



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 MAY 1977

Returns from 81% of reporting consumers representing 97% of total scrap consumption, indicated that consumption of iron and steel scrap in May on a daily average basis was 2% above that in April, according to the Bureau of Mines, U.S. Department of the Interior. Compared with April data, daily average production and net receipts were up 2% and down 1%, respectively, and stocks at the end of the month were down 2%.

Exports of ferrous scrap during the month were 6% above those for April 1977 and 41% below those for May 1976. The Republic of Korea was the largest importer of U.S. scrap, taking 29% of the total exported in May 1977. The next largest importers were Spain and Canada, 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 May was \$64.50 per long ton, down 21% from the price of \$81.83 at the end of May 1976.

Pig iron production and consumption on a daily average basis during the month were unchanged and up 5%, respectively, from those of the previous month. Stocks of pig iron decreased 1% during May compared with those at the end of April 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)

	MAY 1977 (PRELIMINARY) 1/				
	MFRS. OF		MFRS. OF		FINAL TOTAL FOR MONTH OF APR 1977 4/ MAY 1977 5/
	PIG IRON AND STEEL INGOTS & CASTINGS 2/	CASTINGS 2/ STEEL CASTINGS 3/	IRON FOUNDRIES AND MISCEL- LANEOUS USERS	TOTAL FOR MONTH OF MAY 1977	
SCRAP:					
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,436,248	169,555	924,569	3,530,372	3,471,865
RECEIPTS FROM OTHER OWN COMPANY PLANTS	566,080	12,429	337,390	915,899	868,604
PRODUCTION RECIRCULATING SCRAP	3,729,598	84,146	522,507	4,336,251	4,109,928
PRODUCTION OBSOLETE SCRAP	224,033	1,627	8,636	234,296	222,647
CONSUMPTION	6,582,483	258,000	1,725,689	8,566,172	8,107,361
SHIPMENTS	488,798	1,647	29,397	519,842	499,222
STOCKS END OF MONTH	8,256,735	254,615	1,205,630	9,716,980	9,907,605
					16,039,945
					4,057,864
					19,407,534
					1,025,183
					38,350,058
					2,245,786
					--
PIG IRON:					
RECEIPTS	596,474	3,896	245,169	845,539	883,315
PRODUCTION	7,916,162	--	--	7,916,162	7,207,773
CONSUMPTION	7,811,818	3,715	237,035	8,052,568	7,396,462
SHIPMENTS	721,911	--	1,083	722,994	672,126
STOCKS END OF MONTH	1,381,256	6,334	119,857	1,507,447	1,526,262
					3,769,182
					33,934,651
					34,521,603
					3,181,120
					--
DIRECT-REDUCED OR PREREDUCED IRON:					
RECEIPTS	--	--	--	47,671	53,436
PRODUCTION	--	--	--	--	--
CONSUMPTION	--	--	--	47,082	52,616
SHIPMENTS	--	--	--	--	--
STOCKS END OF MONTH	--	--	--	5,515	5,109
					--

1/ BASED ON RETURNS FROM 81% 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, MAY 1977, (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND RECYCLED SCRAP		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOTS AND STODLS)	HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS	
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	47,306	627	3,107	643	44,411	3,804	90,899
CUT STRUCTURAL AND PLATE-----	23,105	--	23,371	--	45,180	35	65,513
NO-1 HEAVY MELTING STEEL-----	539,113	309,262	1,686,529	8,968	2,375,724	245,119	2,362,167
NO-2 HEAVY MELTING STEEL-----	212,582	3,476	90,143	232	296,601	1,430	500,168
NO-1 AND ELECTRIC FURNACE BUNDLES----	579,364	51,748	242,082	23	856,607	10,099	1,681,510
NO-2 AND ALL OTHER BUNDLES-----	191,859	2,345	33,179	--	205,603	12,186	349,239
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	1,030	--	5,696	--	7,364	--	9,235
RAILROAD RAILS-----	7,630	--	--	--	7,449	50	10,709
TURNS AND BORINGS-----	122,285	5,900	24,292	104	142,517	7,867	103,159
SLAG SCRAP (FE CONTENT 70 PERCENT)---	142,329	4,015	243,991	--	379,751	15,128	236,181
SHREDDED OR FRAGMENTED-----	150,916	35,197	309	--	182,533	--	190,796
NO. 1 BUSHMELTING-----	114,817	3,523	635	--	125,979	1,031	208,893
ALL OTHER CARBON STEEL SCRAP-----	150,350	21,915	995,483	30,803	1,149,079	45,371	933,446
STAINLESS STEEL SCRAP-----	31,866	4,347	56,568	7	88,180	4,412	89,313
ALLOY STEEL (EXCEPT STAINLESS)-----	19,280	18,166	142,394	987	177,500	13,304	282,953
INGOT MOLD AND STOOL SCRAP-----	22,279	77,710	84,125	175,960	335,728	78,913	818,185
MACHINERY AND CUPOLA CAST IRON-----	2,468	--	--	--	1,008	--	6,805
CAST IRON BORINGS-----	21,511	4,873	21,036	5,751	50,458	4,066	83,177
MOTOR BLOCKS-----	662	--	--	--	1,073	39	2,099
OTHER IRON SCRAP-----	25,362	18,374	56,425	550	75,476	29,380	141,776
OTHER MIXED SCRAP-----	30,144	4,602	20,233	5	34,454	15,764	90,521
TOTAL SCRAP-----	2,436,248	566,080	3,729,598	224,033	6,582,483	488,798	8,256,735
TOTAL SCRAP THROUGH MAY 1977----	10,753,946	2,409,252	16,512,043	979,018	28,752,683	2,105,520	8,256,735
PIG IRON-----							
	596,474	--	7,916,162	--	7,811,818	721,911	1,381,256
PIG IRON THROUGH MAY 1977-----	2,640,313	--	33,934,651	--	33,392,757	3,178,228	1,381,256

