



MINERAL INDUSTRY SURVEYS

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



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Iron and Steel Scrap, Monthly

IRON AND STEEL SCRAP IN JANUARY 1977

Returns from 84% of reporting consumers representing 97% of total scrap consumption, indicated that consumption of iron and steel scrap in January on a daily average basis was 3% above that in December 1976 according to the Bureau of Mines, U.S. Department of the Interior. Compared with December data, daily average production and net receipts were down 5% and up 2%, respectively, and stocks at the end of the month were down 3%.

Exports (491,000 short tons) of ferrous scrap during the month were 22% below those for December 1976 and 26% below those for January 1976. Japan was the largest importer of U.S. scrap, taking 33% of the total exported in January 1977. The next largest importers were the Republic of Korea and Spain, which received 20% and 11%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of January was \$72.17 per long ton, down 1% from the price of \$73.16 at the end of January 1976. The average composite price of \$72.20 for February was essentially unchanged from the previous month's average.

The sharp upturn in raw steel production starting in early February, continued in March, averaging about 4% per week; this preceded a price rise of scrap in mid-March of about 2%.

Pig iron production and consumption during the month were down 5% each on a daily average basis from that of the previous month. Stocks of pig iron increased 1% during January compared with those at the end of December 1976.

Prepared in the Division of Ferrous Metals, April 15, 1977.

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 1977 (PRELIMINARY) 1/					FINAL
	MFRS. OF	MFRS. OF	IRON FOUNDRIES	TOTAL FOR	TOTAL FOR	
	PIG IRON AND	STEEL	AND MISCEL-	MONTH OF	MONTH OF	
	STEEL INGOTS	CASTINGS 3/	LANEUS USERS	JAN 1977	DEC 1976 4/	
	6 CASTINGS 2/					
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	1,777,248	121,305	836,824	2,735,377	2,663,391	
RECEIPTS FROM OTHER OWN COMPANY PLANTS	381,493	7,877	219,620	608,990	692,459	
PRODUCTION RECIRCULATING SCRAP	2,798,865	77,587	454,459	3,330,911	3,404,239	
PRODUCTION OBSOLETE SCRAP	156,344	580	7,346	164,270	256,482	
CONSUMPTION	4,975,167	219,120	1,532,910	6,727,197	6,508,063	
SHIPMENTS	325,349	1,832	19,988	346,969	415,984	
STOCKS END OF MONTH	8,397,994	239,516	1,084,317	9,721,827	9,988,023	
PIG IRON:						
RECEIPTS	404,726	3,681	197,432	605,839	659,236	
PRODUCTION	5,984,147	--	--	5,984,147	6,270,319	
CONSUMPTION	5,780,771	3,211	200,899	5,984,881	6,275,106	
SHIPMENTS	586,608	--	120	586,728	630,524	
STOCKS END OF MONTH	1,402,311	6,954	114,622	1,523,887	1,512,905	
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS	--	--	--	19,088	18,322	
PRODUCTION	--	--	--	--	--	
CONSUMPTION	--	--	--	19,323	18,085	
SHIPMENTS	--	--	--	--	--	
STOCKS END OF MONTH	--	--	--	4,139	4,379	

1/ BASED ON RETURNS FROM 84% OF REPORTING CONSUMERS, REPRESENTING 97% 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 85 % OF REPORTING CONSUMERS, REPRESENTING 98 % OF SCRAP CONSUMPTION.
5/ CUMULATIVE TOTALS MAY NOT AGREE WITH SUM OF MONTHLY REPORTS BECAUSE OF ADDITION OF REPORTS FROM LATE RESPONDENTS.

