



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 SEPTEMBER 1978

Returns from 73% of reporting consumers representing 91% of total scrap consumption, indicated that consumption of iron and steel scrap in September on a daily average basis was 4% above that in August, according to the Bureau of Mines, U.S. Department of Interior. Compared with August data, daily average production and net receipts were unchanged and down 2%, respectively, and stocks at the end of the month were down 2%.

Exports of ferrous scrap during the month were 7% above those for August 1978 and 46% above those for September 1977. Japan was the largest importer of U.S. scrap in September 1978, taking 41% of the total exported. The next largest importers were Italy and Spain, which received 13% and 9%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of September was \$72.83 per long ton, up 26% from the price of \$57.83 at the end of September 1977.

Pig iron production and consumption on a daily average basis for the month were up 1% and 2%, respectively, from those of the previous month. Monthend stocks of pig iron decreased 3% compared with those at the end of August.

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

SEPTEMBER 1978 (PRELIMINARY) 1/						
	MFRS. OF		MFRS. OF		TOTAL FOR MONTH OF SEP 1978	TOTAL YEAR THROUGH SEP 1978 5/
	PIG IRON AND STEEL INGOTS & CASTINGS 2/	IRON FOUNDRIES AND MISCEL- LANEOUS USERS	STEEL CASTINGS 3/	IRON FOUNDRIES AND MISCEL- LANEOUS USERS		
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,301,475	866,691	149,006	866,691	3,337,172	31,336,813
RECEIPTS FROM OTHER OWN COMPANY PLANTS--	478,399	320,193	3,519	320,193	816,111	7,828,066
PRODUCTION RECIRCULATING SCRAP-----	3,571,062	525,886	79,928	525,886	4,176,876	36,436,318
PRODUCTION OBSOLETE SCRAP-----	220,922	2,578	493	2,578	223,993	2,026,401
CONSUMPTION-----	6,330,678	1,719,473	256,881	1,719,473	8,307,032	73,473,438
SHIPMENTS-----	444,374	23,919	3,465	23,919	471,758	4,245,421
STOCKS END OF MONTH-----	7,499,895	1,065,757	253,528	1,065,757	8,819,180	--
PIG IRON:						
RECEIPTS-----	477,500	214,395	3,167	214,395	695,062	6,317,266
PRODUCTION-----	7,384,094	--	--	--	7,384,094	54,473,181
CONSUMPTION-----	7,220,432	227,395	1,686	227,395	7,451,513	65,182,073
SHIPMENTS-----	663,540	531	--	531	664,071	5,873,734
STOCKS END OF MONTH-----	947,114	94,377	5,595	94,377	1,047,086	--
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS-----	--	--	--	--	56,632	281,466
PRODUCTION-----	--	--	--	--	NA	NA
CONSUMPTION-----	--	--	--	--	54,242	253,223
SHIPMENTS-----	--	--	--	--	W	W
STOCKS END OF MONTH-----	--	--	--	--	29,033	--

NA NOT AVAILABLE.

W WITHHELD TO AVOID DISCLOSING INDIVIDUAL COMPANY CONFIDENTIAL DATA.

