



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 AUGUST 1977

Returns from 74% of reporting consumers representing 88% of total scrap consumption, indicated that consumption of iron and steel scrap in August on a daily average basis was 8% above that in July, according to the Bureau of Mines, U.S. Department of the Interior. Compared with July data, daily average production and net receipts were both up 6% and 9%, respectively, and stocks at the end of the month were relatively unchanged.

Exports of ferrous scrap during the month were 22% below those for July 1977 and 29% below those for August 1976. Japan was the largest importer of U.S. scrap, taking 30% of the total exported in August 1977. The next largest importers were Greece and the Republic of Korea, which received 19% and 13%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of August was \$61.50 per long ton, down 22% from the price of \$78.50 at the end of August 1976.

Pig iron production and consumption on a daily average basis during the month were both down 3% and 2%, respectively, from those of the previous month. Stocks of pig iron increased 1% during August compared with those at the end of July 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)

AUGUST 1977 (PRELIMINARY) 1/						
MFRS. OF						
PIG IRON AND						
STEEL INGOTS						
& CASTINGS 2/						
MFRS. OF						
CASTINGS 3/						
IRON FOUNDRIES						
AND MISCEL-						
LANEUS USERS						
TOTAL FOR						
MONTH OF						
AUG 1977						
FINAL						
TOTAL FOR						
MONTH OF						
JUL 1977 4/						
TOTAL YEAR						
THROUGH						
AUG 1977 5/						
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,120,187	137,542	1,150,856	3,408,585	3,212,785	26,280,080
RECEIPTS FROM OTHER OWN COMPANY PLANTS-	493,222	8,647	360,435	867,304	748,686	6,589,613
PRODUCTION RECIRCULATING SCRAP-----	3,403,294	77,439	489,612	3,970,345	3,760,606	31,443,663
PRODUCTION OBSOLETE SCRAP-----	207,954	1,413	9,848	219,215	200,350	1,709,504
CONSUMPTION-----	5,767,883	218,377	2,122,188	8,108,448	7,526,509	62,502,918
SHIPMENTS-----	445,351	1,573	20,181	467,105	457,291	3,717,265
STOCKS END OF MONTH-----	8,314,334	255,430	1,998,226	10,567,990	10,552,946	--
PIG IRON:						
RECEIPTS-----	542,337	4,189	203,900	750,426	728,281	5,918,996
PRODUCTION-----	6,837,584	--	--	6,837,584	7,015,526	55,402,955
CONSUMPTION-----	6,649,472	3,632	208,601	6,861,705	7,000,840	55,918,460
SHIPMENTS-----	721,333	--	367	721,700	697,959	5,330,059
STOCKS END OF MONTH-----	1,445,329	6,275	120,918	1,572,522	1,564,292	--
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS-----	--	--	--	53,770	51,769	336,230
PRODUCTION-----	--	--	--	--	--	--
CONSUMPTION-----	--	--	--	53,434	51,003	335,054
SHIPMENTS-----	--	--	--	--	--	--
STOCKS END OF MONTH-----	--	--	--	3,550	3,440	--
1/ BASED ON RETURNS FROM 74% OF REPORTING CONSUMERS, REPRESENTING 88% 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, AUGUST 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	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT MOLD, STOKES, HOME SCRAP AND SCRAP FROM OLD EQUIPMENT, CIRCULATING OF SCRAP)	CURRENT OPERATIONS BUILDINGS, ETC.)	SHIPMENTS	STOCKS	
SCRAP:							
CARBON STEEL--							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	45,405	774	2,879	1,196	36,906	4,192	99,732
CUT STRUCTURAL AND PLATE-----	19,430	12	22,203	10	53,845	--	64,061
NO.1 HEAVY MELTING STEEL-----	434,401	253,839	1,512,217	7,675	1,915,735	210,579	2,461,027
NO.2 HEAVY MELTING STEEL-----	174,130	4,596	97,572	165	276,826	2,569	470,450
NO.1 AND ELECTRIC FURNACE BUNDLES----	513,105	59,663	204,271	115	780,685	14,780	1,681,213
NO.2 AND ALL OTHER BUNDLES-----	145,642	1,855	27,457	--	171,724	15,532	348,843
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	1,710	--	5,615	--	8,296	--	6,128
RAILROAD RAILS-----	3,531	--	--	--	6,347	--	8,460
TURNINGS AND BORINGS-----	106,776	6,157	29,237	84	133,603	9,773	117,008
SLAG SCRAP (FE CONTENT 70 PERCENT)---	125,195	2,969	249,597	--	370,591	12,620	236,574
SHREDDER OR FRAGMENTIZED-----	142,398	36,570	--	--	178,856	--	216,588
NO. 1 BUSHING-----	109,243	4,485	744	--	127,327	-52	192,507
ALL OTHER CARBON STEEL SCRAP-----	178,440	20,870	895,791	30,711	1,051,304	52,937	904,552
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	30,235	3,682	50,407	93	70,173	4,043	109,103
INGOT MOLD AND STOKES SCRAP-----	23,111	18,097	135,036	122	155,105	13,286	301,455
MACHINERY AND CUPOLA CAST IRON-----	8,455	45,448	89,827	164,018	279,159	53,543	821,660
CAST IRON BORINGS-----	743	--	--	13	1,040	--	6,015
MOTOR BLOCKS-----	21,278	10,564	26,553	2,739	64,253	11,601	78,246
OTHER IRON SCRAP-----	333	--	--	--	812	--	1,543
OTHER MIXED SCRAP-----	13,596	23,523	39,812	892	51,769	22,951	143,814
	23,030	5,118	14,076	121	33,527	16,997	45,355
TOTAL SCRAP-----	2,120,107	498,222	3,403,294	207,954	5,767,883	445,351	8,314,334
TOTAL SCRAP THROUGH AUGUST 1977----	17,343,018	3,927,750	26,851,142	1,628,528	46,366,847	3,499,371	8,314,334
PIG IRON-----							
	RECEIPTS		PRODUCTION		CONSUMPTION		STOCKS
	542,337		6,837,584		6,649,472	721,333	1,445,329
PIG IRON THROUGH AUGUST 1977-----	4,122,536		55,402,955		54,126,682	5,326,410	1,445,329