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 1977 (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 MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	FROM CURRENT OPERATIONS	FROM SCRAP (INCLUDES INGOT MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	OF BOTH PURCHASED AND RECYCLED SCRAP	SHIPMENTS	STOCKS	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	45,227	120	3,235	316	46,863	2,568	77,912			
CUT STRUCTURAL AND PLATE-----	27,255	19	17,281	--	30,041	37	43,925			
NO.1 HEAVY MELTING STEEL-----	315,551	165,649	1,232,348	5,541	1,679,889	158,675	2,429,626			
NO.2 HEAVY MELTING STEEL-----	129,871	11,796	89,878	95	243,421	2,286	517,820			
NO.1 AND ELECTRIC FURNACE BUNDLES----	423,228	46,043	201,454	878	698,505	10,003	1,543,917			
NO.2 AND ALL OTHER BUNDLES-----	127,972	7,915	18,453	--	161,248	6,921	326,578			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	769	--	4,053	--	5,543	--	6,967			
RAILROAD RAILS-----	17,959	--	--	--	6,124	--	15,060			
TURNINGS AND BORINGS-----	65,659	4,852	22,817	96	96,797	3,320	100,725			
SLAG SCRAP (FE CONTENT 70 PERCENT)----	66,684	17,413	165,577	--	254,206	5,121	315,522			
SHREDDED OR FRAGMENTIZED-----	215,560	33,174	945	--	178,370	--	223,730			
ALL OTHER CARBON STEEL SCRAP-----	246,786	6,888	749,156	18,587	1,009,875	35,777	1,137,390			
STAINLESS STEEL SCRAP-----	26,005	1,987	52,214	7	84,597	2,705	77,222			
ALLOY STEEL (EXCEPT STAINLESS)-----	8,775	14,048	108,943	704	119,873	5,432	280,141			
INGOT MOLD AND STOOL SCRAP-----	19,277	56,051	55,601	126,594	265,343	44,991	985,220			
MACHINERY AND CUPOLA CAST IRON -----	2,167	--	--	--	820	--	3,778			
CAST IRON BORINGS-----	12,616	4,108	24,821	3,064	36,838	13,164	72,980			
MOTOR BLOCKS-----	894	--	--	--	712	44	2,141			
OTHER IRON SCRAP-----	16,420	7,428	40,033	461	37,366	28,480	149,809			
OTHER MIXED SCRAP-----	8,973	4,002	12,046	1	18,736	5,825	87,531			
TOTAL SCRAP-----	1,777,248	381,493	2,798,865	156,344	4,975,167	325,349	8,397,994			
TOTAL SCRAP THROUGH JANUARY 1977----	1,777,248	381,493	2,798,865	156,344	4,975,167	325,349	8,397,994			
PIG IRON-----	404,726		5,984,147		5,780,771	586,608	1,402,311			
PIG IRON THROUGH JANUARY 1977-----	404,726		5,984,147		5,780,771	586,608	1,402,311			
1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.										
2/ BASED ON RETURNS FROM 95% OF REPORTING CONSUMERS, REPRESENTING 99% OF SCRAP CONSUMPTION.										

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

2/ BASED ON RETURNS FROM 95% OF REPORTING CONSUMERS, REPRESENTING 99% 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 1977 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLING SCRAP (INCLUDES INGOT MOLD, STUOLS, AND SCRAP FROM CURRENT OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	RECYCLING SCRAP (INCLUDES INGOT MOLD, STUOLS, AND SCRAP FROM CURRENT OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	CHASED AND HOME SCRAP (INCLUDES RE- SHIPMENTS OF SCRAP)		
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	36,135	517	12,813	56	56,668	81	72,903
CUT STRUCTURAL AND PLATE-----	11,001	1,515	1,470	--	16,158	60	19,229
NO.1 HEAVY MELTING STEEL-----	8,994	50	4,881	--	12,743	--	30,485
NO.2 HEAVY MELTING STEEL-----	3,467	--	1,100	--	4,141	--	3,833
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,516	--	42	--	4,048	--	4,474
NO.2 AND ALL OTHER BUNDLES-----	--	89	--	--	145	--	595
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	3,393	146	1,152	--	4,277	60	5,227
RAILROAD RAILS-----	20	--	--	--	2	--	128
TURNINGS AND BORINGS-----	4,216	890	2,084	--	6,325	869	3,624
SLAG SCRAP (FE CONTENT 70 PERCENT)---	499	--	394	--	871	20	138
SHREDDER OR FRAGMENTIZED-----	6,985	1,604	--	--	9,802	--	5,790
ALL OTHER CARBON STEEL SCRAP-----	31,745	1,964	28,948	498	70,010	218	39,672
STAINLESS STEEL SCRAP-----	1,307	400	1,951	--	3,524	189	5,884
ALLOY STEEL (EXCEPT STAINLESS)---	2,453	702	10,226	--	10,881	--	20,785
INGOT MOLD AND STUOL SCRAP-----	390	--	4	--	275	20	651
MACHINERY AND CUPOLA CAST IRON ---	528	--	1,006	--	1,650	--	2,317
CAST IRON BORINGS-----	3,574	--	4,913	--	8,832	92	2,995
MOTOR BLOCKS-----	82	--	--	--	82	--	111
OTHER IRON SCRAP-----	1,990	--	6,230	26	8,313	23	20,729
OTHER MIXED SCRAP-----	10	--	373	--	373	16	16
TOTAL SCRAP-----	121,305	7,877	77,587	580	219,120	1,632	239,516
TOTAL SCRAP THROUGH JANUARY 1977---	121,305	7,877	77,587	580	219,120	1,632	239,516
PIG IRON-----	3,681	--	--	--	3,211	--	6,954
PIG IRON THROUGH JANUARY 1977-----	3,681	--	--	--	3,211	--	6,954