1/ BASED ON RETURNS FROM 73% OF REPORTING CONSUMERS, REPRESENTING 91% 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 80% 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, SEPTEMBER 1978 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECIRCULATING ORSOLETE SCRAP (INCLUDES INGOT MOLDS, STTOOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)		OF 90TH PURCHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)		
			SCRAP RESULTING FROM CURRENT OPERATIONS	SCRAP (INCLUDES INGOT MOLDS, STTOOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CONSUMPTION	SHIPMENTS	
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	39,974	595	5,786	1,174	46,695	5,004	97,459
CUT STRUCTURAL AND PLATE-----	37,150	9,468	23,336	10	66,257	--	50,559
NO.1 HEAVY MELTING STEEL-----	513,660	238,792	1,563,076	10,564	2,201,349	185,971	2,272,855
NO.2 HEAVY MELTING STEEL-----	185,751	4,085	105,836	312	304,309	7,779	501,660
NO.1 AND ELECTRIC FURNACE BUNDLES----	577,767	48,626	276,125	465	920,425	3,227	1,459,203
NO.2 AND ALL OTHER BUNDLES-----	135,250	2,787	11,265	--	159,147	12,063	321,733
ELECTRIC FURNACE 1 FOOT. AND UNDER (NOT BUNDLES)-----	2,921	--	792	6	4,948	--	3,271
RAILROAD RAILS-----	5,275	--	--	--	2,563	106	6,547
TURNINGS AND BORINGS-----	109,840	5,740	29,366	30	157,153	9,514	108,693
SLAG SCRAP (FE CONTENT 70 PERCENT)----	120,962	653	230,824	--	344,292	5,842	208,278
SHREDED OR FRAGMENTIZED-----	157,311	37,120	3,038	--	192,121	479	221,365
NO. 1 BUSHELING-----	115,462	2,793	574	--	120,394	1,678	166,532
ALL OTHER CARBON STEEL SCRAP-----	146,230	15,208	945,612	39,429	1,102,708	79,338	801,105
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	30,061	2,912	55,225	2,427	84,094	3,130	106,018
INGOT MOLD AND STOOD SCRAP-----	21,749	20,298	125,534	604	159,902	16,645	273,053
MACHINERY AND CUPOLA CAST IRON-----	43,752	55,774	71,422	164,132	303,453	75,402	550,022
CAST IRON BORINGS-----	1,292	163	--	--	1,218	--	1,585
MOTOR BLOCKS-----	19,751	4,315	30,494	1,395	52,011	5,819	112,903
OTHER IRON SCRAP-----	1,823	--	--	--	908	20	1,272
OTHER MIXED SCRAP-----	20,593	10,034	76,230	374	70,279	28,546	190,862
	14,901	9,045	16,527	--	37,551	2,811	44,900
TOTAL SCRAP-----	2,301,475	478,399	3,571,062	220,922	6,330,678	444,374	7,499,895
TOTAL SCRAP THROUGH SEPTEMBER 1978----							
	22,288,132	4,560,600	31,188,363	1,978,799	56,487,663	3,987,073	7,499,895
RECEIPTS		PRODUCTION		CONSUMPTION		SHIPMENTS	
477,500		7,384,094		7,220,432		947,114	
4,326,818		64,473,181		63,148,350		947,114	
PIG IRON THROUGH SEPTEMBER 1978-----		5,868,051		5,868,051		947,114	