1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
// 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, MAY 1977 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP				PRODUCTION OF HOME SCRAP				CONSUMPTION			
	FROM				RECYCLING OBSOLETE SCRAP OF BOTH PUR-				CHASED AND			
	BROKERS,	FROM	OTHER	DEALERS AND	SCRAP	RESULTING	MOLOS, STOOLS, HOME SCRAP	FROM	AND SCRAP FROM (INCLUDES RE-	SHIPMENTS	OF SCRAP	ENDING
	OUTSIDE	COMPANY	OWN	SOURCES		CURRENT	OLD EQUIPMENT, CIRCULATING	OPERATIONS BUILDINGS, ETC.)	SCRAP			STOCKS
SCRAP:												
CARBON STEEL-												
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	51,365	2,892	--	--	15,089	--	118	--	66,722	--	7	72,193
CUT STRUCTURAL AND PLATE-----	15,740	2,000	--	--	1,849	--	--	--	20,538	--	90	17,893
NO.1 HEAVY MELTING STEEL-----	14,849	106	--	--	4,775	--	50	--	18,164	--	14	35,650
NO.2 HEAVY MELTING STEEL-----	5,335	--	--	--	1,529	--	--	--	7,494	--	--	3,239
NO.1 AND ELECTRIC FURNACE BUNDLES---	3,628	--	--	--	249	--	--	--	4,384	--	--	5,692
NO.2 AND ALL OTHER BUNDLES-----	394	--	--	--	--	--	--	--	385	--	--	427
ELECTRIC FURNACE 1 FOOT AND UNDER	4,823	--	--	--	1,580	--	--	--	6,560	--	78	5,190
(NOT BUNDLES)-----	--	--	--	--	--	--	--	--	2	--	--	129
RAILROAD RAILS-----	--	--	--	--	--	--	--	--	7,224	--	801	4,282
TURNINGS AND BORINGS-----	5,511	612	--	--	1,956	--	--	--	7,04	--	14	36
SLAG SCRAP (FE CONTENT 70 PERCENT)---	393	--	--	--	331	--	--	--	9,363	--	--	6,391
SHREDDER OR FRAGMENTIZED-----	7,235	1,894	--	--	--	--	--	--	4,145	--	--	6,379
NO. 1 BUSHING-----	3,020	831	--	--	909	--	--	--	74,122	--	--	42,616
ALL OTHER CARBON STEEL SCRAP-----	42,603	2,573	--	--	28,413	--	1,419	--	--	--	--	--
STAINLESS STEEL SCRAP-----												
ALLOY STEEL (EXCEPT STAINLESS)-----	1,919	444	--	--	2,119	--	--	--	4,255	--	232	5,006
INGOT MOLD AND STUOL SCRAP-----	4,276	1,077	--	--	11,751	--	--	--	12,679	--	1	20,541
MACHINERY AND CUPOLA CAST IRON-----	325	--	--	--	8	--	--	--	556	--	28	738
CAST IRON BORINGS-----	609	--	--	--	948	--	--	--	1,624	--	--	2,226
MOTOR BLOCKS-----	4,841	--	--	--	6,458	--	--	--	10,349	--	--	5,276
OTHER IRON SCRAP-----	45	--	--	--	--	--	--	--	60	--	--	146
OTHER MIXED SCRAP-----	2,644	--	--	--	5,829	--	40	--	8,317	--	382	20,562
	--	--	--	--	353	--	--	--	353	--	--	3
TOTAL SCRAP-----	169,555	12,429	--	--	84,146	--	1,627	--	258,000	--	1,647	254,615
TOTAL SCRAP THROUGH MAY 1977---	772,305	49,948	--	--	410,654	--	3,906	--	1,218,300	--	7,880	254,615
PIG IRON-----												
	RECEIPTS				PRODUCTION				CONSUMPTION			
	3,896				--				3,715			
PIG IRON THROUGH MAY 1977-----	17,923				--				17,812			
