



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 OCTOBER 1977

Returns from 74% of reporting consumers representing 93% of total scrap consumption, indicated that consumption of iron and steel scrap in October on a daily average basis was 1% above that in September, according to the Bureau of Mines, U.S. Department of the Interior. Compared with September data, daily average production and net receipts were both down 2% and stocks at the end of the month were also down 2%.

Exports of ferrous scrap during the month were 26% below those for September 1977 and 30% below those for October 1976. The Republic of Korea was the largest importer of U.S. scrap, taking 27% of the total exported in October 1977. The next largest importers were Japan and Taiwan, which received 14% and 11%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of October was \$47.83 per long ton, down 25% from the price of \$63.83 at the end of October 1976.

Pig iron production and consumption on a daily average basis during the month were both down 2% from those of the previous month. Stocks of pig iron decreased 7% during October compared with those at the end of September 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)

OCTOBER 1977 (PRELIMINARY) 1/						
	MFRS. OF		MFRS. OF	IRON FOUNDRIES AND MISCEL- LANEOUS USERS	TOTAL FOR MONTH OF OCT 1977	FINAL TOTAL FOR MONTH OF SEP 1977 4/ OCT 1977 5/
	PIG IRON AND STEEL INGOTS	% CASTINGS 2/	STEEL CASTINGS 3/			
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,065,587		185,806	922,748	3,174,141	32,086,593
RECEIPTS FROM OTHER OWN COMPANY PLANTS--	534,169		9,900	357,511	901,580	8,345,448
PRODUCTION RECIRCULATING SCRAP-----	3,376,890		90,357	565,384	4,032,631	39,443,192
PRODUCTION OBSOLETE SCRAP-----	205,655		1,392	11,356	218,403	2,139,751
CONSUMPTION-----	5,883,581		280,171	1,807,775	7,971,527	77,277,105
SHIPMENTS-----	465,552		1,396	26,242	493,190	4,697,797
STOCKS END OF MONTH-----	8,313,606		250,065	1,177,123	9,740,794	--
PIG IRON:						
RECEIPTS-----	462,277		3,969	221,772	688,018	7,347,126
PRODUCTION-----	6,635,722		--	--	6,635,722	68,574,519
CONSUMPTION-----	6,524,239		4,100	224,380	6,752,719	69,297,470
SHIPMENTS-----	680,797		--	424	681,221	6,697,127
STOCKS END OF MONTH-----	1,296,012		6,171	116,446	1,418,629	--
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS-----	--		--	--	28,356	393,500
PRODUCTION-----	--		--	--	--	--
CONSUMPTION-----	--		--	--	28,275	391,718
SHIPMENTS-----	--		--	--	--	--
STOCKS END OF MONTH-----	--		--	--	3,529	--