1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
2/ BASED ON RETURNS FROM 91% 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, SEPTEMBER 1978 (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 SOURCES	FROM OTHER OWN COMPANY PLANTS	OTHER	RECIRCULATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND HOMED SCRAP)	RESULTING FROM CURRENT OPERATIONS BUILDINGS, ETC.	MOLDS, STOOLS, AND SCRAP FROM OLD EQUIPMENT, CIRCULATING SCRAP	SHIPMENTS OF SCRAP			
SCRAP:										
CARBON STEEL--										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	47,287	513		18,968	--	70,391	181	59,479		
CUT STRUCTURAL AND PLATE-----	15,416	1,748		2,614	--	20,513	62	21,369		
NO.1 HEAVY MELTING STEEL-----	10,988	14		5,584	145	18,229	90	26,398		
NO.2 HEAVY MELTING STEEL-----	4,546			1,886	--	7,207	--	3,739		
NO.1 AND ELECTRIC FURNACE BUNDLES----	4,131	--		207	--	4,354	--	1,856		
NO.2 AND ALL OTHER BUNDLES-----	145	--		--	--	296	--	1,673		
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----										
RAILROAD RAILS-----	5,676	100		1,707	--	7,403	86	5,394		
TURNTONGS AND BORINGS-----	20	11		--	--	80	--	277		
SLAG SCRAP (FE CONTENT 70 PERCENT)----	5,743	393		2,212	--	6,731	684	5,164		
SHREDDED OR FRAGMENTIZED-----	--	--		266	--	293	12	201		
NO. 1 BUSHING-----	5,995	1,066		--	--	5,845	--	7,573		
ALL OTHER CARBON STEEL SCRAP-----	3,771	715		836	--	5,866	--	7,738		
	47,605	3,070		19,845	49	73,329	--	53,020		
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	1,490	32		2,472	--	3,757	448	4,995		
INGOT MOLD AND STOOL SCRAP-----	5,884	857		11,238	279	12,170	26	26,979		
MACHINERY AND CUPOLA CAST IRON-----	493	--		--	--	350	--	909		
CAST IRON BORINGS-----	1,245	--		901	--	1,948	--	1,815		
MOTOR BLOCKS-----	4,423	--		2,963	--	7,084	103	4,329		
OTHER IRON SCRAP-----	90	--		--	--	70	--	225		
OTHER MIXED SCRAP-----	4,058	--		7,876	20	10,487	1,773	21,350		
	--	--		353	--	478	--	83		
TOTAL SCRAP-----	169,006	8,519		79,928	493	256,881	3,465	253,528		
TOTAL SCRAP THROUGH SEPTEMBER 1978----	1,466,313	84,956		724,898	5,016	2,232,160	28,602	253,528		
PIG IRON-----										
PIG IRON THROUGH SEPTEMBER 1978-----										
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS. 2/ BASED ON RETURNS FROM 74% OF REPORTING CONSUMERS, REPRESENTING 81% OF SCRAP CONSUMPTION.										

11/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.
2/ BASED ON RETURNS FROM 74% OF REPORTING CONSUMERS, REPRESENTING

81% 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, SEPTEMBER 1978 (PRELIMINARY) 1/ (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	FROM RECYCLING SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOKES, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	PRODUCTION	CONSUMPTION	SHIPMENTS			
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	75,563	13,252	8,376	31		96,050	939	50,930		
CUT STRUCTURAL AND PLATE-----	132,431	8,233	14,471	23		154,406	218	94,573		
NO.1 HEAVY MELTING STEEL-----	29,689	8,795	4,080	--		35,882	3,486	49,301		
NO.2 HEAVY MELTING STEEL-----	5,937	443	2,111	161		7,335	329	8,914		
NO.1 AND ELECTRIC FURNACE BUNDLES-----	19,332	15,091	5,915	27		41,974	12	13,803		
NO.2 AND ALL OTHER BUNDLES-----	38,900	10,606	--	--		55,421	600	40,098		
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	7,268	--	329	--		7,865	--	5,251		
RAILROAD RAILS-----	10,853	1	267	--		2,329	24	14,809		
TURNINGS AND BORINGS-----	59,806	14,971	1,957	6		76,733	1,424	84,362		
SLAG SCRAP (FE CONTENT 70 PERCENT)----	2,904	--	50	--		5,972	50	31,323		
SHREDDER OR FRAGMENTIZED-----	79,408	7,442	--	--		85,705	--	54,475		
NO. 1 BUSHING-----	23,602	7,720	1,077	--		32,361	--	12,273		
ALL OTHER CARBON STEEL SCRAP-----	81,821	67,198	12,422	7		178,262	584	89,153		
STAINLESS STEEL SCRAP-----	82	6	552	4		540	48	1,628		
ALLOY STEEL (EXCEPT STAINLESS)-----	4,432	409	210	120		5,702	64	9,035		
INGOT MOLD AND STOK SCRAP-----	10,443	241	8,945	330		21,560	350	44,043		
MACHINERY AND CUPOLA CAST IRON -----	68,240	3,860	66,416	26		141,947	663	85,257		
CAST IRON BORINGS-----	51,732	65,023	35,455	56		141,567	4,967	93,125		
MOTOR BLOCKS-----	56,152	2,232	40,998	--		91,283	--	66,853		
OTHER IRON SCRAP-----	73,578	19,324	287,215	895		374,181	9,276	181,433		
OTHER MIXED SCRAP-----	34,518	84,344	35,040	892		155,398	985	44,093		
TOTAL SCRAP-----	866,691	329,193	525,886	2,578		1,719,473	23,919	1,065,757		
TOTAL SCRAP THROUGH SEPTEMBER 1978----	7,582,368	2,782,510	4,523,057	42,586		14,753,615	229,745	1,065,757		
PIG IRON-----	214,395	--	--	--		227,395	531	94,377		
PIG IRON THROUGH SEPTEMBER 1978-----	1,955,824	--	--	--		1,998,102	5,609	94,377		
1/ BASED ON RETURNS FROM 67% OF REPORTING CONSUMERS, REPRESENTING 73% OF SCRAP CONSUMPTION.										