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

2/ BASED ON RETURNS FROM 87% OF REPORTING CONSUMERS, REPRESENTING 95% 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 1977 (PRELIMINARY) 1/
(SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOT MOLDS, STOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS OF SCRAP	
SCRAP							
CARBON STEEL--							
LOW-PHOSPHORUS PLATE AND PUNCHINGS--							
CUT STRUCTURAL AND PLATE--							
NO.1 HEAVY MELTING STEEL--	54,106	9,378	6,323	5	69,591	692	64,183
NO.2 HEAVY MELTING STEEL--	108,840	7,610	12,511	42	128,846	334	93,588
NO.1 HEAVY MELTING STEEL--	15,352	10,183	3,634	5	34,923	3,107	51,219
NO.1 AND ELECTRIC FURNACE BUNDLES--	8,637	447	2,973	49	11,976	55	7,100
NO.2 AND ALL OTHER BUNDLES--	19,557	9,552	4,231	41	29,941	--	13,732
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)--	44,338	7,572	537	--	38,610	--	48,807
RAILROAD RAILS--	4,656	--	1,160	--	5,209	--	4,976
TURNINGS AND BORINGS--	16,398	--	24	--	9,028	24	18,059
SLAG SCRAP (FE CONTENT 70 PERCENT)--	60,556	8,032	1,682	55	56,270	2,229	94,559
SHREDDER OR FRAGMENTIZED--	7,124	--	41	--	10,361	41	18,564
ALL OTHER CARBON STEEL SCRAP--	74,204	13,934	--	--	76,050	--	54,866
	128,461	70,002	11,787	7	215,917	326	129,194
STAINLESS STEEL SCRAP--	349	3	562	--	601	18	10,894
ALLOY STEEL (EXCEPT STAINLESS)--	6,418	4	427	73	5,879	106	3,368
INGOT MOLD AND STOOL SCRAP--	11,657	--	9,730	585	21,331	666	30,737
MACHINERY AND CUPOLA CAST IRON--	68,774	11,280	51,530	108	129,553	1,802	87,443
CAST IRON BORINGS--	43,511	38,800	22,033	27	115,867	3,393	83,032
MOTOR BLOCKS--	53,832	3,382	31,233	--	87,301	--	55,352
OTHER IRON SCRAP--	83,548	5,374	264,800	6,043	355,277	6,825	174,209
OTHER MIXED SCRAP--	26,506	24,047	29,641	306	130,379	370	40,395
TOTAL SCRAP--	836,824	219,620	454,459	7,346	1,532,910	19,988	1,084,317
TOTAL SCRAP THROUGH JANUARY 1977--	836,824	219,620	454,459	7,346	1,532,910	19,988	1,084,317
RECEIPTS							
PRODUCTION							
CONSUMPTION							
SHIPMENTS							
STOCKS							
PIG IRON--	197,432	--	--	--	200,899	120	114,622
PIG IRON THROUGH JANUARY 1977--	197,432	--	--	--	200,899	120	114,622

1/ BASED ON RETURNS FROM 80% OF REPORTING CONSUMERS, REPRESENTING 94% OF SCRAP CONSUMPTION.

1/ BASED ON RETURNS FROM 80% OF REPORTING CONSUMERS, REPRESENTING 94% OF SCRAP CONSUMPTION.