1/ BASED ON RETURNS FROM 74% OF REPORTING CONSUMERS, REPRESENTING 93% 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 83% 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, OCTOBER 1977 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM BROKERS, SCRAP RESULTING FROM CURRENT OPERATIONS	RECYCLING SCRAP (INCLUDES INGOT MOLD, STUOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	OBsolete SCRAP OF BOTH PURCHASED AND HOME SCRAP	CHASED AND	SHIPMENTS OF SCRAP	CONSUMPTION		
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS-----	44,366	979	3,222	538	46,803	3,737	105,463			
CUT STRUCTURAL AND PLATE-----	14,995	--	21,255	--	44,139	--	60,440			
NO.1 HEAVY MELTING STEEL-----	448,389	276,726	1,518,894	6,679	2,040,599	231,848	2,555,915			
NO.2 HEAVY MELTING STEEL-----	149,349	15,755	92,446	249	277,988	3,077	479,706			
NO.1 AND ELECTRIC FURNACE BUNDLES-----	476,122	65,739	216,577	779	786,423	36,397	1,631,766			
NO.2 AND ALL OTHER BUNDLES-----	111,157	6,111	28,971	--	166,026	10,873	315,594			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	1,762	--	4,794	--	6,479	--	5,520			
RAILROAD RAILS-----	4,527	309	--	--	6,956	--	3,054			
TURNINGS AND BORINGS-----	118,211	8,680	28,264	40	159,196	10,323	102,924			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	103,071	290	242,705	446	355,318	7,763	207,825			
SHREDDER OR FRAGMENTIZED-----	160,697	35,686	105	--	185,175	--	225,239			
NO. 1 BUSHING-----	118,191	3,795	2,313	--	127,893	1,995	176,532			
ALL OTHER CARBON STEEL SCRAP-----	191,185	23,164	859,044	38,590	1,002,857	49,984	994,345			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	28,234	4,130	49,979	9	91,641	4,193	99,126			
INGOT MOLD AND STUOL SCRAP-----	15,153	19,561	131,185	78	152,398	12,686	306,999			
MACHINERY AND CUPOLA CAST IRON-----	15,157	47,445	74,113	148,185	272,493	52,657	763,745			
CAST IRON BORINGS-----	129	--	--	--	1,099	--	3,908			
MOTOR BLOCKS-----	14,496	7,827	32,134	5,460	52,164	6,031	75,310			
OTHER IRON SCRAP-----	2	--	--	--	60	--	1,557			
OTHER MIXED SCRAP-----	18,906	12,792	49,577	4,589	62,334	31,588	136,908			
	31,488	5,180	21,312	13	45,540	3,200	61,726			
TOTAL SCRAP-----	2,065,587	534,169	3,376,890	205,655	5,883,581	465,552	8,313,606			
TOTAL SCRAP THROUGH OCTOBER 1977----	21,730,467	4,985,145	33,513,911	2,035,410	57,970,949	4,420,116	8,313,606			
PIG IRON										
	462,277		6,635,722		6,524,239	680,797	1,296,012			
PIG IRON THROUGH OCTOBER 1977-----	5,079,062		68,574,519		67,031,714	6,692,706	1,296,012			
1/ 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, OCTOBER 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 RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	FROM RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	FROM RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	FROM RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	FROM RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)	FROM RECIRCULATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.)		
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	54,673	454	16,432	26	68,449	--	67,054			
CUT STRUCTURAL AND PLATE-----	16,814	1,694	2,763	--	20,075	56	15,218			
NO.1 HEAVY MELTING STEEL-----	12,729	46	9,933	27	21,871	161	33,112			
NO.2 HEAVY MELTING STEEL-----	4,960	--	1,712	--	6,666	--	3,726			
NO.1 AND ELECTRIC FURNACE BUNDLES---	5,262	--	249	--	6,152	--	4,083			
NO.2 AND ALL OTHER BUNDLES-----	623	--	--	--	185	--	3,287			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,441	--	1,507	--	6,841	60	5,571			
RAILROAD RAILS-----	--	--	--	--	10	--	219			
TURNINGS AND BORINGS-----	7,248	876	2,079	--	8,400	553	5,926			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	--	--	419	--	350	14	97			