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

TYPE OF FURNACE OR OTHER USE	MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/				MANUFACTURERS OF STEEL CASTINGS 2/				IRON FOUNDRIES AND MISCELLANEOUS USERS				TOTAL ALL TYPES	
	SCRAP		PIG IRON		SCRAP		PIG IRON		SCRAP		PIG IRON		SCRAP	PIG IRON
BLAST FURNACE 3/	359,637	--	--	--	--	--	--	--	--	--	--	--	359,637	--
BASIC OXYGEN PROCESS 4/	2,239,545	5,826,839	--	--	--	--	--	--	--	--	--	--	2,239,545	5,826,839
OPEN-HEARTH FURNACE	960,974	1,141,615	--	--	8,027	497	--	--	--	--	--	--	969,001	1,142,112
ELECTRIC FURNACE	2,648,783	47,171	--	--	235,733	2,805	--	--	522,511	24,333	--	--	3,407,027	74,309
CUPOLA FURNACE	24,080	17,221	--	--	10,458	59	--	--	1,157,157	72,779	--	--	1,191,705	90,059
OTHER (INCLUDING AIR FURNACE) 5/	97,659	27,341	--	--	2,663	325	--	--	39,795	2,834	--	--	140,117	30,500
DIRECT CASTINGS 6/	--	160,245	--	--	--	--	--	--	--	127,449	--	--	--	287,694
TOTAL	6,330,678	7,220,432	--	--	256,881	3,686	--	--	1,719,473	227,395	--	--	8,307,032	7,451,313

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, AUGUST 1978 (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 SCRAP RESULTING FROM CURRENT OPERATIONS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	SCRAP (INCLUDES INGOT AND SCRAP FROM (INCLUDES RE-CIRCULATING SCRAP CHASED AND HOME SCRAP	SHIPMENTS OF SCRAP	CONSUMPTION	SHIPMENTS	STOCKS	
SCRAP:										
CARBON STEEL--										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	41,391	2,415	3,495	1,718	38,837	4,609	101,733			
CUT STRUCTURAL AND PLATE-----	35,311	21,561	24,847	--	73,978	--	44,960			
NO-1 HEAVY MELTING STEEL-----	579,170	272,524	1,644,869	7,913	2,177,828	222,137	2,306,864			
NO-2 HEAVY MELTING STEEL-----	240,182	16,875	116,744	195	327,939	10,776	519,558			
NO-1 AND ELECTRIC FURNACE BUNDLES----	614,538	30,095	285,480	34	909,479	970	1,478,070			
NO-2 AND ALL OTHER BUNDLES-----	152,115	3,117	6,132	6,166	160,716	8,158	344,322			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	2,763	--	275	--	3,987	--	4,500			
RAILROAD RAILS-----	6,756	--	--	--	7,399	106	4,124			
TURNINGS AND BORINGS-----	123,121	6,950	29,767	26	157,523	11,162	127,164			
SLAG SCRAP (FE CONTENT 70 PERCENT)----	118,147	1,313	241,721	--	344,417	7,325	205,954			
SHREDDED OR FRAGMENTIZED-----	174,697	37,255	3,035	--	194,697	--	220,673			
NO. 1 BUSHELING-----	116,570	3,920	5,132	--	127,468	827	164,694			
ALL OTHER CARBON STEEL SCRAP-----	182,125	18,332	991,979	38,576	1,131,849	68,395	853,055			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	27,512	3,239	53,128	3,100	80,083	4,207	103,320			
INGOT MOLD AND STUOL SCRAP-----	20,434	21,659	131,055	849	175,073	19,691	280,932			
MACHINERY AND CUPOLA CAST IRON-----	44,760	84,599	95,662	176,650	306,047	90,695	590,979			
CAST IRON ROPINGS-----	846	380	--	--	2,465	--	1,348			
MOTOR BLOCKS-----	27,981	4,953	27,692	1,158	49,898	13,242	106,004			
OTHER IRON SCRAP-----	1,087	--	--	--	980	20	242			
OTHER MIXED SCRAP-----	39,592	11,329	62,252	669	73,502	34,692	179,915			
	20,524	8,899	17,490	13	41,009	2,095	44,680			
TOTAL SCRAP-----	2,569,622	549,415	3,740,755	237,067	6,388,974	499,107	7,683,105			
TOTAL SCRAP THROUGH AUGUST 1978----	19,986,657	4,092,201	27,617,301	1,757,877	50,156,985	3,542,699	7,693,106			
PIG IRON-----										
	RECEIPTS			PRODUCTION			CONSUMPTION			STOCKS
	514,788			7,517,761			7,289,587			
PIG IRON THROUGH AUGUST 1978-----	3,849,318			57,089,087			55,927,918			968,502