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.												
2/ BASED ON RETURNS FROM 81% OF REPORTING CONSUMERS, REPRESENTING 92% 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, MAY 1977(PRELIMINARY) 1/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP		CONSUMPTION			ENDING STOCKS
	FROM DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM OTHER RESULTING FROM CURRENT OPERATIONS	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STUOLS, HOME SCRAP AND SCRAP FROM OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	RE-SCRAP	SHIPMENTS	STOCKS		
CARBON STEEL-									
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	63,298	10,027	7,419	44	80,471	275	67,893		
CUT STRUCTURAL AND PLATE-----	121,145	9,050	13,106	55	148,005	525	101,759		
NO.1 HEAVY MELTING STEEL-----	29,698	16,516	4,915	--	40,608	3,144	56,127		
NO.2 HEAVY MELTING STEEL-----	6,674	386	3,359	93	6,863	1,891	7,243		
NO.1 AND ELECTRIC FURNACE BUNDLES---	15,268	22,299	5,560	40	41,518	--	15,686		
NO.2 AND ALL OTHER BUNDLES-----	49,203	12,544	--	--	60,745	--	73,563		
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,339	626	1,962	--	6,904	--	6,314		
RAILROAD RAILS-----	7,399	--	24	--	9,679	24	13,154		
TURNINGS AND BORINGS-----	66,517	7,786	1,980	178	61,700	4,012	109,204		
SLAG SCRAP (FC CONTENT 70 PERCENT)---	4,388	356	54	--	6,876	54	23,648		
SHREDDED OR FRAGMENTIZED-----	76,094	11,342	--	--	86,720	--	73,929		
NO. 1 BUSHELING-----	33,012	14,474	1,026	--	48,126	--	15,632		
ALL OTHER CARBON STEEL SCRAP-----	102,201	74,018	12,465	7	177,420	773	143,755		
STAINLESS STEEL SCRAP-----									
ALLOY STEEL (EXCEPT STAINLESS)-----	231	1,346	549	2	2,903	44	9,400		
INGOT MOLD AND STUOL SCRAP-----	6,359	2	301	85	6,758	131	3,468		
MACHINERY AND CUPOLA CAST IRON -----	12,992	--	10,002	569	21,819	1,084	33,827		
CAST IRON BORINGS-----	80,911	6,414	72,176	38	152,678	659	100,723		
MOTOR BLOCKS-----	51,005	60,555	38,889	17	141,119	4,873	85,519		
OTHER IRON SCRAP-----	60,337	5,190	39,810	--	106,196	--	61,572		
OTHER MIXED SCRAP-----	96,911	9,841	291,511	7,019	380,415	11,361	156,734		
	36,087	74,618	27,399	489	138,166	547	46,480		
TOTAL SCRAP-----	924,569	337,390	522,507	8,636	1,725,689	29,397	1,205,630		
TOTAL SCRAP THROUGH MAY 1977---	4,513,694	1,598,664	2,484,837	42,259	8,379,075	132,386	1,205,630		
PIG IRON-----									
	RECEIPTS			PRODUCTION		CONSUMPTION		STOCKS	
	245,169			--		237,035		119,857	
	1,110,946			--		1,111,034		119,857	
PIG IRON THROUGH MAY 1977-----									
// BASED ON RETURNS FROM 78% OF REPORTING CONSUMERS, REPRESENTING 93% OF SCRAP CONSUMPTION.									

