



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 DECEMBER 1978

Returns from 72% of reporting consumers representing 94% of total scrap consumption, indicated that consumption of iron and steel scrap in December on a daily average basis was 4% below that in November, according to the Bureau of Mines, U.S. Department of the Interior. Compared with November data, daily average production and net receipts were down 5% and 6%, respectively, and stocks at the end of the month were down 2%.

Exports of ferrous scrap during the month were 3% below those for November 1978 and 111% above those for December 1977. Japan was the largest importer of U.S. scrap, taking 31% of the total exported in December 1978. The next largest importers were Spain and the Republic of Korea, which received 20% and 14%, respectively.

The Iron Age composite price for No. 1 heavy melting steel scrap (Chicago, Pittsburgh, and Philadelphia) at the end of December was \$92.50 per long ton, up 39% from the price of \$66.77 at the end of December 1977.

Pig iron production and consumption on a daily average basis during the month were down 1% and 2%, respectively, from those of the previous month. Stocks of pig iron decreased 9% during December compared with those at the end of November 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)

DECEMBER 1978 (PRELIMINARY) 1/									

MFRS. OF									
PIG IRON AND									
STEEL INGOTS									
& CASTINGS 2/									
MFRS. OF									
STEEL									
CASTINGS 3/									
IRON FOUNDRIES									
AND MISCEL-									
LANEOUS USERS									

TOTAL FOR									
MONTH OF									
DEC 1978									

FINAL									
TOTAL FOR									
MONTH OF									
NOV 1978 4/									

TOTAL YEAR									
THROUGH									
DEC 1978 5/									

SCRAP:									
RECEIPTS FROM DEALERS AND OTHER SOURCES	2,406,837	176,157	837,420	3,420,414	3,435,444	41,729,934			
RECEIPTS FROM OTHER OWN COMPANY PLANTS-	519,567	10,035	287,324	816,926	898,858	10,073,907			
PRODUCTION RECIRCULATING SCRAP-----	3,519,254	88,281	494,057	4,101,592	4,203,419	49,187,038			
PRODUCTION OBSOLETE SCRAP-----	234,185	41	6,128	240,354	238,973	2,773,091			
CONSUMPTION-----	6,494,913	253,197	1,568,823	8,326,933	8,396,948	99,132,617			
SHIPMENTS-----	466,015	6,029	34,661	506,705	475,385	5,724,271			
STOCKS END OF MONTH-----	6,966,133	239,167	1,088,197	8,293,497	8,457,819	--			
PIG IRON:									
RECEIPTS-----	552,355	3,967	213,049	769,371	744,821	8,584,081			
PRODUCTION-----	7,657,556	--	--	7,657,556	7,515,322	87,459,214			
CONSUMPTION-----	7,502,324	3,453	214,743	7,720,520	7,593,784	88,392,704			
SHIPMENTS-----	808,270	--	414	808,684	688,954	8,077,507			
STOCKS END OF MONTH-----	764,203	5,490	113,511	883,204	955,422	--			
DIRECT-REDUCED OR PREREDUCED IRON:									
RECEIPTS-----	--	--	--	37,520	42,616	402,250			
PRODUCTION-----	--	--	--	NA	NA	NA			
CONSUMPTION-----	--	--	--	35,085	48,733	386,848			
SHIPMENTS-----	--	--	--	W	W	W			
STOCKS END OF MONTH-----	--	--	--	14,541	12,147	--			

NA NOT AVAILABLE.									

TABLE 2. - MANUFACTURERS OF PIG IRON AND STEEL INGOTS AND CASTINGS 1/ - RECEIPTS, PRODUCTION, CONSUMPTION, AND STOCKS OF PIG IRON AND IRON AND STEEL SCRAP, BY GRADE, DECEMBER 1978 (PRELIMINARY) 2/ (SHORT TONS)