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, AUGUST 1978 (FINAL) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP			ENDLVS STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP (INCLUDES INGOT CHASED AND MOLD, STOOLES, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.) SCRAP)	RECIRCULATING OBSOLETE SCRAP	RESULTING FROM CURRENT OPERATIONS	OLD BUILDINGS, ETC.)	OF BOTH PURCHASED AND HOME SCRAP	SHIPMENTS	STOCKS	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	43,232	330	18,939	--	--	--	69,638	181	62,090	
CUT STRUCTURAL AND PLATE-----	14,526	1,066	2,441	--	--	--	17,393	62	22,021	
NO.1 HEAVY MELTING STEEL-----	12,957	109	6,527	39	--	--	19,493	--	27,308	
NO.2 HEAVY MELTING STEEL-----	3,914	--	1,426	--	--	--	5,106	--	3,951	
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,153	--	207	--	--	--	4,591	--	2,397	
NO.2 AND ALL OTHER BUNDLES-----	474	--	--	--	--	--	451	--	2,253	
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,889	100	1,737	--	--	--	7,236	128	5,707	
RAILROAD RAILS-----	43	--	--	--	--	--	64	--	325	
TURNINGS AND BORINGS-----	5,608	425	2,007	--	--	--	7,071	692	3,102	
SLAB SCRAP (FE CONTENT 70 PERCENT)---	--	--	279	--	--	--	243	12	236	
SHREDDED OR FRAGMENTIZED-----	3,968	1,066	--	--	--	--	4,680	--	6,285	
NO. 1 BUSHING-----	3,394	715	836	--	--	--	5,497	--	9,587	
ALL OTHER CARBON STEEL SCRAP-----	42,463	2,502	20,190	--	--	--	64,554	1,830	52,553	
STAINLESS STEEL SCRAP-----	1,529	100	2,161	--	--	--	3,733	434	4,907	
ALLOY STEEL (EXCEPT STAINLESS)-----	4,664	313	10,914	--	--	--	11,259	18	25,103	
INGOT MOLD AND STUOL SCRAP-----	383	--	--	--	--	--	510	--	779	
MACHINERY AND CUPOLA CAST IRON-----	630	--	656	--	--	--	1,432	--	1,097	
CAST IRON BORINGS-----	3,373	--	2,400	--	--	--	6,517	75	3,540	
MOTOR BLOCKS-----	69	--	--	--	--	--	39	--	203	
OTHER IRON SCRAP-----	2,994	--	7,453	40	--	--	10,103	71	21,783	
OTHER MIXED SCRAP-----	--	--	230	--	--	--	435	--	209	
TOTAL SCRAP-----	154,263	6,726	78,403	79	--	--	240,045	3,503	256,437	
TOTAL SCRAP THROUGH AUGUST 1978---	1,297,307	76,437	644,970	4,523	--	--	1,975,279	25,137	256,437	
PIG IRON-----	RECEIPTS			PRODUCTION			CONSUMPTION			STOCKS
	3,435			--			3,899			5,173
PIG IRON THROUGH AUGUST 1978-----	31,457			--			31,935			5,173