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN MAY 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	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON
BLAST FURNACE 3/	370,836	--	--	--	--	--	--	--	--	--	--	--	370,836	--	--	--
BASIC OXYGEN PROCESS 4/	2,469,072	6,129,086	--	--	--	--	--	--	--	--	--	--	2,469,072	--	6,129,086	--
OPEN-HEARTH FURNACE	1,145,204	1,399,559	8,067	435	--	--	--	--	--	--	--	--	1,153,271	--	1,399,994	--
ELECTRIC FURNACE	2,482,744	63,232	233,763	2,916	--	--	--	--	480,430	20,432	--	--	3,196,937	--	86,580	--
CUPOLA FURNACE	33,454	20,593	13,801	100	--	--	--	--	1,194,410	87,836	--	--	1,241,665	--	108,529	--
OTHER (INCLUDING AIR FURNACE) 5/	81,173	26,437	2,369	264	--	--	--	--	50,849	2,563	--	--	134,391	--	29,264	--
DIRECT CASTINGS 6/	--	172,911	--	--	--	--	--	--	--	126,204	--	--	--	--	299,115	--
TOTAL	6,582,483	7,811,818	258,000	3,715	1,725,689	237,035	8,566,172	8,052,568								

- 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, APRIL 1977 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION		ENDING STOCKS
	FROM BRKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLATING SCRAP RESULTING FROM CURRENT OPERATIONS	OBSELETE SCRAP (INCLUDES INGOT MOLDS, STTOOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	OF BOTH PURCHASED AND HOME SCRAP (INCLUDES RE- SHIPMENTS OF SCRAP)		
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	48,944	976	2,966	861	48,138	3,497	87,740
CUT STRUCTURAL AND PLATE-----	25,642	1,475	26,018	--	44,669	15	63,329
NO.1 HEAVY MELTING STEEL-----	535,751	280,693	1,622,978	10,000	2,228,181	238,946	2,447,813
NO.2 HEAVY MELTING STEEL-----	199,602	4,906	82,991	219	274,877	1,228	500,596
NO.1 AND ELECTRIC FURNACE BUNDLES----	562,036	37,646	234,251	1,346	789,682	1,478	1,689,002
NO.2 AND ALL OTHER BUNDLES-----	162,466	9,330	15,091	--	194,142	8,915	337,676
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	3,239	--	5,702	--	6,618	--	9,873
RAILROAD RAILS-----	6,801	--	2	--	6,169	--	11,328
TURNINGS AND BORINGS-----	114,712	5,897	30,778	92	140,953	7,711	100,299
SLAG SCRAP (FE CONTENT 70 PERCENT)---	153,371	7,246	221,374	--	388,517	14,636	299,163
SHREDDED OR FRAGMENTIZED-----	151,818	33,550	1,481	--	181,950	--	189,472
NO. 1 BUSHCLING-----	116,137	2,210	641	--	112,868	874	217,691
ALL OTHER CARBON STEEL SCRAP-----	143,695	21,197	912,081	22,553	1,067,383	48,520	938,825
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	32,404	4,019	57,483	45	91,543	4,808	89,807
INGOT MOLT AND STUOL SCRAP-----	18,275	17,345	138,103	172	148,145	17,594	292,601
MACHINERY AND CUPOLA CAST IRON-----	43,196	62,287	78,284	173,320	317,629	76,913	872,192
CAST IRON BORINGS-----	1,297	--	--	25	464	--	5,337
MOTOR BLOCKS-----	21,035	12,798	25,592	3,883	53,034	5,029	82,971
OTHER IRON SCRAP-----	2,412	--	--	--	889	62	2,724
OTHER MIXED SCRAP-----	23,074	11,568	38,371	756	52,512	22,151	143,990
	22,923	5,663	24,240	6	33,757	15,823	89,508
TOTAL SCRAP-----	2,393,830	518,806	3,518,427	213,278	6,182,120	468,200	8,471,937
TOTAL SCRAP THROUGH APRIL 1977----	8,317,698	1,843,172	12,782,445	754,985	22,170,200	1,616,722	8,471,937
PIG IRON-----							
	648,611		7,207,773		7,157,846		1,408,223
PIG IRON THROUGH APRIL 1977-----	2,043,939		26,018,489		25,580,939		2,456,317
							1,408,223

