/ BASED ON RETURNS FROM 91% OF REPORTING CONSUMERS, REPRESENTING 98% OF SCRAP CONSUMPTION.

TABLE 3. - MANUFACTURERS OF STEEL CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, JANUARY 1978 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	RECYCLING	JSCAPE	OF BOTH PUR-	245,908	1,260		
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	46,922	234	14,845	1,038	66,543	--	--	55,307		
CUT STRUCTURAL AND PLATE-----	15,945	1,388	2,223	--	19,595	33	33	21,662		
NO.1 HEAVY MELTING STEEL-----	11,389	--	5,308	11	18,967	--	--	29,331		
NO.2 HEAVY MELTING STEEL-----	5,465	28	1,433	--	6,162	--	--	2,944		
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,918	--	243	--	4,278	--	--	3,767		
NO.2 AND ALL OTHER BUNDLES-----	223	--	--	--	202	--	--	2,204		
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,701	--	1,511	--	6,396	--	--	4,930		
RAILROAD RAILS-----	11	--	--	--	67	--	--	158		
TURNINGS AND BORINGS-----	4,611	251	2,132	--	6,714	880	880	5,369		
SLAG SCRAP (FE CONTENT 70 PERCENT)---	--	--	384	--	382	22	22	38		
SHREDDED OR FRAGMENTIZED-----	5,302	1,151	--	--	8,233	--	--	3,177		
NO. 1 BUSHING-----	2,898	680	639	--	4,906	--	--	8,628		
ALL OTHER CARBON STEEL SCRAP-----	39,125	3,292	27,910	462	70,574	--	--	53,565		
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)---	1,886	344	2,105	--	4,328	278	278	4,420		
INGOT MOLD AND STOOL SCRAP-----	3,817	699	9,451	--	11,706	--	--	23,174		
MACHINERY AND CUPOLA CAST IRON---	396	--	14	--	408	8	8	745		
CAST IRON BORINGS-----	476	--	750	--	1,370	--	--	2,080		
MOTOR BLOCKS-----	3,033	--	2,367	--	5,592	39	39	4,245		
OTHER IRON SCRAP-----	121	--	--	--	51	--	--	175		
OTHER MIXED SCRAP-----	2,135	--	6,436	48	8,834	--	--	21,120		
	--	--	399	--	400	--	--	6		
TOTAL SCRAP-----	153,374	8,067	78,156	1,559	245,908	1,260	1,260	247,545		
TOTAL SCRAP THROUGH JANUARY 1978---	153,374	8,067	78,156	1,559	245,908	1,260	1,260	247,545		
PIG IRON-----										
	3,733	--	--	--	3,550	71	71	6,271		
PIG IRON THROUGH JANUARY 1978-----	3,733	--	--	--	3,550	71	71	6,271		

1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.
2/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 77% OF SCRAP CONSUMPTION.