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN JANUARY 1977 (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		PIG IRON		SCRAP		PIG IRON		SCRAP		PIG IRON		SCRAP	
BLAST FURNACE 3/	199,552	--	4,663,001	--	--	--	--	--	--	--	--	--	199,552	--
BASIC OXYGEN PROCESS 4/	1,804,392	--	924,875	--	--	--	--	--	--	--	--	--	1,804,392	4,663,001
OPEN-HEARTH FURNACE	862,194	--	43,780	--	5,996	611	--	--	--	--	--	--	868,190	925,286
ELECTRIC FURNACE	2,030,448	--	16,422	--	200,282	2,384	20,101	--	433,044	20,101	73,250	--	2,663,774	66,265
CUPOLA FURNACE	20,493	--	26,416	--	11,299	30	--	--	1,041,956	73,250	--	--	1,073,748	89,702
OTHER (INCLUDING AIR FURNACE) 5/	58,088	--	106,477	--	1,543	186	--	--	57,910	2,838	--	--	117,541	29,440
DIRECT CASTINGS 6/	--	--	--	--	--	--	--	--	--	104,710	--	--	--	211,187
TOTAL	4,975,167	5,780,771	219,120	3,211	1,532,910	200,899	6,727,197	5,984,881						

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 STUOLS.

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 1976 (FINAL) 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	RECYCLATING SCRAP (INCLUDES INGOT MOLDS, STOOLES, HOME SCRAP AND SCRAP FROM OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	RESULTING FROM CURRENT OPERATIONS	OF BOTH PURCHASED AND RECYCLED SCRAP (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)		
					SHIPMENTS OF SCRAP	STOCKS	
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	72,048	414	11,891	149	76,962	1,198	141,020
CUT STRUCTURAL AND PLATE-----	9,835	--	20,072	242	33,116	2,972	31,501
NO.1 HEAVY MELTING STEEL-----	366,484	222,340	1,260,939	7,484	1,634,329	214,003	2,576,748
NO.2 HEAVY MELTING STEEL-----	118,761	4,408	84,851	213	242,605	970	528,533
NO.1 AND ELECTRIC FURNACE BUNDLES----	421,976	50,049	204,488	1,055	650,727	2,017	1,615,351
NO.2 AND ALL OTHER BUNDLES-----	148,135	8,424	15,804	--	194,712	5,867	348,905
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	8,016	--	4,452	--	13,593	--	32,045
RAILROAD RAILS-----	1,129	--	--	--	9,286	--	973
TURNS AND BORINGS-----	75,323	4,355	25,402	80	99,495	7,573	106,433
SLAG SCRAP (FE CONTENT 70 PERCENT)----	91,299	3,309	227,499	--	303,377	4,406	316,003
SHREDDER OR FRAGMENTIZED-----	83,159	42,227	399	--	127,017	1,213	161,297
ALL OTHER CARBON STEEL SCRAP-----	215,739	12,754	715,690	109,282	942,005	45,309	1,012,134
STAINLESS STEEL SCRAP----							
ALLOY STEEL (EXCEPT STAINLESS)-----	23,322	3,233	49,654	2	82,065	5,654	85,445
INGOT MOLD AND STOOL SCRAP-----	12,046	14,799	116,904	624	125,826	18,301	272,918
MACHINERY AND CUPOLA CAST IRON -----	32,289	41,417	62,290	124,654	217,053	42,829	1,039,611
CAST IRON BORINGS-----	--	--	--	--	1,190	--	2,431
MOTOR BLOCKS-----	12,601	5,288	22,030	1,890	36,159	5,127	77,213
OTHER IRON SCRAP-----	119	--	21	--	39	21	617
OTHER MIXED SCRAP-----	24,602	8,108	68,519	287	57,918	24,543	152,618
	12,396	3,432	18,883	6	22,733	8,584	86,984
TOTAL SCRAP-----	1,729,279	424,557	2,909,788	245,968	4,870,207	390,587	8,588,780
TOTAL SCRAP THROUGH DECEMBER 1976----	25,807,681	6,029,119	40,835,598	2,646,171	68,353,138	5,778,287	8,588,780
PIG IRON							
	RECEIPTS		PRODUCTION		CONSUMPTION		STOCKS
	459,089		6,270,319		6,078,998	629,545	1,381,038
PIG IRON THROUGH DECEMBER 1976-----	5,522,393		86,644,513		84,101,856	7,980,733	1,381,038