SHREDDER OR FRAGMENTIZED-----	5,305	1,871	--	--	7,951	--	4,763			
NO. 1 BUSHING-----	4,908	913	1,035	--	5,339	--	6,974			
ALL OTHER CARBON STEEL SCRAP-----	51,151	2,854	30,158	1,335	89,378	--	46,800			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)---	2,251	437	2,197	--	4,312	288	4,650			
INGOT MOLD AND STUOL SCRAP-----	5,670	755	8,735	--	12,618	--	19,552			
MACHINERY AND CUPOLA CAST IRON-----	519	--	--	--	451	4	582			
CAST IRON BORINGS-----	300	--	719	--	1,446	--	2,250			
MOTOR BLOCKS-----	5,153	--	5,744	--	10,955	57	4,878			
OTHER IRON SCRAP-----	129	--	--	--	74	--	186			
OTHER MIXED SCRAP-----	2,667	--	6,382	4	8,756	203	21,028			
	3	--	293	--	292	--	9			
TOTAL SCRAP-----	185,806	9,900	90,357	1,392	280,171	1,396	250,065			
TOTAL SCRAP THROUGH OCTOBER 1977---	1,551,543	99,477	831,245	12,058	2,464,763	16,357	250,065			
PIG IRON-----										
	RECEIPTS			PRODUCTION			CONSUMPTION			SHIPMENTS
	3,969			--			4,100			
PIG IRON THROUGH OCTOBER 1977-----	37,365			--			36,749			47
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.										
2/ BASED ON RETURNS FROM 72% OF REPORTING CONSUMERS, REPRESENTING 80% 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, OCTOBER 1977 (PRELIMINARY) 1/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP				PRODUCTION OF HOME SCRAP				CONSUMPTION				ENDING STOCKS
	FROM				RECYCLING OBSOLETE SCRAP				OF BOTH PUR-				
	FROM PROKERS, DEALERS AND OTHER	FROM OTHER OWN	COMPANY PLANTS	SOURCES	FROM SCRAP RESULTING FROM CURRENT OPERATIONS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	SCRAP (INCLUDES INGOT AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	HOME SCRAP	CHASSIS AND	STOOLS, HOME SCRAP	RE-SHIPMENTS	OF SCRAP	
SCRAP:													
CARBON STEEL-													
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	65,560	8,592			7,106			32	81,908		359		60,492
CUT STRUCTURAL AND PLATE-----	131,249	11,910			14,892			96	165,930		421		105,475
NO.1 HEAVY MELTING STEEL-----	37,952	10,428			7,736			--	37,918		5,783		57,827
NO.2 HEAVY MELTING STEEL-----	4,854	434			1,756			90	6,573		65		12,535
NO.1 AND ELECTRIC FURNACE BUNDLES----	13,558	19,367			5,771			49	37,366		--		14,011
NO.2 AND ALL OTHER BUNDLES-----	69,757	18,215			--			--	76,472		--		51,953
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,100	--			1,523			--	5,679		--		5,896
RAILROAD RAILS-----	8,694	--			24			--	9,230		24		13,206
TURNINGS AND BORINGS-----	57,502	11,727			1,336			51	63,646		2,657		102,028
SLAC SCRAP (FE CONTENT 70 PERCENT)---	4,392	2,800			63			--	8,164		63		30,759
SHREDDED OR FRAGMENTIZED-----	64,480	10,067			--			--	80,193		179		69,931
NO. 1 BUSHING-----	39,360	12,947			971			--	48,861		--		17,751
ALL OTHER CARBON STEEL SCRAP-----	90,608	74,523			13,870			7	179,927		626		126,985
STAINLESS STEEL SCRAP-----	375	214			712			--	1,008		36		9,037
ALLOY STEEL (EXCEPT STAINLESS)-----	5,700	1			273			41	6,168		29		6,755
INGOT MOLD AND STOOL SCRAP-----	8,846	--			9,915			397	22,460		762		21,945
MACHINERY AND CUPOLA CAST IRON -----	73,617	13,649			78,806			125	162,777		849		60,928
CAST IRON BORINGS-----	50,709	65,787			45,682			19	151,260		4,770		101,229
MOTOR BLOCKS-----	61,643	14,020			40,392			--	105,128		--		63,521
OTHER IRON SCRAP-----	91,807	11,677			302,403			10,210	499,532		9,339		171,444
OTHER MIXED SCRAP-----	37,286	71,144			32,153			239	147,575		270		42,508
TOTAL SCRAP-----	922,748	357,511			565,384			11,356	1,807,775		26,242		1,177,123
TOTAL SCRAP THROUGH OCTOBER 1977----	8,804,583	3,260,826			5,028,036			92,283	16,841,393		261,324		1,177,123
PIG IRON-----													
PIG IRON THROUGH OCTOBER 1977-----													
1/ BASED ON RETURNS FROM 70% OF REPORTING CONSUMERS, REPRESENTING 78% OF SCRAP CONSUMPTION.													

