



MINERAL INDUSTRY SURVEYS

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



Cecil D. Andrus, Secretary

Roger A. Markle, Director

For information call K. W. Palmer
Telephone: 202-634-1029

Iron and Steel Scrap, Monthly

IRON AND STEEL SCRAP IN NOVEMBER 1978

Returns from 71% of reporting consumers representing 87% of total scrap consumption, indicated that consumption of iron and steel scrap in November on a daily average basis was 1% below that in October, according to the Bureau of Mines, U.S. Department of the Interior. Compared with October data, daily average production and net receipts were down 2% and up 2%, respectively, and stocks at the end of the month were down 1%.

Exports of ferrous scrap during the month were unchanged from those for October 1978 and 121% above those for November 1977. Japan was the largest importer of U.S. scrap, taking 35% of the total exported in November 1978. The next largest importers were the Republic of Korea and Spain, which received 17% and 14%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of November was \$84.83 per long ton, up 73% from the price of \$49.17 at the end of November 1977.

Pig iron production and consumption on a daily average basis during the month were both down 1% from those of the previous month. Stocks of pig iron decreased 2% during November compared with those at the end of October 1978.

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

NOVEMBER 1978 (PRELIMINARY) 1/						
	MFRS. OF	MFRS. OF	IRON FOUNDRIES		FINAL	
	PIG IRON AND	STEEL	AND MISCEL-		TOTAL FOR	TOTAL YEAR
	CASTINGS 2/	CASTINGS 3/	LANEODS USERS		MONTH OF	THROUGH
					OCT 1978 4/	NOV 1978 5/
SCRAP:						
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,374,332	170,951	901,313		3,525,920	38,327,764
RECEIPTS FROM OTHER OWN COMPANY PLANTS-	547,007	11,683	387,622		917,806	9,304,940
PRODUCTION RECIRCULATING SCRAP-----	3,592,780	85,870	546,441		4,425,374	45,112,156
PRODUCTION OBSOLETE SCRAP-----	234,341	2,288	2,616		239,245	2,533,556
CONSUMPTION-----	6,456,049	259,725	1,790,425		8,918,240	90,925,016
SHIPMENTS-----	446,539	1,610	28,099		476,248	5,218,474
STOCKS END OF MONTH-----	7,153,075	246,719	1,048,619		8,448,413	--
PIG IRON:						
RECEIPTS-----	506,382	3,442	242,685		753,696	7,822,558
PRODUCTION-----	7,512,122	--	--		7,805,162	79,800,831
CONSUMPTION-----	7,365,617	3,470	223,633		7,592,720	80,672,969
SHIPMENTS-----	689,484	--	474		709,130	7,270,201
STOCKS END OF MONTH-----	848,254	5,492	112,765		983,067	--
DIRECT-REDUCED OR PREREDUCED IRON:						
RECEIPTS-----	--	--	--		40,648	364,730
PRODUCTION-----	--	--	--		NA	NA
CONSUMPTION-----	--	--	--		49,807	351,763
SHIPMENTS-----	--	--	--		W	W
STOCKS END OF MONTH-----	--	--	--		18,654	--
MA NOT AVAILABLE.						