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 7. - MANUFACTURERS OF STEEL CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, APRIL 1977 (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	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	FROM RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING MOLDS, STODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	
SCRAP:										
CARBON STEEL-										
LUM-PHOSPHORUS PLATE AND PUNCHINGS---	47,322	449		14,503	61		63,663		7	69,609
CUT STRUCTURAL AND PLATE-----	17,814	2,477		1,806	--		17,281		83	19,188
NO.1 HEAVY MELTING STEEL-----	17,020	86		3,745	22		16,166		--	34,098
NO.2 HEAVY MELTING STEEL-----	4,610	--		1,435	--		5,695		--	3,869
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,835	--		249	--		4,925		--	6,711
NO.2 AND ALL OTHER BUNDLES-----	573	--		--	--		541		--	418
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,388	19		1,514	--		6,432		90	5,327
RAILROAD RAILS-----	16	--		--	--		3		--	131
TURNINGS AND BORINGS-----	4,124	658		2,065	--		6,265		518	3,773
SLAG SCRAP (FE CONTENT 70 PERCENT)---	471	--		484	--		925		40	30
SHREDDED OR FRAGMENTIZED-----	6,376	1,857		--	--		8,387		--	6,708
NO. 1 BUSHSLING-----	2,691	775		825	--		4,595		--	6,005
ALL OTHER CARBON STEEL SCRAP-----	39,070	1,491		25,769	488		66,326		103	39,713
STAINLESS STEEL SCRAP-----	1,721	783		1,364	--		3,961		306	5,028
ALLOY STEEL (EXCEPT STAINLESS)-----	4,176	1,323		10,388	--		13,325		41	18,771
INGOT MOLD AND STODL SCRAP-----	852	--		22	--		507		14	989
MACHINERY AND GUPOLA CAST IRON-----	512	--		924	--		1,950		--	2,206
CAST IRON YOKIN'-----	3,184	--		5,548	--		8,790		--	4,320
MOTOR BLOCKS-----	25	--		--	--		95		--	161
OTHER IRON SCRAP-----	2,472	--		6,195	35		8,553		493	20,727
OTHER MIXED SCRAP-----	--	--		352	--		355		--	3
TOTAL SCRAP-----	157,252	9,918		77,188	606		238,340		1,695	247,785
TOTAL SCRAP THROUGH APRIL 1977---	602,750	37,519		326,508	2,279		960,300		6,233	247,785
PIG IRON-----										
	3,683				--		3,526		28	6,192
PIG IRON THROUGH APRIL 1977-----	14,027				--		14,097		47	6,192
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.										
2/ BASED ON RETURNS FROM 87% OF REPORTING CONSUMERS, REPRESENTING 96% 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, APRIL 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	RECIRCULATING OBSOLETE SCRAP		OF BOTH PURCHASED AND REPRODUCED SCRAP		
			RESULTING FROM CURRENT OPERATIONS	AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP	SHIPMENTS OF SCRAP	
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	61,468	13,524	6,620	20	78,298	1,323	68,209
CUT STRUCTURAL AND PLATE-----	130,919	13,089	15,609	39	157,650	2	104,918
NO-1 HEAVY MELTING STEEL-----	26,316	12,785	5,276	--	38,308	3,419	48,750
NO-2 HEAVY MELTING STEEL-----	4,394	374	1,270	73	5,337	278	5,460
NO-1 AND ELECTRIC FURNACE BUNDLES---	16,644	17,418	5,437	34	39,631	--	14,040
NO-2 AND ALL OTHER BUNDLES-----	45,581	16,504	--	--	58,519	1,296	71,737
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,798	--	1,633	--	6,039	--	6,848
RAILROAD RAILS-----	8,863	--	24	--	9,781	24	14,975
TURNINGS AND RODS-----	54,680	8,250	12,482	57	58,982	1,941	104,691
SLAG SCRAP (FE CONTENT 70 PERCENT)---	6,571	--	40	--	6,097	40	25,492
SHREDDED OR FRAGMENTIZED-----	78,696	14,311	--	--	78,832	--	74,654
NO- 1 BUSHING-----	29,748	15,127	974	--	48,325	--	14,085
ALL OTHER CARBON STEEL SCRAP-----	101,547	85,057	13,130	7	186,948	1,796	133,816
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	1,136	--	594	3	2,644	140	10,236
INGOT MOLD AND STUOL SCRAP-----	7,511	--	373	20	8,055	20	3,670
MACHINERY AND CUPOLA CAST IRON -----	12,976	--	2,268	572	13,814	1,415	30,865
CAST IRON RODS-----	76,260	6,206	69,753	38	140,480	668	93,503
MOTOR BLOCKS-----	73,813	49,596	30,704	26	145,227	4,498	84,852
OTHER IRON SCRAP-----	58,094	3,601	37,409	--	97,582	39	63,392
OTHER MIXED SCRAP-----	86,946	8,378	283,187	7,339	367,947	11,874	168,885
	32,822	75,660	27,530	535	138,405	554	44,805
TOTAL SCRAP-----	920,783	339,880	514,313	8,763	1,686,901	29,327	1,187,883
TOTAL SCRAP THROUGH APRIL 1977---	3,589,125	1,261,274	1,962,330	33,623	6,653,386	102,989	1,187,883
PIG IRON-----							
	RECEIPTS		PRODUCTION		CONSUMPTION		STOCKS
	231,021		--		235,090		420
PIG IRON THROUGH APRIL 1977-----							
	865,777		--		873,999		1,762
1/ BASED ON RETURNS FROM 82% OF REPORTING CONSUMERS, REPRESENTING 95% OF SCRAP CONSUMPTION.							