TABLE 4. - IRON FOUNDRIES AND MISCELLANEOUS USERS - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, JANUARY 1978 (PRELIMINARY) 1/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP (INCLUDES INGOT CHASED AND MOLD, STOKS, HOME SCRAP AND SCRAP FROM (INCLUDES RE- SHIPMENTS OF SCRAP CIRCULATING SCRAP))	RECYCLATING OBSOLETE SCRAP	RESULTING FROM CURRENT OLD EQUIPMENT, BUILDINGS, ETC.)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLD, STOKS, HOME SCRAP AND SCRAP FROM (INCLUDES RE- SHIPMENTS OF SCRAP CIRCULATING SCRAP))	OF BOTH PUR-CHASED AND HOME SCRAP	SHIPMENTS		
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	52,733	13,028	6,515	39	80,402	102	60,466			
CUT STRUCTURAL AND PLATE-----	109,764	7,393	12,360	167	131,283	183	99,101			
NO.1 HEAVY MELTING STEEL-----	17,883	7,299	6,322	--	34,516	3,182	47,604			
NO.2 HEAVY MELTING STEEL-----	4,131	394	1,741	46	6,897	74	6,124			
NO.1 AND ELECTRIC FURNACE BUNDLES---	11,743	11,979	6,228	47	30,055	--	10,102			
NO.2 AND ALL OTHER BUNDLES-----	36,232	12,928	--	--	59,197	--	46,901			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	3,933	--	1,859	--	7,110	--	5,266			
RAILROAD RAILS-----	9,374	1	24	--	9,322	24	16,218			
TURNINGS AND BORINGS-----	57,841	10,570	1,439	50	68,503	1,745	89,823			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	4,598	--	58	--	7,233	58	29,151			
SHREDDER OR FRAGMENTIZED-----	56,703	9,207	--	--	68,891	113	49,203			
NO. 1 BUSHFLING-----	26,231	6,265	187	--	34,316	--	8,946			
ALL OTHER CARBON STEEL SCRAP-----	77,942	58,072	11,759	7	153,469	432	129,672			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	227	--	443	1	582	35	3,584			
INGOT MOLD AND STOKL SCRAP-----	4,481	22	212	87	3,315	2,888	14,709			
MACHINEPY AND CUPOLA CAST IRON -----	4,853	--	8,725	315	18,318	116	26,581			
CAST IRON BORINGS-----	72,598	11,013	50,315	49	139,932	679	99,055			
MOTOR BLOCKS-----	47,319	51,247	25,593	513	127,685	3,585	86,335			
OTHER IRON SCRAP-----	61,759	2,538	41,331	--	102,426	141	54,504			
OTHER MIXED SCRAP-----	75,316	5,597	242,985	8,113	330,080	16,673	150,821			
	26,996	68,316	22,318	200	116,357	194	49,567			
TOTAL SCRAP-----	762,657	275,869	450,414	9,634	1,520,889	30,221	1,064,827			
TOTAL SCRAP THROUGH JANUARY 1978----	762,657	275,869	450,414	9,634	1,520,889	30,221	1,064,827			
PIG IRON-----										
	RECEIPTS			PRODUCTION			CONSUMPTION			STOCKS
	182,241			--			186,666			
PIG IRON THROUGH JANUARY 1978-----	182,241			--			186,666			117,360
/ / BASED ON RETURNS FROM 73% OF REPORTING CONSUMERS, REPRESENTING 86% OF SCRAP CONSUMPTION.										

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN JANUARY 1978 (PRELIMINARY), BY TYPE OF CONSUMER AND TYPE OF FURNACE OR OTHER USE
(SHORT TONS)

TYPE OF FURNACE OR OTHER USE	MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/				MANUFACTURERS OF STEEL CASTINGS 2/		IRON FOUNDRIES AND MISCELLANEOUS USERS		TOTAL ALL TYPES	
	SCRAP				SCRAP		SCRAP		SCRAP	
	PIG IRON				PIG IRON		PIG IRON		PIG IRON	
BLAST FURNACE 3/	218,888	--	--	--	--	--	--	--	218,888	--
BASIC OXYGEN PROCESS 4/	1,953,089	4,979,800	--	--	--	--	--	--	1,953,089	4,979,800
OPEN-HEARTH FURNACE	1,002,934	1,051,936	4,361	298	298	--	--	--	1,007,295	1,052,234
ELECTRIC FURNACE	2,495,423	115,197	227,576	2,788	2,788	428,978	26,318	--	3,151,977	144,303
CUPOLA FURNACE	33,248	11,252	11,743	151	151	1,050,259	72,669	--	1,095,250	84,072
OTHER (INCLUDING AIR FURNACE) 5/	68,354	24,471	2,228	313	313	41,652	2,814	--	112,234	27,598
DIRECT CASTINGS 6/	--	94,869	--	--	--	--	84,868	--	--	179,734
TOTAL	5,771,936	6,277,525	245,908	3,550	3,550	1,520,889	186,666	--	7,538,733	5,467,741

1/ INCLUDES ONLY THOSE CASTINGS MADE BY COMPANIES PRODUCING STEEL INGOTS.