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, NOVEMBER 1978 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MELTS, STOKES, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.))	RESULTING FROM CURRENT OPERATIONS	CONSUMPTION	SHIPMENTS	
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	38,679	823	2,930	487	46,713	5,964	82,432
CUT STRUCTURAL AND PLATE-----	22,884	8,372	19,978	10	62,338	--	27,782
NO.1 HEAVY MELTING STEEL-----	502,862	247,210	1,521,116	6,301	2,169,555	192,218	2,203,221
NO.2 HEAVY MELTING STEEL-----	190,133	4,293	122,935	232	322,903	5,518	463,949
NO.1 AND ELECTRIC FURNACE BUNDLES----	632,399	75,371	267,742	1,500	948,317	15,617	1,390,850
NO.2 AND ALL OTHER BUNDLES-----	142,474	1,865	2,647	--	163,515	2,024	274,403
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,059	--	745	--	4,192	--	5,523
RAILROAD RAILS-----	6,989	--	--	70	6,394	--	5,246
TURNINGS AND BORINGS-----	122,194	5,798	30,639	21	143,193	7,735	115,543
SLAG SCRAP (FE CONTENT 70 PERCENT)---	129,400	1,583	274,763	--	404,376	11,460	198,510
SHREDDED OR FRAGMENTIZED-----	137,443	33,759	2,029	--	195,906	20	173,939
NO. 1 BUSHING-----	124,098	3,148	401	--	136,815	254	146,544
ALL OTHER CARBON STEEL SCRAP-----	164,690	42,384	976,762	31,789	1,143,237	80,639	775,786
STAINLESS STEEL SCRAP-----							
ALLOY STEEL (EXCEPT STAINLESS)-----	29,183	3,786	46,528	10	77,882	3,396	106,053
INGOT MOLD AND STUOL SCRAP-----	16,230	20,516	129,039	1,142	168,704	9,172	257,120
MACHINERY AND CUPOLA CAST IRON-----	41,673	59,709	102,720	179,266	288,127	85,870	568,665
CAST IRON BORINGS-----	2,593	88	--	--	1,619	--	3,473
MOTOR BLOCKS-----	19,377	9,986	19,445	13,362	54,272	5,499	107,349
OTHER IRON SCRAP-----	317	--	--	--	1,250	--	675
OTHER MIXED SCRAP-----	26,208	10,173	54,654	143	66,876	18,104	189,612
	19,447	18,143	17,707	8	49,865	3,049	56,400
TOTAL SCRAP-----	2,374,332	547,007	3,592,780	234,341	6,456,049	446,539	7,153,075
TOTAL SCRAP THROUGH NOVEMBER 1978---	27,115,260	5,627,395	38,563,344	2,478,140	69,706,259	4,894,443	7,153,075
PIG IRON-----							
	506,382		7,512,122		7,365,617	689,484	848,254
PIG IRON THROUGH NOVEMBER 1978-----	5,347,218		79,800,831		78,173,020	7,263,663	848,254

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

2/ BASED ON RETURNS FROM 88% OF REPORTING CONSUMERS, REPRESENTING 96% 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, NOVEMBER 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	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	FROM OTHER OWN COMPANY PLANTS	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	FROM OTHER OWN COMPANY PLANTS	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	
SCRAP :										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	59,749	457	19,106	--	73,860	181	59,709			
CUT STRUCTURAL AND PLATE-----	15,993	2,697	2,744	--	21,020	78	20,289			
NO.1 HEAVY MELTING STEEL-----	7,059	68	3,349	2,080	13,088	185	25,064			
NO.2 HEAVY MELTING STEEL-----	6,535	--	1,610	--	6,275	--	4,916			
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,924	--	207	--	5,023	--	1,374			
NO.2 AND ALL OTHER BUNDLES-----	--	--	--	--	515	--	1,185			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,834	100	1,400	--	6,694	94	4,603			
RAILROAD RAILS-----	48	10	--	--	73	--	189			
TURNINGS AND BORINGS-----	5,451	933	1,255	7	6,433	497	5,687			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	170	--	8	--	140	8	144			
SHREDDER OR FRAGMENTIZED-----	3,314	2,301	--	--	7,252	--	6,418			
NO. 1 BUSHING-----	3,842	2,180	996	--	5,847	--	7,849			
ALL OTHER CARBON STEEL SCRAP-----	42,829	2,215	28,776	183	75,747	--	48,739			
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)---	1,820	80	2,183	--	4,031	459	4,655			
INGOT MOLD AND STOOL SCRAP-----	4,850	606	12,147	--	13,105	10	27,875			
MACHINERY AND CUPOLA CAST IRON---	541	--	34	--	435	34	1,071			
CAST IRON BORINGS-----	1,361	--	998	--	2,047	--	1,464			
MOTOR BLOCKS-----	4,405	36	3,233	--	7,153	--	5,715			
OTHER IRON SCRAP-----	47	--	--	--	77	--	185			
OTHER MIXED SCRAP-----	2,092	--	7,401	18	10,299	64	19,511			
	87	--	423	--	611	--	77			
TOTAL SCRAP-----	170,951	11,683	85,870	2,288	259,725	1,610	246,719			
TOTAL SCRAP THROUGH NOVEMBER 1978---	1,810,845	109,944	905,742	7,377	2,773,295	34,089	246,719			
PIG IRON-----										
	RECEIPTS			PRODUCTION			CONSUMPTION			STOCKS
	3,442			--			3,470			5,492
PIG IRON THROUGH NOVEMBER 1978-----	41,443			--			42,507			5,492
1/ EXCLUDES COMPANIES THAT PRODUCE BOTH STEEL INGOTS AND CASTINGS.										
2/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 86% OF SCRAP CONSUMPTION.										