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

2/ BASED ON RETURNS FROM 89% OF REPORTING CONSUMERS, REPRESENTING 97% 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, AUGUST 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 CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE- OLD EQUIPMENT, CIRCULATING OPERATIONS BUILDINGS, ETC.)	RECYCLING FROM CURRENT OPERATIONS	FROM SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE- OLD EQUIPMENT, CIRCULATING OPERATIONS BUILDINGS, ETC.)	CONSUMPTION	SHIPMENTS	OF SCRAP		
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS--	42,057	496	15,439	--	--	61,329	--	--	68,014	
CUT STRUCTURAL AND PLATE--	10,179	1,718	1,526	--	--	15,793	--	66	17,136	
NO.1 HEAVY MELTING STEEL--	3,490	48	4,946	30	--	10,805	--	--	28,950	
NO.2 HEAVY MELTING STEEL--	4,269	--	1,105	--	--	4,406	--	--	4,174	
NO.1 AND ELECTRIC FURNACE BUNDLES--	5,930	--	249	--	--	5,357	--	--	5,396	
NO.2 AND ALL OTHER BUNDLES--	207	--	--	--	--	218	--	--	2,288	
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)--	4,599	--	1,415	--	--	5,463	--	72	5,177	
RAILROAD RAILS--	--	--	--	--	--	35	--	--	246	
TURNINGS AND BORINGS--	4,135	494	2,603	--	--	6,826	--	962	3,627	
SLAG SCRAP (FE CONTENT 70 PERCENT)--	152	--	430	--	--	546	--	26	40	
SHREDDER OR FRAGMENTIZED--	3,323	1,498	--	--	--	4,993	--	--	7,293	
NO. 1 BUSHING--	3,370	411	667	--	--	4,078	--	--	5,342	
ALL OTHER CARBON STEEL SCRAP--	40,084	2,587	24,961	1,329	--	64,413	--	--	50,755	
STAINLESS STEEL SCRAP--										
ALLOY STEEL (EXCEPT STAINLESS)--	1,823	458	1,847	--	--	3,487	--	219	4,701	
INGOT MOLD AND STOOD SCRAP--	5,334	937	10,817	--	--	11,834	--	--	22,238	
MACHINERY AND CUPOLA CAST IRON--	562	--	38	--	--	416	--	16	645	
CAST IRON BORINGS--	426	--	432	--	--	1,033	--	--	2,415	
MOTOR BLOCKS--	4,343	--	5,190	--	--	9,310	--	--	5,243	
OTHER IRON SCRAP--	70	--	--	--	--	45	--	--	186	
OTHER MIXED SCRAP--	3,189	--	5,536	54	--	7,953	--	212	21,562	
	--	--	238	--	--	237	--	--	2	
TOTAL SCRAP--	137,542	8,647	77,439	1,413	--	218,377	--	1,573	255,430	
TOTAL SCRAP THROUGH AUGUST 1977--	1,197,988	78,192	638,966	8,991	--	1,889,710	--	12,838	255,430	
PIG IRON--										
	4,189	--	--	--	--	3,632	--	--	6,275	
PIG IRON THROUGH AUGUST 1977--	28,117	--	--	--	--	27,459	--	47	6,275	
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS. 2/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 83% OF SCRAP CONSUMPTION.										