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN OCTOBER 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
BLAST FURNACE 3/	314,656	--	--	--	--	--	314,656	--
BASIC OXYGEN PROCESS 4/	2,112,812	5,364,622	--	--	--	--	2,112,812	5,364,622
OPEN-HEARTH FURNACE	842,898	912,338	--	--	--	--	848,265	912,811
ELECTRIC FURNACE	2,470,247	55,415	5,367	473	--	--	3,244,269	81,779
CUPOLA FURNACE	29,829	10,045	256,035	3,189	517,987	23,175	1,293,660	98,331
OTHER (INCLUDING AIR FURNACE) 5/	113,139	34,413	16,496	67	1,247,335	88,219	157,865	37,912
DIRECT CASTINGS 6/	--	147,406	2,273	371	42,453	3,128	--	257,264
TOTAL	5,883,581	6,524,239	280,171	4,100	1,807,775	224,380	7,971,527	6,752,719

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 STOOKLS.

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, SEPTEMBER 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	RECYCLING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOKS, HOME SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	790	4,231	44,256	4,535	106,755		
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	48,173	2,570	4,231	790	44,256	4,535	106,755			
CUT STRUCTURAL AND PLATE-----	20,854	--	26,115	--	42,305	--	67,292			
NO.1 HEAVY MELTING STEEL-----	486,411	257,477	1,433,513	8,283	1,872,452	212,261	2,574,413			
NO.2 HEAVY MELTING STEEL-----	173,160	16,272	85,996	261	263,059	1,613	501,722			
NO.1 AND ELECTRIC FURNACE BUNDLES----	497,284	77,540	224,927	24	754,975	22,373	1,701,088			
NO.2 AND ALL OTHER BUNDLES-----	124,228	6,857	27,356	--	151,472	10,356	350,406			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	1,216	--	5,884	--	7,427	--	5,443			
RAILROAD NAILS-----	3,482	--	--	--	6,761	--	5,461			
TURNINGS AND BORINGS-----	113,212	6,801	35,647	40	147,804	9,616	115,914			
SLAG SCRAP (FE CONTENT 70 PERCENT)----	120,003	2,340	232,164	--	354,923	7,123	229,243			
SHREDDER OR FRAGMENTIZED-----	138,660	39,019	56	--	177,732	--	216,150			
NO. 1 BUSHING-----	106,423	3,624	477	--	121,278	5	131,270			
ALL OTHER CARBON STEEL SCRAP-----	167,742	16,415	867,379	30,353	998,761	62,592	941,228			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	34,545	3,342	50,643	22	82,706	3,455	111,254			
INGOT MOLD AND STOK SCRAP-----	17,224	18,343	142,287	9	155,837	16,831	305,710			
MACHINERY AND CUPOLA CAST IRON-----	10,937	45,053	102,075	147,901	256,476	58,523	817,949			
CAST IRON BORINGS-----	--	--	--	--	1,016	--	4,878			
MOTOR BLOCKS-----	19,828	7,505	23,531	8,919	51,775	5,940	79,997			
OTHER IRON SCRAP-----	13	--	--	--	509	--	1,434			
OTHER MIXED SCRAP-----	11,971	17,572	58,289	4,616	54,118	31,839	150,355			
	26,426	5,215	13,633	9	34,112	6,819	57,704			
TOTAL SCRAP-----	2,131,792	525,945	3,334,203	201,227	5,579,654	453,881	8,516,266			
TOTAL SCRAP THROUGH SEPTEMBER 1977----	19,664,880	4,450,976	30,137,021	1,829,755	52,087,368	3,954,564	8,516,266			
PIG IRON-----										
	492,154		6,566,283		6,410,600	685,499	1,403,113			
PIG IRON THROUGH SEPTEMBER 1977-----										
	4,616,785		61,938,797		60,507,479	6,011,009	1,403,113			
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, SEPTEMBER 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	RECIRCULATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND RESULTING FROM MOLD, STOODLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.)		OF BOTH PUR-		
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	49,486	654	16,855	30	71,224	90	63,259
CUT STRUCTURAL AND PLATE-----	12,454	2,243	2,594	--	18,475	66	13,085
NO.1 HEAVY MELTING STEEL-----	11,012	130	6,400	40	16,312	--	29,876
NO.2 HEAVY MELTING STEEL-----	5,529	--	1,867	--	7,850	--	3,720
NO.1 AND ELECTRIC FURNACE BUNDLES----	5,268	--	249	--	5,715	--	4,877
NO.2 AND ALL OTHER BUNDLES-----	722	--	--	--	337	--	1,474
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	4,868	--	1,608	--	6,176	58	5,663
RAILROAD RAILS-----	--	--	--	--	23	--	226
TURNINGS AND BORINGS-----	5,760	594	2,606	--	7,170	973	4,454
SLAG SCRAP (FE CONTENT 70 PERCENT)----	626	--	372	--	984	12	42
SHREDDER OR FRAGMENTIZED-----	5,650	1,888	--	--	8,359	--	5,560
NO. 1 BUSHING-----	3,928	737	1,035	--	5,376	--	5,388
ALL OTHER CARBON STEEL SCRAP-----	38,609	3,696	31,360	1,590	82,021	--	43,143
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	2,069	435	2,222	--	4,381	348	4,415
INGOT MOLD AND STUOL SCRAP-----	5,688	873	10,802	--	15,147	--	19,890
MACHINERY AND CUPOLA CAST IRON-----	208	--	46	--	345	40	516
CAST IRON BORINGS-----	257	--	745	--	1,483	--	2,244
MOTOR BLOCKS-----	3,917	--	6,142	--	9,958	160	5,083
OTHER IRON SCRAP-----	25	--	--	--	80	--	131
OTHER MIXED SCRAP-----	2,447	--	6,890	15	8,913	376	21,357
	5	--	396	--	398	--	5
TOTAL SCRAP-----	158,528	11,250	92,189	1,675	270,727	2,123	234,408
TOTAL SCRAP THROUGH SEPTEMBER 1977----	1,365,737	89,577	740,888	10,666	2,184,592	14,961	234,408
PIG IRON-----							
	3,992		--	--	3,771	--	6,428
PIG IRON THROUGH SEPTEMBER 1977-----							
	33,396		--	--	32,649	47	6,428
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS. 94% OF SCRAP CONSUMPTION. BASED ON RETURNS FROM 84% OF REPORTING CONSUMERS, REPRESENTING.							