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

2/ BASED ON RETURNS FROM 80% OF REPORTING CONSUMERS, REPRESENTING 92% OF SCRAP CONSUMPTION.

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

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION OF BOTH PUR-			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	OTHER RESULTING FROM CURRENT OPERATIONS	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	67,259	11,185	8,955	81	89,640	671	51,173			
CUT STRUCTURAL AND PLATE-----	133,208	5,258	10,445	149	150,938	441	91,403			
NO.1 HEAVY MELTING STEEL-----	22,181	5,734	3,302	1,358	29,611	5,322	45,913			
NO.2 HEAVY MELTING STEEL-----	7,632	351	2,312	57	6,897	246	7,863			
NO.1 AND ELECTRIC FURNACE BUNDLES----	16,233	13,831	6,642	30	38,934	--	13,647			
NO.2 AND ALL OTHER BUNDLES-----	55,649	9,343	--	--	67,497	--	49,627			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	8,070	--	821	--	7,299	--	6,739			
RAILROAD RAILS-----	9,247	1	24	--	9,145	24	13,427			
TURNINGS AND BORINGS-----	57,068	10,800	1,833	6	74,307	1,543	93,284			
SLAG SCRAP (FE CONTENT 70 PERCENT)----	4,448	--	39	--	5,946	39	34,646			
SHREDDER OR FRAGMENTIZED-----	60,641	7,951	--	--	66,676	--	53,408			
NO. 1 BUSHING-----	23,488	7,983	1,077	--	30,614	--	11,911			
ALL OTHER CARBON STEEL SCRAP-----	81,307	67,434	9,519	7	174,312	509	89,734			
STAINLESS STEEL SCRAP-----	45	--	464	1	415	55	2,749			
ALLOY STEEL (EXCEPT STAINLESS)-----	4,003	551	300	124	4,493	113	9,428			
INGOT MOLD AND STUOL SCRAP-----	10,324	365	9,078	490	22,004	484	45,321			
MACHINERY AND CUPOLA CAST IRON -----	75,459	4,042	64,073	55	142,899	911	87,838			
CAST IRON BORINGS-----	38,123	57,819	34,748	10	126,429	4,209	78,976			
MOTOR BLOCKS-----	64,142	2,169	30,734	--	86,711	192	61,963			
OTHER IRON SCRAP-----	66,388	12,656	283,268	2,694	358,865	10,453	183,430			
OTHER MIXED SCRAP-----	39,184	84,204	35,121	832	155,813	872	46,854			
TOTAL SCRAP-----	844,099	301,686	502,746	5,904	1,650,435	26,084	1,078,628			
TOTAL SCRAP THROUGH AUGUST 1978----	6,715,677	2,453,317	3,997,171	40,008	13,034,142	205,826	1,078,629			
PIG IRON-----										
	232,277	--	--	--	233,876	509	105,255			
PIG IRON THROUGH AUGUST 1978-----	1,741,429	--	--	--	1,770,707	5,078	105,256			
1/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 93% OF SCRAP CONSUMPTION.										