2/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND STEEL CASTINGS.

3/ INCLUDES CONSUMPTION IN ALL BLAST FURNACES PRODUCING PIG IRON.

4/ INCLUDES SCRAP AND PIG IRON PROCESSED IN METALLURGICAL BLAST CUPOLAS AND USED IN OXYGEN CONVERTERS.

5/ INCLUDES VACUUM MELTING FURNACES AND MISCELLANEOUS USES.

6/ INCLUDES INGOT MOLDS AND STOOLES.

TABLE 6. - MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, DECEMBER 1977 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOT MOLDS, STOKS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS OF SCRAP	ENDING STOCKS		
SCRAP:										
CARBON STEEL										
LOW-PHOSPHORUS PLATE AND PUNCHINGS	34,737	692	2,201	803	38,134	3,018	109,142			
CUT STRUCTURAL AND PLATE	29,345	--	22,080	--	58,395	--	59,576			
NO.1 HEAVY MELTING STEEL	423,603	260,165	1,473,895	10,356	2,014,159	238,312	2,429,173			
NO.2 HEAVY MELTING STEEL	156,920	4,181	75,694	148	254,395	595	491,935			
NO.1 AND ELECTRIC FURNACE BUNDLES	489,506	66,079	238,361	142	779,638	16,259	1,639,337			
NO.2 AND ALL OTHER BUNDLES	120,688	10,949	28,434	--	153,535	13,745	280,415			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)	1,458	--	--	--	2,728	--	3,511			
RAILROAD RAILS	8,600	--	1	--	8,125	--	3,510			
TURBINES AND BORINGS	112,218	7,351	29,960	137	131,665	10,391	107,383			
SLAG SCRAP (FE CONTENT 70 PERCENT)	108,884	791	184,341	800	319,385	8,664	170,486			
SHREDDED OR FRAGMENTIZED	96,309	23,981	79	--	139,708	--	201,875			
NO. 1 BUSHING	129,496	3,503	454	--	135,940	7	178,459			
ALL OTHER CARBON STEEL SCRAP	147,274	11,179	854,487	74,092	965,434	112,405	962,235			
STAINLESS STEEL SCRAP										
ALLOY STEEL (EXCEPT STAINLESS)	32,494	3,217	53,122	4	84,750	4,180	93,324			
INGOT MOLD AND STOK SCRAP	17,292	19,651	131,843	285	137,837	15,000	307,849			
MACHINERY AND CUPOLA CAST IRON	77,586	47,893	79,680	140,547	306,253	72,425	673,946			
CAST IRON BORINGS	543	--	--	--	506	--	4,253			
MOTOR BLOCKS	12,125	3,860	17,143	6,066	37,400	3,800	77,822			
OTHER IRON SCRAP	2	--	18	--	27	--	1,569			
OTHER MIXED SCRAP	17,751	15,154	36,688	3,139	45,490	19,002	129,444			
	25,839	2,693	21,276	4	41,968	4,672	60,028			
TOTAL SCRAP	2,042,670	481,289	3,249,757	156,523	5,655,472	522,515	7,984,272			
TOTAL SCRAP THROUGH DECEMBER 1977	25,783,380	5,981,378	39,979,551	2,422,096	69,339,517	5,450,700	7,984,272			
PIG IRON										
	452,283	--	6,412,067	--	6,335,214	603,211	1,186,582			
PIG IRON THROUGH DECEMBER 1977	5,955,837	--	81,090,246	--	79,390,424	7,909,601	1,186,582			
1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS. BASED ON RETURNS FROM 93% OF REPORTING CONSUMERS, REPRESENTING 98% OF SCRAP CONSUMPTION.										

1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
2/ BASED ON RETURNS FROM 93% OF REPORTING CONSUMERS, REPRESENTING 98% OF SCRAP CONSUMPTION.