ITEM	RECEIPTS OF SCRAP			PRODUCTION OF HOME SCRAP			CONSUMPTION			ENDING STOCKS
	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANIES PLANTS	FROM RECYCLATING DRSOLETE SCRAP (INCLUDES INGOT MOLD, STOL, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANIES PLANTS	FROM RECYCLATING DRSOLETE SCRAP (INCLUDES INGOT MOLD, STOL, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	FROM BROKERS, DEALERS AND OTHER SOURCES	FROM OTHER OWN COMPANIES PLANTS	FROM RECYCLATING DRSOLETE SCRAP (INCLUDES INGOT MOLD, STOL, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING BUILDINGS, ETC.) SCRAP)	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS---	35,072	656	2,619	309	41,597	4,399	75,744			
CUT STRUCTURAL AND PLATE-----	25,458	20,693	14,659	--	55,930	--	34,127			
NO.1 HEAVY MELTING STEEL-----	491,484	254,007	1,567,789	8,361	2,230,950	210,079	2,114,643			
NO.2 HEAVY MELTING STEEL-----	182,789	18,234	111,838	619	319,208	10,832	428,823			
NO.1 AND ELECTRIC FURNACE BUNDLES---	599,564	48,460	285,459	153	1,043,299	21,316	1,333,439			
NO.2 AND ALL OTHER BUNDLES-----	154,314	3,233	4,054	--	169,654	1,394	264,748			
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	3,817	--	1,052	--	4,580	--	5,808			
RAILROAD RAILS-----	9,216	--	--	--	7,548	--	7,002			
TURNTONGS AND BORINGS-----	123,325	7,573	32,829	73	153,746	10,728	114,257			
SLAG SCRAP (FE CONTENT 70 PERCENT)---	131,500	7,539	244,939	--	379,741	7,705	195,271			
SHREDDER OR FRAGMENTIZED-----	132,859	36,901	399	--	193,477	--	163,921			
NO. 1 BUSHING-----	127,559	3,425	1,441	--	134,028	1,250	144,650			
ALL OTHER CARBON STEEL SCRAP-----	217,032	18,403	891,137	40,158	1,078,379	78,726	765,730			
STAINLESS STEEL SCRAP-----	27,463	4,263	59,837	2	95,542	4,010	95,793			
ALLOY STEEL (EXCEPT STAINLESS)-----	21,191	20,849	123,242	808	157,416	4,268	257,775			
INGOT MOLD AND STOL SCRAP-----	29,075	47,249	89,852	173,230	256,520	65,646	591,292			
MACHINERY AND CUPOLA CAST IRON-----	694	83	--	--	469	--	3,782			
CAST IRON BORINGS-----	18,875	5,786	14,546	10,273	45,506	3,006	119,111			
MOTOR BLOCKS-----	384	--	--	--	629	--	298			
OTHER IRON SCRAP-----	29,494	9,641	54,816	195	76,327	37,953	176,908			
OTHER MIXED SCRAP-----	24,672	12,572	18,746	4	50,377	2,703	72,999			
TOTAL SCRAP-----	2,486,837	519,567	3,519,254	234,185	6,494,913	466,015	6,955,133			
TOTAL SCRAP THROUGH DECEMBER 1978---	2,515,064	6,147,839	42,066,855	2,711,529	76,170,521	5,358,907	6,966,133			
PIG IRON-----	552,355	--	7,657,556	--	7,502,324	804,270	764,203			
PIG IRON THROUGH DECEMBER 1978-----	549,951	--	87,459,214	--	85,676,165	8,070,495	764,203			

1/ INCLUDES ONLY THOSE MANUFACTURERS OF STEEL CASTINGS THAT ALSO PRODUCE INGOTS.
2/ BASED ON RETURNS FROM 91% OF REPORTING CONSUMERS, REPRESENTING 99% 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, DECEMBER 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 OUTSIDE SOURCES	FROM OTHER OWN COMPANY PLANTS	FROM OTHER RESULTING FROM CURRENT OPERATIONS	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.))	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.))	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.))	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.))	RECYCLING OBSOLETE SCRAP (INCLUDES INGOT CHASED AND MOLD, STOODS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.))		
SCRAP:										
CARBON STEEL:										
LOW-PHOSPHORUS PLATE AND PUNCHINGS	57,504	329	10,510	73,232	--	--	181	63,418		
CUT STRUCTURAL AND PLATE	15,774	2,177	1,713	21,377	--	--	8	18,206		
NO.1 HEAVY MELTING STEEL	11,847	--	5,755	19,265	17	--	139	19,187		
NO.2 HEAVY MELTING STEEL	6,286	--	2,053	7,943	--	--	--	4,823		
NO.1 AND ELECTRIC FURNACE BUNDLES	3,703	--	207	2,889	--	--	--	1,700		
NO.2 AND ALL OTHER BUNDLES	947	--	--	589	--	--	--	1,564		
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)	6,793	100	1,153	6,165	--	--	62	5,036		
RAILROAD RAILS	--	7	--	58	--	--	--	139		
TURNINGS AND BORINGS	4,681	449	2,595	6,349	--	--	1,294	4,972		
SLAG SCRAP (FE CONTENT 70 PERCENT)	--	--	214	191	--	--	8	159		
SHREDDER OR FRAGMENTIZED	5,397	1,514	--	7,768	--	--	--	5,561		
NO. 1 BUSHING	2,865	1,939	1,659	6,655	--	--	--	7,347		
ALL OTHER CARBON STEEL SCRAP	45,880	2,883	27,966	72,734	--	--	--	51,113		
STAINLESS STEEL SCRAP:										
ALLOY STEEL (EXCEPT STAINLESS)	1,671	68	2,263	3,571	--	--	435	4,969		
INGOT MOLD AND STOOD SCRAP	5,338	39	13,144	14,162	--	--	2	27,491		
MACHINERY AND COPOLA CAST IRON	334	--	--	445	--	--	--	897		
CAST IRON BORINGS	1,223	475	579	2,093	--	--	--	1,438		
MOTOR BLOCKS	4,874	--	2,892	7,071	--	--	63	5,560		
OTHER IRON SCRAP	154	--	--	74	--	--	--	265		
OTHER MIXED SCRAP	2,429	55	7,190	10,116	24	--	3,837	15,253		
	57	--	388	450	--	--	--	69		
TOTAL SCRAP	176,157	10,035	88,281	263,197	41	--	6,029	239,167		
TOTAL SCRAP THROUGH DECEMBER 1978	1,988,353	119,690	994,959	3,038,673	7,418	--	48,046	239,167		
PIG IRON										
	3,967	--	--	3,453	--	--	--	5,490		
PIG IRON THROUGH DECEMBER 1978	45,420	--	--	45,934	--	--	74	5,490		