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

2/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 83% 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, AUGUST 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 SOURCES	FROM OWN COMPANY PLANTS	SCRAP RESULTING FROM CURRENT OPERATIONS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOTS, STODLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS OF SCRAP	
CARBON STEEL-							
L04-PHOSPHORUS PLATE AND PUNCHINGS----	317,670	6,145	6,555	47	342,416	92	153,208
C01 STRUCTURAL AND PLATE-----	114,686	8,461	8,965	72	134,314	215	99,926
NO.1 HEAVY MELTING STEEL-----	8,484	10,223	5,498	--	21,884	3,591	56,616
NO.2 HEAVY MELTING STEEL-----	4,985	214	1,962	52	7,760	44	11,567
NO.1 AND ELECTRIC FURNACE BUNDLES----	15,001	19,382	6,237	50	40,482	--	13,307
NO.2 AND ALL OTHER BUNDLES-----	33,686	13,213	--	--	59,121	--	58,036
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,668	--	1,470	--	6,931	--	5,232
RAILROAD RAILS-----	7,545	--	24	--	8,944	24	15,334
TURNINGS AND BORINGS-----	48,487	9,108	1,182	250	53,274	2,241	109,314
SLAG SCRAP (FE CONTENT 70 PERCENT)---	7,393	1,916	36	--	8,003	36	31,771
SHREDDED OR FRAGMENTIZED-----	64,917	7,687	--	--	71,588	200	76,146
NO. 1 BUSHING-----	35,317	9,443	1,003	--	51,299	--	9,267
ALL OTHER CARBON STEEL SCRAP-----	74,728	83,709	8,294	7	200,239	875	116,473
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	203	187	634	2	1,009	40	8,615
INGOT MOLD AND STODL SCRAP-----	5,645	3	272	107	4,527	61	4,993
MACHINERY AND CUPOLA CAST IRON -----	105,011	--	11,760	307	201,859	351	758,757
CAST IRON BORINGS-----	75,157	13,643	55,852	62	152,961	777	88,319
MOTOR BLOCKS-----	53,497	60,126	36,001	41	150,983	4,306	93,426
OTHER IRON SCRAP-----	53,947	2,813	36,611	--	91,591	--	58,494
OTHER MIXED SCRAP-----	77,681	9,710	279,245	8,466	343,966	6,980	180,044
	37,148	104,452	28,011	385	169,037	348	49,381
TOTAL SCRAP-----	1,150,856	360,435	489,612	9,848	2,122,188	20,181	1,998,226
TOTAL SCRAP THROUGH AUGUST 1977----	7,739,074	2,583,671	3,953,555	71,985	14,246,361	205,056	1,998,226
PIG IRON-----							
	203,900	--	--	--	208,601	367	120,918
PIG IRON THROUGH AUGUST 1977-----	1,768,343	--	--	--	1,764,319	3,602	120,918
1/ BASED ON RETURNS FROM 70% OF REPORTING CONSUMERS, REPRESENTING 63% OF SCRAP CONSUMPTION.							