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, SEPTEMBER 1977 (FINAL) 1/
(SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDINGS 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-OLD EQUIPMENT, CIRCULATING OF SCRAP)	RESULTING FROM CURRENT OPERATIONS BUILDINGS, ETC.)	REFCIRCULATING OR SOLITE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOKS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP)	OF BOTH PUR-CHASED AND HOME SCRAP	SHIPMENTS	STOCKS	SHIPMENTS	STOCKS
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	64,031	7,873	6,769	22	83,607	236	50,831			
CUT STRUCTURAL AND PLATE---	132,544	8,337	12,012	143	150,374	910	112,975			
NO.1 HEAVY MELTING STEEL---	14,410	9,865	7,340	--	37,178	3,371	45,416			
NO.2 HEAVY MELTING STEEL---	6,946	594	2,809	85	9,455	93	12,478			
NO.1 AND ELECTRIC FURNACE BUNDLES---	13,550	18,571	5,845	39	38,203	--	12,454			
NO.2 AND ALL OTHER BUNDLES---	51,477	16,521	--	--	77,666	--	40,453			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)---	4,855	--	1,541	--	6,997	--	4,834			
RAILROAD RAILS---	8,966	--	24	--	9,263	24	14,513			
TURNINGS AND BORINGS---	52,196	9,939	1,244	53	54,174	4,228	107,094			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	5,020	2,364	48	--	7,446	48	31,417			
SHREDDER OR FRAGMENTIZED---	70,882	7,187	--	--	73,147	--	75,264			
NO. 1 BUSHING---	39,706	11,205	971	--	50,136	--	13,453			
ALL OTHER CARBON STEEL SCRAP---	89,090	73,964	14,995	7	179,568	632	128,505			
STAINLESS STEEL SCRAP---	280	193	630	2	507	55	9,756			
ALLOY STEEL (EXCEPT STAINLESS)---	7,028	--	335	74	6,207	35	7,204			
INGOT MOLD AND TOOL SCRAP---	10,105	--	9,930	674	22,651	947	23,989			
MACHINERY AND CUPOLA CAST IRON---	74,728	12,637	75,215	41	160,451	3,187	80,114			
CAST IRON BORINGS---	61,208	52,113	42,786	35	148,035	4,353	98,495			
MOTOR BLOCKS---	57,756	2,250	41,074	--	97,477	253	58,699			
OTHER IRON SCRAP---	93,740	9,624	296,846	7,551	400,371	10,812	177,300			
OTHER MIXED SCRAP---	34,896	71,120	28,301	334	141,014	363	42,523			
TOTAL SCRAP---	893,414	314,357	548,715	9,060	1,754,537	29,547	1,166,778			
TOTAL SCRAP THROUGH SEPTEMBER 1977---	7,881,835	2,903,315	4,532,652	80,927	15,033,618	235,082	1,166,778			
PIG IRON---	236,869	--	--	--	235,678	352	120,011			
PIG IRON THROUGH SEPTEMBER 1977---	2,008,927	--	--	--	2,004,623	3,950	120,011			
1/ BASED ON RETURNS FROM 79% OF REPORTING CONSUMERS, REPRESENTING 94% OF SCRAP CONSUMPTION.										