1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
2/ BASED ON RETURNS FROM 96% OF REPORTING CONSUMERS, REPRESENTING 99% 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 1976 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT MOLD, STOOLES, HOME SCRAP FROM CURRENT OPERATIONS BUILDINGS, ETC.)	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT MOLD, STOOLES, HOME SCRAP FROM OLD EQUIPMENT, CIRCULATING RE-OPERATIONS BUILDINGS, ETC.)	CHASED AND PURCHASED SCRAP	SHIPMENTS OF SCRAP	
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	50,767	82	13,939	137	59,162	20	85,569
CUT STRUCTURAL AND PLATE-----	15,664	1,647	1,488	--	17,780	60	22,488
NO.1 HEAVY MELTING STEEL-----	10,413	211	5,235	--	16,441	--	29,371
NO.2 HEAVY MELTING STEEL-----	4,690	--	1,070	--	5,918	--	3,565
NO.1 AND ELECTRIC FURNACE BUNDLES----	4,156	--	--	--	3,806	--	4,305
NO.2 AND ALL OTHER BUNDLES-----	188	--	--	--	104	--	611
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	3,868	--	1,075	--	5,171	46	5,100
RAILROAD RAILS-----	7	--	--	--	33	--	110
TURNINGS AND BORINGS-----	4,519	664	2,113	--	7,475	914	3,959
SLAG SCRAP (FE CONTENT 70 PERCENT)----	315	--	484	--	680	14	136
SHREDDER OR FRAGMENTIZED-----	7,648	1,531	--	--	9,710	--	7,013
ALL OTHER CARBON STEEL SCRAP-----	40,874	2,570	27,200	820	69,803	449	40,920
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	1,341	367	2,244	--	3,493	298	5,608
INGOT MCLL AND STOOOL SCRAP-----	5,550	531	11,809	105	13,427	--	21,974
MACHINERY AND CUPOLA CAST IRON-----	112	--	54	--	379	48	497
CAST IRON BORINGS-----	801	--	822	--	1,591	--	2,433
MOTOR BLOCKS-----	3,810	--	4,408	--	7,975	224	3,340
OTHER IRON SCRAP-----	73	--	--	--	73	--	111
OTHER MIXED SCRAP-----	3,118	--	5,982	97	8,344	98	21,289
	--	--	281	--	329	--	6
TOTAL SCRAP-----	157,914	7,603	78,204	1,159	231,694	2,171	258,405
TOTAL SCRAP THROUGH DECEMBER 1976----	1,818,796	103,793	976,922	14,826	2,846,680	40,370	258,405
RECEIPTS		PRODUCTION		CONSUMPTION		SHIPMENTS	STOCKS
3,490		--		3,423		--	6,827
45,510		--		45,795		112	6,827
PIG IRON THROUGH DECEMBER 1976-----							

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

2/ BASED ON RETURNS FROM 86% OF REPORTING CONSUMERS, REPRESENTING 95% 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 1976 (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	SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOT AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS OF SCRAP		
SCRAP:								
CARBON STEEL-								
LOW-PHOSPHORUS PLATE AND PUNCHINGS---								
CUT STRUCTURAL AND PLATE-----	54,344	8,978	6,436	5	71,593	767	66,911	
NO.1 HEAVY MELTING STEEL-----	102,118	8,163	12,078	608	125,282	312	94,995	
NO.2 HEAVY MELTING STEEL-----	14,454	10,982	6,240	--	31,640	3,991	59,658	
NO.1 AND ELECTRIC FURNACE BUNDLES---	10,060	421	103	49	8,781	55	7,394	
NO.2 AND ALL OTHER BUNDLES-----	12,004	13,116	3,763	29	28,830	--	11,038	
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	39,570	9,164	437	--	47,170	--	34,970	
RAILROAD RAILS-----	33,525	6,525	1,302	--	39,494	--	14,399	
TURNINGS AND BORINGS-----	9,055	--	24	--	8,421	26	12,417	
SLAG SCRAP (FE CONTENT 70 PERCENT)---	55,048	8,988	1,239	241	64,251	2,006	106,957	
SHREDDED OR FRAGMENTIZED-----	4,975	--	49	--	7,365	49	5,735	
ALL OTHER CARBON STEEL SCRAP-----	66,503	11,977	--	--	75,720	--	41,896	
	82,593	61,283	12,515	7	162,260	497	122,631	
STAINLESS STEEL SCRAP-----	206	--	344	--	400	26	4,414	
ALLOY STEEL (EXCEPT STAINLESS)---	5,902	3	715	89	6,703	364	13,291	
INGOT MOLD AND STUOL SCRAP-----	10,457	--	10,274	498	20,327	445	27,760	
MACHINERY AND CUPOLA CAST IRON ---	66,197	10,909	44,498	1,202	121,608	1,273	88,179	
CAST IRON BORINGS-----	52,026	38,088	19,787	46	107,808	3,261	99,404	
MCTOR BLOCKS-----	45,127	4,762	34,664	--	88,933	285	56,253	
OTHER IRON SCRAP-----	80,045	6,533	242,989	6,299	327,524	9,517	179,961	
OTHER MIXED SCRAP-----	31,989	60,407	18,790	282	62,032	352	92,575	
TOTAL SCRAP-----	776,198	260,299	416,247	9,355	1,406,162	23,226	1,140,838	
TOTAL SCRAP THROUGH DECEMBER 1976---	10,003,764	3,698,601	5,518,701	38,050	18,626,495	334,005	1,140,838	
RECEIPTS		PRODUCTION		CONSUMPTION		SHIPMENTS		STOCKS
196,657		--		192,685		979		125,040
2,776,702		--		2,791,301		9,647		125,040
1/ BASED ON RETURNS FROM 81% OF REPORTING CONSUMERS, REPRESENTING 94% OF SCRAP CONSUMPTION.								