TABLE 5- - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN AUGUST 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/	339,616	--	--	--	--	--	--	--	--	--	--	--	339,616	--
BASIC OXYGEN PROCESS 4/	2,198,561	5,539,568	--	--	--	--	--	--	--	--	--	--	2,198,561	5,539,568
OPEN-HEARTH FURNACE	849,515	892,526	--	--	6,812	535	--	--	--	--	--	--	856,327	893,061
ELECTRIC FURNACE	2,249,145	50,377	--	--	195,149	2,756	--	--	900,217	--	21,704	--	3,344,511	74,837
CUPOLA FURNACE	26,077	14,697	--	--	14,442	52	--	--	1,180,059	--	85,492	--	1,220,578	100,241
OTHER (INCLUDING AIR FURNACE) 5/	104,969	20,182	--	--	1,974	289	--	--	41,912	--	2,674	--	148,855	23,145
DIRECT CASTINGS 6/	--	132,122	--	--	--	--	--	--	--	--	98,731	--	--	230,853
TOTAL	5,767,883	6,649,472	218,377	3,632	2,122,188	208,601	8,108,448	6,861,705						

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 STODLS.

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, JULY 1977 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP				PRODUCTION OF HOME SCRAP				CONSUMPTION				ENDING STOCKS	
					RECYCLING				OF BOTH PUR-					
	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	FROM SCRAP (INCLUDES INGOT CHASED AND MOLOS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)		
SCRAP:														
CARBON STEEL-														
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	43,074	375	2,023	583	39,530	2,644	90,380							
CUT STRUCTURAL AND PLATE-----	21,981	--	15,784	--	31,406	--	75,960							
NO.1 HEAVY MELTING STEEL-----	428,930	240,478	1,476,264	6,840	1,976,685	185,701	2,372,146							
NO.2 HEAVY MELTING STEEL-----	128,334	13,305	82,946	64	237,979	769	460,839							
NO.1 AND ELECTRIC FURNACE BUNDLES---	493,445	46,113	209,459	19	725,238	1,997	1,704,140							
NO.2 AND ALL OTHER BUNDLES-----	154,251	3,440	22,517	--	164,128	5,163	360,753							
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	1,318	--	5,928	--	8,184	--	7,099							
RAILROAD RAILS-----	6,036	--	1	--	4,975	--	11,375							
TURNINGS AND BORINGS-----	100,333	5,881	23,414	96	110,331	7,901	118,917							
SLAG SCRAP (FE CONTENT 70 PERCENT)---	123,875	2,378	226,192	--	352,367	9,322	245,188							
SHREDDED OR FRAGMENTIZED-----	157,273	33,519	1,356	--	166,949	--	217,138							
NO. 1 BUSHELING-----	114,440	847	447	--	116,587	1,003	205,343							
ALL OTHER CARBON STEEL SCRAP-----	152,588	26,168	845,179	25,955	1,013,061	67,904	890,582							
STAINLESS STEEL SCRAP-----	38,183	2,996	48,927	76	75,891	3,129	98,977							
ALLOY STEEL (EXCEPT STAINLESS)-----	17,710	9,802	112,001	95	128,716	13,047	292,633							
INGOT MOLD AND STUOL SCRAP-----	7,634	62,466	96,624	149,387	220,168	65,073	839,767							
MACHINERY AND CUPOLA CAST IRON-----	174	--	--	--	727	--	6,299							
CAST IRON BORINGS-----	26,347	8,576	35,420	3,974	60,441	10,039	93,061							
MOTOR BLOCKS-----	627	--	12	--	1,007	42	1,929							
OTHER IRON SCRAP-----	17,599	20,056	47,287	335	55,492	36,696	140,106							
OTHER MIXED SCRAP-----	21,598	4,194	17,626	6	34,032	20,913	56,426							
TOTAL SCRAP-----	2,055,750	480,594	3,269,407	187,430	5,523,894	431,343	8,289,058							
TOTAL SCRAP THROUGH JULY 1977---	15,222,831	3,429,528	23,447,848	1,420,574	40,598,964	3,054,020	8,289,058							