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN AUGUST 1978 (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	
	PIG IRON		PIG IRON		PIG IRON		PIG IRON	
	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON
BLAST FURNACE 3/	358,547	--	--	--	--	--	358,547	--
BASIC OXYGEN PROCESS 4/	2,280,094	5,955,391	--	--	--	--	2,280,094	5,955,391
OPEN-HEARTH FURNACE	953,570	1,102,307	8,387	446	--	--	951,957	1,102,753
ELECTRIC FURNACE	2,628,980	57,825	216,981	2,790	484,681	25,369	3,330,642	85,984
CUPOLA FURNACE	39,580	15,708	11,079	72	1,118,518	70,926	1,169,177	87,706
OTHER (INCLUDING AIR FURNACE) 5/	128,203	21,270	3,598	591	47,236	2,996	179,037	24,857
DIRECT CASTINGS 6/	--	136,086	--	--	--	134,585	--	270,671
TOTAL	6,388,974	7,289,587	240,045	3,899	1,650,435	233,876	8,279,454	7,527,362

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 STPOOLS.

FOREIGN TRADE

Exports of iron and steel scrap totaled 834,347 short tons in September compared with 776,736 tons in August. Exports of pig iron during September totaled 893 tons and 6,552 tons in August. Imports of scrap totaled 70,428 short tons in September compared with 71,209 tons in August. Of the scrap imported during September 65,917 short tons came from Canada and 4,511 tons from other sources. Imports of pig iron totaled 87,743 short tons in September and 77,985 tons in August. In addition to the foregoing imports of pig iron during September, there were 99 tons of sponge iron, valued at \$31,592 imported, all of which came from Canada.

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

Country	September 1978		Year to date	
	Short tons	Value	Short tons	Value
Canada-----	61,125	\$2,872,452	567,200	\$28,737,291
Egypt-----	--	--	23,694	1,217,657
Greece-----	21,989	1,723,772	276,355	20,064,075
Indonesia-----	21,404	1,516,626	44,902	3,260,037
Italy-----	109,257	10,200,434	478,044	39,870,646
Japan-----	338,507	26,216,196	2,165,846	153,823,223
Korea, Republic of-----	57,777	5,135,000	1,101,603	82,773,510
Mexico-----	35,787	3,223,820	290,062	21,598,104
Qatar-----	12,457	967,701	63,142	4,646,039
Singapore-----	--	--	51,872	3,481,894
Spain-----	71,863	5,177,050	328,549	21,483,353
Taiwan-----	26,488	2,542,944	280,943	28,235,109
Turkey-----	22,042	1,597,561	226,564	16,599,735
United Kingdom-----	50	55,433	4,229	520,987
Other countries <u>2/</u> -----	55,601	7,028,150	241,868	32,410,046
Total-----	834,347	68,257,139	6,144,873	458,721,706

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

2/ Argentina, Pakistan, and Sweden are included in "Other countries".

Source: U.S. Bureau of Census, adjusted by Bureau of Mines.

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

Grade of scrap	September 1978		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	185,983	\$13,668,508	1,551,595	\$108,957,391
No. 2 heavy melting steel scrap-----	53,170	3,571,568	556,031	35,254,528
No. 1 bundles-----	6,603	470,032	86,609	5,640,738
No. 2 bundles-----	23,752	1,272,366	194,638	9,757,618
Borings, shovelings and turnings-----	40,701	1,633,960	461,450	19,559,671
Stainless steel-----	16,412	6,702,705	89,755	32,883,199
Shredded steel scrap-----	321,283	24,984,120	1,973,546	140,393,055
Iron scrap (excluding borings and shovelings)	43,299	3,440,796	311,122	22,547,336
All other steel scrap <u>1/-</u>	143,144	12,513,084	920,127	83,728,170
Total-----	834,347	68,257,139	6,144,873	458,721,706
Ships, boats, and other vessels for breaking up (for scrapping)-----	80	11,988	1,534	230,193
Total-----	834,427	68,269,127	6,146,407	458,951,899

1/ Includes tinplate and terneplate.

Source: U.S. Bureau of Census, adjusted by Bureau of Mines