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

2/ BASED ON RETURNS FROM 76% OF REPORTING CONSUMERS, REPRESENTING 86% 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, NOVEMBER 1978 (PRELIMINARY) 1/
(SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP		CONSUMPTION OF BOTH PURCHASED AND HOME SCRAP (INCLUDES RE-Shipments OF SCRAP)	ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM SCRAP RESULTING FROM CURRENT OPERATIONS	OBsolete SCRAP (INCLUDES INGOTS, MOlds, STOOls, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED HOME SCRAP		
SCRAP:							
CARBON STEEL-							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---							
CUT STRUCTURAL AND PLATE-----	81,148	13,025	7,711	37	102,750	823	47,448
NO.1 HEAVY MELTING STEEL-----	133,314	6,759	14,520	20	153,237	213	90,093
NO.2 HEAVY MELTING STEEL-----	29,764	12,512	5,069	--	37,826	3,410	57,906
NO.1 AND ELECTRIC FURNACE BUNDLES-----	3,980	382	2,461	57	8,438	102	3,832
NO.2 AND ALL OTHER BUNDLES-----	21,965	14,471	6,017	66	44,301	--	11,573
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	49,634	19,427	--	--	62,564	--	37,911
RAILROAD RAILS-----	7,490	200	390	225	7,391	--	6,034
TURNINGS AND BORINGS-----	8,952	51	288	--	9,147	24	13,809
SLAG SCRAP (FE CONTENT 70 PERCENT)---	69,372	13,187	1,644	3	77,972	1,469	91,295
SHREDDED OR FRAGMENTIZED-----	4,632	--	46	--	5,586	46	28,109
NO. 1 BUSHELING-----	74,972	11,471	--	--	90,808	--	37,849
ALL OTHER CARBON STEEL SCRAP-----	23,423	8,544	1,077	--	31,839	--	11,361
	86,907	92,579	12,746	41	177,203	820	97,152
STAINLESS STEEL SCRAP:							
ALLOY STEEL (EXCEPT STAINLESS)-----	62	2	809	1	807	57	1,637
INGOT MOLD AND STOOL SCRAP-----	5,228	--	571	84	5,493	287	8,832
MACHINERY AND CUPOLA CAST IRON -----	6,030	318	9,132	409	20,127	455	41,191
MOTOR BLOCKS-----	69,121	8,222	62,565	26	135,437	2,860	87,472
OTHER IRON SCRAP-----	54,498	71,945	37,553	45	158,399	4,627	78,248
OTHER MIXED SCRAP-----	51,563	15,865	39,847	--	97,958	120	68,395
	89,676	6,354	310,699	1,010	407,289	12,107	187,021
	29,582	92,308	33,096	592	155,853	679	41,451
TOTAL SCRAP-----	901,313	387,622	546,441	2,616	1,790,425	28,099	1,048,619
TOTAL SCRAP THROUGH NOVEMBER 1978----	9,401,659	3,567,601	5,643,070	48,039	18,445,462	289,942	1,048,619
PIG IRON:							
PIG IRON THROUGH NOVEMBER 1978-----	242,685	--	--	--	223,633	474	112,765
PIG IRON THROUGH NOVEMBER 1978-----	2,433,897	--	--	--	2,457,442	6,464	112,765