TABLE 7. - MANUFACTURERS OF STEEL CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, DECEMBER 1977 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP				PRODUCTION OF HOME SCRAP				CONSUMPTION				ENDING STOCKS
	FROM				RECYCLATING OBSOLETE SCRAP OF BOTH PUR-				CHASED AND				
	BROKERS, DEALERS AND OTHER	FROM OTHER OWN	COMPANY PLANTS	SOURCES	SCRAP	RESULTING FROM CURRENT OPERATIONS	OLD EQUIPMENT, BUILDINGS, ETC.)	SCRAP	HOME SCRAP	RE- SHIPMENTS	OF SCRAP		
SCRAP:													
CARBON STEEL-													
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	44,283	274			15,507		1,010	65,473					60,968
CUT STRUCTURAL AND PLATE-----	16,671	2,482			2,196		--	18,960					23,433
NO.1 HEAVY MELTING STEEL-----	10,778	122			5,880		257	19,521					30,837
NO.2 HEAVY MELTING STEEL-----	2,852	--			1,489		--	5,244					1,388
NO.1 AND ELECTRIC FURNACE BUNDLES----	5,515	--			249		--	5,103					4,078
NO.2 AND ALL OTHER BUNDLES-----	1,185	--			--		--	172					2,183
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,572	--			1,495		--	5,421					5,329
RAILROAD RAILS-----	--	--			--		--	10					214
TURNINGS AND BORINGS-----	3,410	299			2,263		--	5,449					5,725
SLAG SCRAP (FE CONTENT 70 PERCENT)---	--	--			306		--	303					10
SHREDDED OR FRAGMENTIZED-----	7,375	1,151			--		--	7,273					5,555
NO. 1 BUSHELING-----	4,571	680			813		--	4,359					9,564
ALL OTHER CARBON STEEL SCRAP-----	44,699	2,354			28,529		688	72,203					52,040
STAINLESS STEEL SCRAP-----	2,320	339			2,245		--	4,447					4,564
ALLOY STEEL (EXCEPT STAINLESS)---	3,886	345			10,686		--	12,048					22,416
INGOT MOLD AND STUOL SCRAP-----	493	--			32		--	485					749
MACHINERY AND CUPOLA CAST IRON-----	527	--			698		--	1,293					2,101
CAST IRON BORINGS-----	3,135	--			2,517		--	5,713					4,580
MOTOR BLOCKS-----	48	--			--		--	67					105
OTHER IRON SCRAP-----	3,874	--			6,087		--	9,187					21,335
OTHER MIXED SCRAP-----	112	--			339		--	338					119
TOTAL SCRAP-----	160,306	8,046			81,331		1,955	243,069					257,341
TOTAL SCRAP THROUGH DECEMBER 1977----	1,869,436	116,109			990,800		15,775	2,929,694					257,341
PIG IRON-----													
	RECEIPTS	PRODUCTION			CONSUMPTION			SHIPMENTS					STOCKS
	4,054	--			3,580			48					6,370
PIG IRON THROUGH DECEMBER 1977-----	46,146	--			45,244			95					6,370
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.													
2/ BASED ON RETURNS FROM 84% OF REPORTING CONSUMERS, REPRESENTING 94% OF SCRAP CONSUMPTION.													