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

2/ BASED ON RETURNS FROM 75% 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, DECEMBER 1978 (PRELIMINARY) 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	RECYCLATING ORSOLETE SCRAP		FROM SCRAP (INCLUDES INGOT CHASED AND MELTS, STUOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.)	RESULTING FROM CURRENT OLD EQUIPMENT, CIRCULATING OF SCRAP	FROM SCRAP (INCLUDES INGOT CHASED AND MELTS, STUOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.)	CONSUMPTION	SHIPMENTS				
SCRAP:													
CARBON STEEL-													
LOW-PHOSPHORUS PLATE AND PUNCHINGS----	70,935	9,296	7,185	17	88,119	864	49,297						
CUT STRUCTURAL AND PLATE-----	126,076	8,664	16,964	34	139,758	199	103,761						
NO.1 HEAVY MELTING STEEL-----	32,909	6,823	4,319	--	36,947	4,529	60,554						
NO.2 HEAVY MELTING STEEL-----	5,643	374	3,179	48	8,344	90	4,520						
NO.1 AND ELECTRIC FURNACE BUNDLES-----	12,833	12,544	5,995	21	32,107	--	15,004						
NO.2 AND ALL OTHER BUNDLES-----	47,306	9,440	--	--	55,918	--	36,990						
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	7,830	209	314	--	7,510	--	6,901						
RAILROAD RAILS-----	8,649	1	684	--	8,716	24	14,561						
TURNINGS AND BORINGS-----	46,226	12,788	1,344	4	65,830	2,237	82,514						
SLAG SCRAP (FE CONTENT 70 PERCENT)----	4,300	--	36	--	7,165	36	24,045						
SHREDDED OR FRAGMENTIZED-----	67,112	10,289	--	--	78,064	5,599	33,132						
NO. 1 BUSHING-----	24,691	9,833	1,077	--	29,165	--	16,831						
ALL OTHER CARBON STEEL SCRAP-----	87,291	53,007	13,656	7	144,045	806	112,237						
STAINLESS STEEL SCRAP-----													
ALLOY STEEL (EXCEPT STAINLESS)-----	52	1	612	--	614	39	1,611						
INGOT MOLD AND STUOL SCRAP-----	5,242	--	388	148	5,845	256	8,382						
MACHINERY AND CUPOLA CAST IRON -----	14,487	--	9,146	391	19,289	413	46,893						
CAST IRON BORINGS-----	66,454	6,906	59,637	29	133,064	3,435	85,051						
MOTOR BLOCKS-----	49,541	52,741	34,207	58	131,274	3,945	78,227						
OTHER IRON SCRAP-----	41,769	13,295	35,160	--	85,305	84	66,708						
OTHER MIXED SCRAP-----	90,600	7,346	272,378	4,960	361,453	11,630	196,910						
	27,474	73,767	27,776	411	130,290	475	44,068						
TOTAL SCRAP-----	837,420	287,324	494,057	6,128	1,568,823	34,661	1,088,197						
TOTAL SCRAP THROUGH DECEMBER 1978----	10,226,517	3,806,774	6,125,224	54,144	19,923,423	325,318	1,088,197						
PIG IRON-----													
	213,049				--	214,743	414	113,511					
PIG IRON THROUGH DECEMBER 1978-----	2,639,110				--	2,670,604	6,938	113,511					
1/ BASED ON RETURNS FROM 65% OF REPORTING CONSUMERS, REPRESENTING 80% OF SCRAP CONSUMPTION.													