1/ BASED ON RETURNS FROM 65% OF REPORTING CONSUMERS, REPRESENTING 55% OF SCRAP CONSUMPTION.

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN NOVEMBER 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				MANUFACTURERS OF STEEL CASTINGS 2/				IRON FOUNDRIES AND MISCELLANEOUS USERS				TOTAL ALL TYPES	
	AND CASTINGS 1/													
	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON
BLAST FURNACE 3/	399,766	--	--	--	--	--	--	--	--	--	399,766	--	--	--
BASIC OXYGEN PROCESS 4/	2,335,124	6,014,934	--	--	--	--	--	--	--	--	2,335,124	--	6,014,934	--
OPEN-HEARTH FURNACE	950,322	1,106,263	9,282	462	2,475	58	516,536	23,869	959,604	--	959,604	--	1,106,725	--
ELECTRIC FURNACE	2,632,728	49,982	236,580	11,079	2,475	58	1,224,707	70,927	3,385,844	23,869	3,385,844	23,869	76,326	--
CUPOLA FURNACE	38,294	15,960	11,079	58	2,475	58	49,182	3,015	1,274,080	70,927	1,274,080	3,015	86,945	--
OTHER (INCLUDING AIR FURNACE) 5/	99,815	28,561	2,784	475	--	--	--	--	151,781	125,822	151,781	--	32,051	--
DIRECT CASTINGS 6/	--	149,917	--	--	--	--	--	--	--	--	--	--	275,739	--
TOTAL	6,456,049	7,365,617	259,725	3,470	1,790,425	223,633	8,506,199	7,592,720	--	--	--	--	--	--

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.