TABLE 8. - IRON FOUNDRIES AND MISCELLANEOUS USERS - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, DECEMBER 1977 (FINAL) 1/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP (INCLUDES INGOT AND SCRAP FROM CURRENT OLD EQUIPMENT, BUILDINGS, ETC.)	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP (INCLUDES INGOT AND SCRAP FROM CURRENT OLD EQUIPMENT, BUILDINGS, ETC.)	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP (INCLUDES INGOT AND SCRAP FROM CURRENT OLD EQUIPMENT, BUILDINGS, ETC.)	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP (INCLUDES INGOT AND SCRAP FROM CURRENT OLD EQUIPMENT, BUILDINGS, ETC.)	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	51,995	7,130	5,338	34	60,959	158	65,952			
CUT STRUCTURAL AND PLATE-----	101,802	12,099	11,389	147	138,479	215	86,810			
NO.1 HEAVY MELTING STEEL-----	19,447	9,585	5,820	--	33,111	3,510	54,066			
NO.2 HEAVY MELTING STEEL-----	932	502	1,255	38	5,108	160	6,913			
NO.1 AND ELECTRIC FURNACE BUNDLES---	9,079	11,248	6,210	24	30,807	--	9,628			
NO.2 AND ALL OTHER BUNDLES-----	49,854	11,397	--	--	56,393	--	56,938			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,755	--	2,193	--	6,697	--	6,369			
RAILROAD RAILS-----	9,575	1	24	--	8,931	173	16,505			
TURNINGS AND BORINGS-----	43,902	8,592	1,346	54	53,883	2,049	43,017			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	4,780	--	54	--	5,656	54	31,659			
SHREDDED OR FRAGMENTIZED-----	66,828	9,246	--	--	74,373	266	53,407			
NO. 1 BUSHELING-----	28,871	11,108	944	--	37,904	--	14,919			
ALL OTHER CARBON STEEL SCRAP-----	79,825	52,701	13,450	7	151,288	607	126,642			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	1,263	--	562	1	1,576	66	9,127			
INGOT MOLD AND STOOL SCRAP-----	8,990	14	297	73	9,164	124	10,752			
MACHINERY AND CUPOLA CAST IRON -----	19,493	--	6,809	369	18,226	338	33,709			
CAST IRON BORINGS-----	65,460	12,861	61,117	370	138,416	1,295	87,839			
MOTOR BLOCKS-----	34,137	47,658	27,932	374	110,369	3,762	91,342			
OTHER IRON SCRAP-----	53,027	4,960	33,504	--	87,676	--	56,216			
OTHER MIXED SCRAP-----	80,835	8,856	226,494	6,281	320,782	6,722	176,115			
	29,486	64,803	25,755	199	121,096	185	40,064			
TOTAL SCRAP-----	764,336	272,761	430,493	7,971	1,469,904	19,714	1,117,898			
TOTAL SCRAP THROUGH DECEMBER 1977----	10,367,567	3,876,560	6,009,971	105,651	19,971,117	303,014	1,117,898			
PIG IRON-----										
	158,943	--	--	--	155,886	2,766	122,916			
PIG IRON THROUGH DECEMBER 1977-----										
	2,571,448	--	--	--	2,566,391	7,811	122,916			
1/ BASED ON RETURNS FROM 79% OF REPORTING CONSUMERS, REPRESENTING 92% OF SCRAP CONSUMPTION.										

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN DECEMBER 1977 (FINAL), BY TYPE OF CONSUMER AND TYPE OF FURNACE OR OTHER USE
(SHORT TONS)

TYPE OF FURNACE OR OTHER USE	MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/				MANUFACTURERS OF STEEL CASTINGS 2/				IRON FOUNDRIES AND MISCELLANEOUS USERS				TOTAL ALL TYPES	
	SCRAP		PIG IRON		SCRAP		PIG IRON		SCRAP		PIG IRON		SCRAP	PIG IRON
BLAST FURNACE 3/	293,323	--	--	--	--	--	--	--	--	--	--	--	293,323	--
BASIC OXYGEN PROCESS 4/	1,993,768	5,143,481	--	--	--	--	--	--	--	--	--	--	1,993,768	5,143,481
OPEN-HEARTH FURNACE	943,797	967,080	--	--	5,883	454	--	--	--	--	--	--	949,680	967,534
ELECTRIC FURNACE	2,329,894	46,249	--	--	222,427	2,583	--	--	425,033	25,453	--	--	2,977,354	74,285
CUPOLA FURNACE	34,511	14,218	--	--	11,757	59	--	--	1,007,412	69,484	--	--	1,053,680	83,761
OTHER (INCLUDING AIR FURNACE) 5/	60,179	20,207	--	--	3,002	484	--	--	37,459	3,314	--	--	100,640	24,005
DIRECT CASTINGS 6/	--	143,979	--	--	--	--	--	--	--	57,635	--	--	--	201,614
TOTAL	5,655,472	6,335,214	--	--	243,069	3,580	--	--	1,469,904	155,886	--	--	7,368,445	6,494,680

1/ INCLUDES ONLY THOSE CASTINGS MADE BY COMPANIES PRODUCING STEEL INGOTS.