TABLE 9.- CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN APRIL 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/		360,294	--	--	--	--	--	--	--	--	--	--	360,294	--
BASIC OXYGEN PROCESS 4/		2,197,720	5,590,993	--	--	--	--	--	--	--	--	--	2,197,720	5,590,993
OPEN-HEARTH FURNACE		1,076,465	1,307,768	--	7,895	--	347	--	--	--	--	--	1,084,360	1,308,115
ELECTRIC FURNACE		2,442,245	62,458	--	216,235	--	2,774	--	466,935	--	20,923	--	3,125,415	86,155
CUPOLA FURNACE		26,384	17,276	--	12,014	--	100	--	1,169,630	--	81,336	--	1,208,028	98,712
OTHER (INCLUDING AIR FURNACE) 5/		79,012	26,814	--	2,196	--	305	--	50,336	--	2,728	--	131,544	29,847
DIRECT CASTINGS 6/		--	152,537	--	--	--	--	--	--	--	130,103	--	--	282,640
TOTAL		6,182,120	7,157,846	--	238,340	--	3,526	--	1,686,901	--	235,090	--	8,107,361	7,396,462

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 471,056 short tons in May compared with 445,406 tons in April. Exports of pig iron during May totaled 9,725 tons and 3,804 tons in April. Imports of scrap totaled 42,651 short tons in May compared with 80,298 tons in April. Of the scrap imported during May 41,389 short tons came from Canada and 1,262 tons from other sources. Imports of pig iron totaled 36,380 short tons in May and 13,607 tons in April. In addition to the foregoing imports of pig iron during May, there were 20 tons of sponge iron, valued at \$13,742 imported, all of which came from Canada.

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

Country	May 1977		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	21,738	\$1,457,084	21,738	\$1,457,084
Canada-----	61,768	2,860,655	265,588	12,316,490
China, People's Rep. of--	--	--	--	--
Greece-----	--	--	102,042	6,692,789
Italy-----	1,523	889,597	57,820	8,339,235
Japan-----	57,749	4,304,881	367,087	25,971,706
Korea, Republic of-----	136,924	8,205,980	644,063	39,975,164
Mexico-----	25,919	1,929,599	173,560	12,499,841
Pakistan-----	107	89,192	731	473,933
Spain-----	92,416	4,844,352	335,273	22,641,140
Sweden-----	84	98,731	601	583,540
Taiwan-----	32,194	3,023,263	142,509	12,382,696
Turkey-----	28,016	2,171,778	137,934	9,411,676
United Kingdom-----	165	88,225	48,414	5,565,571
Other countries-----	12,453	1,688,785	66,559	7,477,972
Total-----	471,056	31,652,122	2,363,919	165,788,837

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	May 1977		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	153,777	\$10,191,180	725,817	\$47,006,888
No. 2 heavy melting steel scrap-----	54,263	3,118,289	307,679	18,228,256
No. 1 bundles-----	209	14,310	4,307	277,602
No. 2 bundles-----	63,679	2,623,705	207,032	9,508,656
Borings, shovelings and turnings-----	40,314	1,864,742	163,734	6,466,900
Stainless steel-----	5,190	2,890,275	37,183	18,243,569
Shredded steel scrap-----	85,088	5,318,601	545,416	36,828,131
Iron scrap (excluding borings and shovelings)---	14,099	1,027,948	127,669	8,783,000
All other steel scrap <u>1</u> /-----	54,437	4,603,072	245,082	20,445,835
Total-----	471,056	31,652,122	2,363,919	165,788,837
Ships, boats, and other vessels for breaking up (for scrapping)-----	8,693	367,479	15,157	979,970
Total-----	479,749	32,019,601	2,379,076	166,768,807

1/ Includes tinplate and terneplate.