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

ITEM	RECEIPTS OF SCRAP		PRODUCTION OF HOME SCRAP		CONSUMPTION		ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANY PLANTS	RECIRCULATING SCRAP (INCLUDES INGOT Molds, STOOls, FROM CURRENT OPERATIONS BUILDINGS, ETC.)	OBSoLETE SCRAP (INCLUDES INGOT Molds, STOOls, FROM OLD EQUIPMENT, CIRCULATING SCRAP)	OF BOTH PURCHASED AND HOME SCRAP	RE- SHIPMENTS OF SCRAP	
SCRAP :							
CARBON STEEL--							
LOW-PHOSPHORUS PLATE AND PUNCHINGS----							
CUT STRUCTURAL AND PLATE----	42,810	596	3,655	1,127	48,624	5,040	95,322
NO.1 HEAVY MELTING STEEL----	31,326	15,137	11,852	10	66,339	--	38,463
NO.2 HEAVY MELTING STEEL----	536,291	240,642	1,639,088	11,130	2,310,343	190,142	2,227,696
NO.1 AND ELECTRIC FURNACE BUNDLES----	188,883	4,483	119,378	184	330,140	4,802	471,559
NO.2 AND ALL OTHER BUNDLES----	617,652	55,762	246,519	1,906	981,124	14,029	1,383,635
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)----	128,511	6,239	5,929	--	163,866	2,019	298,529
RAILROAD RAILS----	4,539	--	1,009	--	5,523	--	3,911
TURNINGS AND BORINGS----	6,615	--	--	--	8,879	--	4,500
SLAG SCRAP (FE CONTENT 70 PERCENT)----	124,151	7,167	35,070	23	158,092	9,755	106,790
SHREDDED OR FRAGMENTIZED----	127,261	2,194	248,106	--	365,566	7,753	205,639
NO. 1 BUSHING----	168,982	33,645	2,958	--	229,252	1	200,537
ALL OTHER CARBON STEEL SCRAP----	124,430	1,795	814	--	134,446	1,594	154,420
	173,946	25,563	1,046,176	32,367	1,188,072	71,399	803,874
STAINLESS STEEL SCRAP----							
ALLOY STEEL (EXCEPT STAINLESS)----	29,063	3,653	59,568	139	89,166	4,584	107,057
INGOT MOLD AND STUOL SCRAP----	27,889	19,751	143,579	482	181,161	9,141	277,349
MACHINERY AND CUPOLA CAST IRON----	29,089	65,772	97,965	192,034	295,919	88,599	557,915
CAST IRON BORINGS----	1,488	163	--	--	825	--	2,411
MOTOR BLOCKS----	20,278	4,708	27,253	4,224	54,465	6,231	104,869
OTHER IRON SCRAP----	1,224	--	--	--	993	--	1,625
OTHER MIXED SCRAP----	31,279	12,047	80,339	492	81,783	41,309	192,191
	21,087	16,545	21,065	5	45,574	4,310	53,774
TOTAL SCRAP----	2,436,794	515,862	3,786,443	244,123	6,740,152	460,708	7,292,064
TOTAL SCRAP THROUGH OCTOBER 1978----	24,740,928	5,080,388	34,970,564	2,243,799	63,250,210	4,447,904	7,292,064
PIG IRON-----							
		514,003	7,805,162		7,646,846	708,685	881,956
PIG IRON THROUGH OCTOBER 1978-----		4,840,836	72,288,709		70,807,403	6,574,179	881,956
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 7. - MANUFACTURERS OF STEEL CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, SHIPMENTS AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, OCTOBER 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	RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT MOLDS, STTOOLS, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CHASED AND HOME SCRAP (INCLUDES RE-CIRCULATING SCRAP)	SHIPMENTS OF SCRAP		
SCRAP:							
CARBON STEEL -							
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	55,877	569	20,403	--	80,026	181	54,960
CUT STRUCTURAL AND PLATE-----	16,596	1,513	2,675	--	20,869	78	20,087
NO.1 HEAVY MELTING STEEL-----	8,522	58	5,796	60	16,209	125	24,874
NO.2 HEAVY MELTING STEEL-----	5,172	--	1,649	--	7,183	--	2,823
NO.1 AND ELECTRIC FURNACE BUNDLES---	4,975	--	207	--	5,461	--	1,405
NO.2 AND ALL OTHER BUNDLES-----	387	--	--	--	360	--	1,700
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,603	100	1,526	--	7,014	108	4,440
RAILROAD RAILS-----	--	5	--	--	72	--	210
TURNINGS AND BORINGS-----	5,777	583	1,876	--	7,980	517	5,096
SLAG SCRAP (FE CONTENT 70 PERCENT)---	--	--	211	--	278	22	114
SHREDDED OR FRAGMENTIZED-----	4,833	2,811	--	--	7,149	--	8,055
NO. 1 BUSHELING-----	5,079	947	963	--	6,382	--	6,982
ALL OTHER CARBON STEEL SCRAP-----	46,782	2,937	31,807	--	83,029	1,484	50,214
STAINLESS STEEL SCRAP-----	1,426	20	2,467	2	3,811	434	4,854
ALLOY STEEL (EXCEPT STAINLESS)---	4,990	1,791	12,663	--	13,431	--	28,391
INGOT MOLD AND STUOL SCRAP-----	400	--	18	--	322	12	983
MACHINERY AND CUPOLA CAST IRON---	1,181	--	908	--	1,922	--	1,292
CAST IRON BORINGS-----	5,324	40	2,989	--	7,061	155	5,382
MOTOR BLOCKS-----	49	--	--	--	59	--	215
OTHER IRON SCRAP-----	2,805	--	7,931	11	10,738	699	20,587
OTHER MIXED SCRAP-----	226	--	439	--	570	--	178
TOTAL SCRAP-----	176,804	11,374	94,528	73	279,926	3,815	242,842
TOTAL SCRAP THROUGH OCTOBER 1978---	1,639,894	98,261	819,872	5,089	2,513,570	32,479	242,842
PIG IRON-----	RECEIPTS	PRODUCTION	CONSUMPTION	SHIPMENTS	STOCKS		
	3,429	--	--	--	5,477	--	5,477
PIG IRON THROUGH OCTOBER 1978-----	38,001	--	--	--	39,037	74	5,477