2/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND STEEL CASTINGS.

3/ INCLUDES CONSUMPTION IN ALL BLAST FURNACES PRODUCING PIG IRON.

4/ INCLUDES SCRAP AND PIG IRON PROCESSED IN METALLURGICAL BLAST CUPOLAS AND USED IN OXYGEN CONVERTERS.

5/ INCLUDES VACUUM MELTING FURNACES AND MISCELLANEOUS USES.

6/ INCLUDES INGOT MOLDS AND STOOLS.

FOREIGN TRADE

Exports of iron and steel scrap totaled 642,320 short tons in January compared with 448,145 tons in December. Exports of pig iron during January totaled 706 tons and 698 tons in December. Imports of scrap totaled 52,687 short tons in January compared with 49,598 tons in December. Of the scrap imported during January, 51,257 short tons came from Canada and 1,430 tons from other sources. Imports of pig iron totaled 44,423 short tons in January and 53,164 tons in December. In addition to the foregoing imports of pig iron during January, there were 75 tons of sponge iron, valued at \$53,767 imported, of which 43 tons came from Canada, and 32 tons from Sweden.

Table 10. - U.S. exports of iron and steel scrap, 1/ by country

Country	January 1978		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	2	\$8,194	2	\$8,194
Canada-----	38,194	1,914,036	38,194	1,914,036
Egypt-----	18,106	923,447	18,106	923,447
Greece-----	21,908	1,185,543	21,908	1,185,543
Italy-----	83,176	4,342,249	83,176	4,342,249
Japan-----	220,376	11,036,495	220,376	11,036,495
Korea, Republic of-----	131,320	6,965,639	131,320	6,965,639
Mexico-----	33,209	1,656,139	33,209	1,656,139
Pakistan-----	2,413	261,256	2,413	261,256
Spain-----	2,253	1,022,110	2,253	1,022,110
Sweden-----	--	--	--	--
Taiwan-----	53,956	3,602,358	53,956	3,602,358
Turkey-----	13,632	949,455	13,632	949,455
United Kingdom-----	126	28,543	126	28,543
Other countries-----	23,649	2,890,995	23,649	2,890,995
Total-----	642,320	36,786,459	642,320	36,786,459

1/ Excludes ships, boats, and other vessels for breaking up (for scrapping) which was included in 1965-1970 figures.

Table 11. - U.S. exports of iron and steel scrap, by grade

Grade of scrap	January 1978		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	208,481	\$11,870,754	208,481	\$11,870,754
No. 2 heavy melting steel scrap-----	55,486	2,917,017	55,486	2,917,017
No. 1 bundles-----	16,144	812,736	16,144	812,736
No. 2 bundles-----	15,853	514,315	15,853	514,315
Borings, shovelings and turnings-----	8,864	287,888	8,864	287,888
Stainless steel-----	5,705	2,785,537	5,705	2,785,537
Shredded steel scrap-----	223,796	11,886,186	223,796	11,886,186
Iron scrap (excluding borings and shovelings)--	25,703	1,512,214	25,703	1,512,214
All other steel scrap <u>1</u> /----	82,288	4,199,812	82,288	4,199,812
Total-----	642,320	36,786,459	642,320	36,786,459
Ships, boats, and other vessels for breaking up (for scrapping)-----	--	--	--	--
Total-----	642,320	36,786,459	642,320	36,786,459

1/ Includes tinplate, terneplate, and steel alloy.