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN SEPTEMBER 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/	324,237	--	--	--	--	--	324,237	--
BASIC OXYGEN PROCESS 4/	2,018,933	5,287,812	--	--	--	--	2,018,933	5,287,812
OPEN-HEARTH FURNACE	629,586	879,365	5,578	417	--	--	835,164	879,782
ELECTRIC FURNACE	2,299,192	52,187	249,011	3,060	483,137	24,300	3,031,340	79,547
CUPOLA FURNACE	24,465	8,955	14,240	59	1,231,449	83,150	1,270,154	92,164
OTHER (INCLUDING AIR FURNACE) 5/	83,241	30,614	1,898	235	39,951	3,034	125,090	33,883
DIRECT CASTINGS 6/	--	151,667	--	--	--	125,194	--	276,861
TOTAL	5,579,654	6,410,600	270,727	3,771	1,754,537	235,678	7,604,918	6,650,049

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.

FOREIGN TRADE

Exports of iron and steel scrap totaled 572,207 short tons in September compared with 430,058 tons in August. Exports of pig iron during September totaled 3,040 tons and 2,861 tons in August. Imports of scrap totaled 61,837 short tons in September compared with 66,590 tons in August. Of the scrap imported during September, 52,046 short tons came from Canada and 9,791 tons from other sources. Imports of pig iron totaled 25,15 short tons in September and 19,314 tons in August. In addition to the foregoing imports of pig iron during September, there were 27 tons of sponge iron, valued at \$17,678 imported, all of which came from Canada.

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

Country	September 1977		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	10,417	\$576,662	58,699	\$3,697,028
Canada-----	47,770	2,004,364	412,728	19,009,223
China, People's Rep. of----	--	--	--	--
Greece-----	27,679	1,646,168	231,051	14,134,922
Italy-----	36,225	2,885,682	156,938	15,710,527
Japan-----	60,204	3,532,323	749,434	47,172,063
Korea, Rep. of-----	155,948	9,551,143	1,190,870	74,798,748
Mexico-----	17,099	1,173,681	246,442	17,693,841
Pakistan-----	14,699	789,698	27,739	2,039,481
Spain-----	9,577	408,818	635,294	38,537,917
Sweden-----	41	53,630	1,751	1,399,137
Taiwan-----	125,666	8,040,551	335,543	27,792,648
Turkey-----	30,534	2,305,806	231,379	15,757,558
United Kingdom-----	567	177,456	50,187	5,901,973
Other countries-----	35,781	2,414,223	211,199	20,089,996
Total-----	572,207	35,560,205	4,539,254	303,735,062