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

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER OUTSIDE SOURCES	FROM OTHER COMPANY PLANTS		RECYCLATING SCRAP (INCLUDES INGOT CHASED AND MOLD, STOOLES, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING SCRAP)	FROM CURRENT OPERATIONS BUILDINGS, ETC.)	FROM	OF BOTH PURCHASED AND	SHIPMENTS	OF SCRAP	
		OWN	PLANTS							
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	80,759	14,241		9,013		42	106,276	251		48,167
CUT STRUCTURAL AND PLATE-----	126,513	8,324		16,854		39	159,556	223		88,472
NO.1 HEAVY MELTING STEEL-----	33,292	12,991		4,615		--	44,437	3,096		51,851
NO.2 HEAVY MELTING STEEL-----	2,012	437		2,467		57	8,148	108		5,617
NO.1 AND ELECTRIC FURNACE BUNDLES---	21,852	12,395		6,605		48	43,548	964		10,725
NO.2 AND ALL OTHER BUNDLES-----	41,123	19,065		--		--	68,674	--		31,406
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	6,895	--		340		--	8,027	--		5,186
RAILROAD RAILS-----	9,030	51		594		--	10,166	24		13,854
TURNINGS AND BORINGS-----	66,395	14,401		1,591		3	81,014	1,510		85,751
SLAG SCRAP (FE CONTENT 70 PERCENT)---	4,613	--		52		--	6,174	52		29,507
SHREDDED OR FRAGMENTIZED-----	69,443	13,450		--		--	100,237	--		38,673
NO. 1 BUSHING-----	22,298	8,343		1,077		--	35,105	--		9,287
ALL OTHER CARBON STEEL SCRAP-----	93,165	93,129		12,349		9	184,748	743		97,410
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)---	117	2		680		--	742	28		1,639
INGOT MOLD AND STUOL SCRAP-----	6,304	--		414		107	5,922	235		9,213
MACHINERY AND CUPOLA CAST IRON ---	14,482	408		8,958		583	21,784	534		45,167
CAST IRON BORINGS-----	76,107	6,441		68,438		256	151,268	1,054		81,700
MOTOR BLOCKS-----	59,818	71,946		35,682		48	164,030	4,924		77,888
OTHER IRON SCRAP-----	61,653	5,648		45,292		--	109,831	--		64,111
OTHER MIXED SCRAP-----	75,791	24,623		320,642		978	423,432	15,100		164,266
	41,460	84,675		35,740		667	165,043	673		41,144
TOTAL SCRAP-----	913,122	390,570		571,403		2,837	1,898,162	29,519		1,001,034
TOTAL SCRAP THROUGH OCTOBER 1978----	8,500,346	3,179,979		5,096,629		45,423	16,655,037	261,843		1,001,034
RECEIPTS			PRODUCTION			CONSUMPTION			STOCKS	
236,264			--			236,292			95,634	
2,191,212			--			2,233,809			95,634	
1/ BASED ON RETURNS FROM 73% OF REPORTING CONSUMERS, REPRESENTING 92% OF SCRAP CONSUMPTION.										