RECEIPTS				PRODUCTION				CONSUMPTION				SHIPMENTS		

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

TABLE 8. - IRON FOUNDRIES AND MISCELLANEOUS USERS - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS, AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, JULY 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	RECYCLING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	OBSELETE SCRAP	OF BOTH PURCHASED AND	SHIPMENTS	
SCRAP:							
CARBON STEEL--							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	308,714	8,738	5,515	25	332,928	127	153,551
CUT STRUCTURAL AND PLATE-----	99,661	9,272	9,054	744	119,118	428	94,101
NO. 1 HEAVY MELTING STEEL-----	13,238	10,365	5,189	--	23,371	2,786	58,165
NO. 2 HEAVY MELTING STEEL-----	5,609	288	838	52	3,426	44	12,134
NO. 1 AND ELECTRIC FURNACE BUNDLES----	10,291	13,106	4,445	6	29,208	--	12,483
NO. 2 AND ALL OTHER BUNDLES-----	24,387	13,873	--	--	60,066	--	55,192
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	2,857	--	1,733	--	5,004	--	4,822
RAILROAD RAILS-----	7,073	--	24	--	6,930	24	17,192
TURNINGS AND BORINGS-----	54,853	6,662	1,916	246	51,058	4,486	113,774
SLAG SCRAP (FE CONTENT 70 PERCENT)---	6,113	4,814	36	--	6,999	36	31,525
SHREDDED OR FRAGMENTIZED-----	59,921	7,603	--	--	68,166	--	74,572
NO. 1 BUSHING-----	31,735	10,437	632	--	44,283	--	11,760
ALL OTHER CARBON STEEL SCRAP-----	59,900	49,414	10,421	7	134,166	1,199	136,133
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	85	238	421	2	746	34	8,736
INGOT MOLD AND STOOD SCRAP-----	4,692	--	294	51	4,261	29	4,431
MACHINERY AND CUPOLA CAST IRON-----	101,146	--	9,752	739	195,252	981	762,243
CAST IRON BURLINGS-----	50,239	11,636	48,878	38	114,727	902	92,388
MOTOR BLOCKS-----	38,622	44,279	31,952	11	112,562	3,275	97,218
OTHER IRON SCRAP-----	49,616	4,033	33,824	--	86,657	--	56,406
OTHER MIXED SCRAP-----	73,935	8,415	242,443	7,990	316,727	10,209	164,019
	31,191	56,928	23,654	80	104,187	109	49,489
TOTAL SCRAP-----	1,033,878	260,101	431,021	9,991	1,819,842	24,669	2,010,334
TOTAL SCRAP THROUGH JULY 1977----	6,988,218	2,223,236	3,463,943	62,137	12,124,173	184,875	2,010,334
PIG IRON-----							
	RECEIPTS		PRODUCTION		CONSUMPTION		STOCKS
	206,611		--		201,402		
PIG IRON THROUGH JULY 1977-----	1,564,443		--		1,555,718		126,349
1/ BASED ON RETURNS FROM 79% OF REPORTING CONSUMERS, REPRESENTING 93% OF SCRAP CONSUMPTION.							