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN DECEMBER 1976 (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/-	271,198	--	--	--	--	--	271,198	--
BASIC OXYGEN PROCESS 4/-	1,953,532	4,954,371	--	--	--	--	1,953,532	4,954,371
OPEN-HEARTH FURNACE	744,198	917,726	--	--	--	--	750,821	918,171
ELECTRIC FURNACE	1,805,472	36,483	6,623	445	--	--	2,440,985	57,971
CUPOLA FURNACE	34,212	21,161	213,543	2,712	421,970	18,776	972,631	101,282
OTHER (INCLUDING AIR FURNACE) 5/	61,595	18,954	9,732	20	928,687	80,401	118,896	21,996
DIRECT CASTINGS 6/	--	130,303	1,796	246	55,505	2,796	--	221,015
TOTAL	4,870,207	6,078,998	231,694	3,423	1,406,162	192,685	6,508,063	6,275,106

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 490,878 short tons in January compared with 631,497 tons in December. Exports of pig iron during January totaled 4,105 tons and 6,346 tons in December. Imports of scrap totaled 54,713 short tons in January compared with 33,730 tons in December. Of the scrap imported during January, 37,959 short tons came from Canada and 16,754 tons from other sources. Imports of pig iron totaled 6,284 short tons in January and 64,219 tons in December. There were no imports of sponge iron during January.

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

Country	January 1977		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	--	--	--	--
Canada-----	45,709	\$1,988,183	45,709	\$1,988,183
China, People's Rep. of---	--	--	--	--
Greece-----	20,124	1,183,928	20,124	1,183,928
Italy-----	80	59,337	80	59,337
Japan-----	162,358	10,480,835	162,358	10,480,835
Korea, Republic of-----	97,158	5,753,767	97,158	5,753,767
Mexico-----	22,990	1,672,889	22,990	1,672,889
Pakistan-----	244	101,947	244	101,947
Spain-----	53,889	3,603,261	53,889	3,603,261
Sweden-----	57	49,753	57	49,753
Taiwan-----	6,792	777,718	6,792	777,718
Turkey-----	37,934	2,598,786	37,934	2,598,786
United Kingdom-----	29,890	3,217,738	29,890	3,217,738
Other countries-----	13,653	1,406,602	13,653	1,406,602
Total-----	490,878	32,894,744	490,878	32,894,744

^{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 1977		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	174,223	\$10,871,311	174,223	\$10,871,311
No. 2 heavy melting steel scrap-----	92,162	5,435,839	92,162	5,435,839
No. 1 bundles-----	220	13,640	220	13,640
No. 2 bundles-----	15,930	771,015	15,930	771,015
Borings, shoveling and turnings-----	17,562	596,460	17,562	596,460
Stainless steel-----	5,961	2,053,944	5,961	2,053,944
Shredded steel scrap-----	128,476	8,945,958	128,476	8,945,958
Iron scrap (excluding borings and shoveling)-	20,067	1,429,415	20,067	1,429,415
All other steel scrap ^{1/} -----	36,277	2,777,162	36,277	2,777,162
Total-----	490,878	32,894,744	490,878	32,894,744
Ships, boats, and other vessels for breaking up (for scrapping)-----	4	1,800	4	1,800
Total-----	490,882	32,896,544	490,882	32,896,544

^{1/} Includes tinplate and terneplate.