TABLE 2. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN OCTOBER 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	
	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON	SCRAP	PIG IRON
BLAST FURNACE 3/	394,181	--	--	--	--	--	394,181	--
BASIC OXYGEN PROCESS 4/	2,455,733	6,220,487	--	--	--	--	2,455,733	6,220,487
OPEN-HEARTH FURNACE	979,873	1,140,201	9,299	359	--	--	989,172	1,140,560
ELECTRIC FURNACE	2,770,261	61,269	256,749	2,652	540,986	24,919	3,567,996	88,840
CUPOLA FURNACE	32,013	18,421	11,240	58	1,308,852	79,967	1,352,105	98,446
OTHER (INCLUDING AIR FURNACE) 5/	108,091	33,227	2,638	319	48,324	2,978	159,053	36,524
DIRECT CASTINGS 6/	--	173,241	--	--	--	128,428	--	301,669
TOTAL	6,740,152	7,646,846	279,926	3,388	1,898,162	236,292	8,918,240	7,886,526

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 STTOOLS.

FOREIGN TRADE

Exports of iron and steel scrap totaled 973,355 short tons in November compared with 976,818 tons in October. Exports of pig iron during November totaled 8,134 tons and 10,949 tons in October. Imports of scrap totaled 67,329 short tons in November compared with 50,891 tons in October. Of the scrap imported during November, 60,543 short tons came from Canada and 6,786 tons from other sources. Imports of pig iron totaled 75,025 short tons in November and 40,629 tons in October. In addition to the foregoing imports of pig iron during November, there were 142 tons of sponge iron, valued at \$81,303 imported, of which 77 tons came from Canada, and 65 tons from Sweden.

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

Country	November 1978		Year to date	
	Short tons	Value	Short tons	Value
Canada-----	75,581	\$4,345,043	714,174	\$37,014,313
Egypt-----	--	--	23,694	1,217,657
Greece-----	20,761	1,665,851	312,134	22,908,737
Indonesia-----	--	--	44,902	3,260,037
Italy-----	38,944	2,926,345	610,434	49,659,821
Japan-----	342,912	27,946,397	2,894,795	211,606,821
Korea, Republic of-----	160,767	14,301,285	1,372,176	106,613,124
Mexico-----	56,446	5,013,928	391,440	30,452,490
Qatar-----	--	--	71,377	5,285,785
Singapore-----	1,623	153,431	80,213	5,742,629
Spain-----	135,702	10,596,078	554,411	38,399,814
Taiwan-----	46,043	4,989,325	374,182	38,160,771
Turkey-----	--	--	226,564	16,599,735
United Kingdom-----	27	8,386	4,342	536,379
Other countries <u>2/</u> -----	94,549	8,712,123	420,208	48,277,479
Total-----	973,355	80,658,192	8,095,046	615,735,592

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: Bureau of Census.

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

Grade and scrap	November 1978		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	295,711	\$24,671,146	2,094,958	\$152,894,415
No. 2 heavy melting steel scrap-----	111,088	8,254,718	755,659	49,780,471
No. 1 bundles-----	11,348	947,087	112,150	7,610,409
No. 2 bundles-----	48,110	2,987,318	299,368	15,666,807
Borings, shoveling and turnings-----	109,875	5,414,877	691,155	30,289,009
Stainless steel-----	9,374	4,800,721	108,146	41,317,450
Shredded steel scrap-----	207,792	16,560,316	2,426,689	176,607,885
Iron scrap (excluding borings and shovelings)-----	44,185	4,002,502	387,775	29,347,908
All other steel scrap <u>1/</u> -----	135,872	13,019,507	1,219,146	112,221,238
Total-----	973,355	80,658,192	8,095,046	615,735,592
Ships, boats, and other vessels for breaking up (for scrapping)-----	--	--	1,534	230,193
Total-----	973,355	80,658,192	8,096,580	615,965,785

1/ Includes tinplate and terneplate.

SOURCE: Bureau of Census.