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	September 1977		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	238,621	\$14,220,307	1,415,844	\$88,786,547
No. 2 heavy melting steel scrap-----	61,656	3,422,240	485,992	28,249,029
No. 1 bundles-----	394	19,857	98,685	2,243,927
No. 2 bundles-----	12,101	532,248	287,861	12,781,739
Borings, shovelings and turnings-----	25,940	885,413	321,173	12,502,210
Stainless steel-----	3,514	1,743,022	58,887	29,612,275
Shredded steel scrap-----	158,827	9,227,180	1,190,636	75,377,123
Iron scrap (excluding borings and shovelings)---	27,929	1,618,916	243,019	16,304,893
All other steel scrap <u>1/</u> ----	43,225	3,891,022	437,157	37,877,319
Total-----	572,207	35,560,205	4,539,254	303,735,062
Ships, boats, and other vessels for breaking up (for scrapping)-----	6,889	638,495	22,060	1,620,465
Total-----	579,096	36,198,700	4,561,314	305,355,527

1/ Includes tinplate and terneplate.

FOREIGN TRADE

Exports of iron and steel scrap totaled 426,087 short tons in October compared with 572,207 tons in September. Exports of pig iron during October totaled 2,018 tons and 3,040 tons in September. Imports of scrap totaled 40,419 short tons in October compared with 61,837 tons in September. Of the scrap imported during October, 31,989 short tons came from Canada and 8,430 tons from other sources. Imports of pig iron totaled 53,625 short tons in October and 25,135 tons in September. In addition to the foregoing imports of pig iron during October, there were 35 tons of sponge iron, valued at \$15,614 imported, all of which came from Canada.

Table 12. - U.S. exports of iron and steel scrap, 1/ by country

Country	October 1977		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	22,044	\$1,099,549	80,743	\$4,796,577
Canada-----	42,506	1,853,630	455,234	20,862,853
China, People's Rep. of----	--	--	--	--
Greece-----	--	--	231,051	14,134,922
Italy-----	28,952	1,547,550	185,890	17,258,077
Japan-----	58,492	3,105,627	807,926	50,277,690
Korea, Rep. of-----	115,976	6,257,643	1,306,846	81,056,391
Mexico-----	24,463	1,632,248	270,905	19,326,089
Pakistan-----	26,506	1,376,012	54,245	3,415,493
Spain-----	37,896	3,063,413	673,190	41,601,330
Sweden-----	--	--	1,751	1,399,137
Taiwan-----	47,093	3,047,817	382,636	30,840,465
Turkey-----	15,690	1,119,726	247,069	16,877,284
United Kingdom-----	305	38,626	50,492	5,940,599
Other countries-----	6,164	1,838,156	217,363	21,928,152
Total-----	426,087	25,979,997	4,965,341	329,715,059

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

Table 13. - U.S. exports of iron and steel scrap, by grade

Grade of scrap	October 1977		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	132,810	\$7,187,614	1,548,654	\$95,974,161
No. 2 heavy melting steel scrap-----	36,316	1,957,228	522,308	30,206,257
No. 1 bundles-----	3,305	175,149	101,990	2,419,076
No. 2 bundles-----	4,702	179,541	292,563	12,961,280
Borings, shoveling and turnings-----	46,355	1,710,010	367,528	14,212,220
Stainless steel-----	5,788	3,093,116	64,675	32,705,391
Shredded steel scrap-----	95,722	5,026,775	1,286,358	80,403,898
Iron scrap (excluding borings and shoveling)---	40,600	2,461,158	283,619	18,766,051
All other steel scrap <u>1/</u> ----	60,489	4,189,406	497,646	42,066,725
Total-----	426,087	25,979,997	4,965,341	329,715,059
Ships, boats, and other vessels for breaking up (for scrapping)-----	6,365	499,712	28,425	2,120,177
Total-----	432,452	26,479,709	4,993,766	331,835,236

1/ Includes tinplate and terneplate.