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN JULY 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	AND CASTINGS 1/	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON
BLAST FURNACE 3/	343,232	--	--	--	--	--	--	343,232	--
BASIC OXYGEN PROCESS 4/	2,128,136	5,429,383	--	--	--	--	--	2,128,136	5,429,383
OPEN-HEARTH FURNACE	850,704	1,131,304	--	4,777	175	--	--	855,481	1,131,479
ELECTRIC FURNACE	2,087,869	44,942	--	160,962	1,757	815,691	18,705	3,064,522	65,304
CUPOLA FURNACE	28,006	18,568	--	15,248	52	967,711	70,011	1,010,965	88,631
OTHER (INCLUDING AIR FURNACE) 5/	85,947	25,120	--	1,786	244	36,440	2,299	124,173	27,663
DIRECT CASTINGS 6/	--	147,993	--	--	--	--	110,387	--	258,380
TOTAL	5,523,894	6,797,210	--	182,773	2,228	1,819,842	201,402	7,526,509	7,000,840

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 STODLS.

FOREIGN TRADE

Exports of iron and steel scrap totaled 430,058 short tons in August compared with 553,670 tons in July. Exports of pig iron during August totaled 2,861 tons and 3,841 tons in July. Imports of scrap totaled 66,590 short tons in August compared with 35,059 tons in July. Of the scrap imported during August 54,428 short tons came from Canada and 12,162 tons from other sources. Imports of pig iron totaled 19,314 short tons in August and 21,844 tons in July. In addition to the foregoing imports of pig iron during August, there were 2 tons of sponge iron, valued at \$1,574 imported, all of which came from Canada.

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

Country	August 1977		Year to date	
	Short tons	Value	Short tons	Value
Argentina-----	--	--	48,282	\$3,120,366
Canada-----	26,917	\$1,365,720	364,958	17,004,859
China, People's Rep. of--	--	--	--	--
Greece-----	81,072	4,708,465	203,372	12,488,754
Italy-----	62	45,021	120,713	12,824,845
Japan-----	130,159	3,775,388	689,230	43,639,740
Korea, Republic of-----	57,620	4,176,343	1,034,922	65,247,605
Mexico-----	16,303	1,178,027	229,343	16,520,160
Pakistan-----	--	--	13,040	1,249,783
Spain-----	27,103	1,349,760	625,717	38,129,099
Sweden-----	22	28,421	1,710	1,345,507
Taiwan-----	42,716	3,797,962	209,877	19,752,097
Turkey-----	--	--	200,845	13,451,752
United Kingdom-----	264	43,690	49,620	5,724,517
Other countries-----	47,820	4,933,751	175,418	17,675,773
Total-----	430,058	25,402,548	3,967,047	268,174,857

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	August 1977		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	134,382	\$7,911,951	1,177,223	\$74,566,240
No. 2 heavy melting steel scrap-----	34,352	1,971,666	424,336	24,826,789
No. 1 bundles-----	74,928	703,799	98,291	2,224,070
No. 2 bundles-----	28,572	1,124,100	275,760	12,249,491
Borings, shovelings and turnings-----	17,352	570,818	295,233	11,616,797
Stainless steel-----	5,555	2,916,164	55,373	27,869,253
Shredded steel scrap-----	72,956	4,410,305	1,031,809	66,149,943
Iron scrap (excluding borings and shovelings)--	13,949	1,017,714	215,090	14,685,977
All other steel scrap <u>1/</u> ----	48,012	4,776,031	393,932	33,986,297
Total-----	430,058	25,402,548	3,967,047	268,174,857
Ships, boats, and other vessels for breaking up (for scrapping)-----	--	--	15,171	981,970
Total-----	430,058	25,402,548	3,982,218	269,156,827

1/ Includes tinplate and terneplate.