TABLE 5. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN DECEMBER 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	
BLAST FURNACE 3/	388,004	--	--	--	--	--	--	--	--	--	--	--	388,004	--
BASIC OXYGEN PROCESS 4/	2,349,403	6,149,280	--	--	--	--	--	--	--	--	--	--	2,349,403	6,149,280
OPEN-HEARTH FURNACE	968,319	1,134,020	--	--	7,855	385	--	--	--	--	--	--	968,174	1,134,405
ELECTRIC FURNACE	2,670,635	50,604	--	--	242,419	2,641	--	--	476,938	23,602	--	--	3,389,992	76,847
CUPOLA FURNACE	32,435	15,718	--	--	10,012	34	--	--	1,054,211	67,028	--	--	1,096,658	82,780
OTHER (INCLUDING AIR FURNACE) 5/	94,117	57,023	--	--	2,911	393	--	--	37,674	2,969	--	--	134,702	60,385
DIRECT CASTINGS 6/	--	95,679	--	--	--	--	--	--	--	121,144	--	--	--	216,823
TOTAL	6,494,913	7,502,324	263,197	3,453	1,568,823	214,743	8,326,933	7,720,520						

- 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-HEATING FURNACES AND MISCELLANEOUS USES.
6/ INCLUDES INGOT MOLDS AND STOOLES.

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, NOVEMBER 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		RECYCLATING OBSOLETE SCRAP (INCLUDES INGOT MOLDS, STTOOLS, HOME SCRAP FROM AND SCRAP FROM (INCLUDES RE-OLD EQUIPMENT, CIRCULATING OF SCRAP OPERATIONS BUILDINGS, ETC.)	RE- SHIPMENTS	SHIPMENTS				
SCRAP:										
CARBON STEEL--										
LOU-PHOSPHORUS PLATE AND PUNCHINGS----	38,961	823	2,930	487	46,681	82,624				
CUT STRUCTURAL AND PLATE-----	22,529	8,372	19,613	--	62,655	26,597				
NO.1 HEAVY MELTING STEEL-----	504,956	247,104	1,515,497	6,301	2,153,675	2,207,670				
NO.2 HEAVY MELTING STEEL-----	192,158	4,293	122,990	232	335,451	451,172				
NO.1 AND ELECTRIC FURNACE BUNDLES----	632,293	75,371	267,742	1,500	948,200	1,390,861				
NO.2 AND ALL OTHER BUNDLES-----	142,768	1,865	2,647	--	163,205	274,656				
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)-----	5,059	--	745	--	4,192	5,523				
RAILROAD RAILS-----	6,989	--	--	70	6,394	5,245				
TURNINGS AND BORINGS-----	119,681	5,798	30,866	21	138,003	115,041				
SLAG SCRAP (FE CONTENT 70 PERCENT)----	129,400	1,583	274,763	--	404,376	198,510				
SHREDDED OR FRAGMENTIZED-----	136,883	33,759	2,029	--	196,756	167,951				
NO. 1 BUSHELING-----	123,278	3,148	401	--	134,723	146,344				
ALL OTHER CARBON STEEL SCRAP-----	164,989	42,384	975,732	31,789	1,145,218	774,053				
STAINLESS STEEL SCRAP-----										
ALLOY STEEL (EXCEPT STAINLESS)-----	27,752	4,805	44,611	10	74,383	105,172				
INGOT MOLD AND STUOL SCRAP-----	16,155	20,900	128,566	1,142	167,884	256,981				
MACHINERY AND CUPOLA CAST IRON-----	41,673	59,709	102,257	179,036	281,368	570,861				
CAST IRON BORINGS-----	2,593	88	--	--	1,619	3,473				
MOTOR BLOCKS-----	18,997	9,986	19,445	13,362	54,262	107,175				
OTHER IRON SCRAP-----	317	--	--	--	1,250	675				
OTHER MIXED SCRAP-----	26,208	10,173	54,654	134	66,867	189,612				
	19,447	18,143	17,203	8	49,082	56,364				
TOTAL SCRAP-----	2,373,086	548,304	3,582,691	234,092	6,436,244	7,136,562				
TOTAL SCRAP THROUGH NOVEMBER 1978----	27,108,227	5,627,872	38,547,601	2,477,344	69,675,608	7,136,562				
RECEIPTS PRODUCTION CONSUMPTION SHIPMENTS STOCKS										
PIG IRON-----	506,360	7,515,322		7,368,506	686,480	848,145				
PIG IRON THROUGH NOVEMBER 1978-----	5,347,196	79,801,658		78,173,842	7,262,225	848,145				

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

2/ BASED ON RETURNS FROM 93% 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, NOVEMBER 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	RECYCLATING SCRAP RESULTING FROM CURRENT OPERATIONS	OBSELETE SCRAP (INCLUDES INGOT MOLDS, STOOLS, HOME SCRAP AND SCRAP FROM (INCLUDES RE-CIRCULATING OLD EQUIPMENT, CIRCULATING OF SCRAP BUILDINGS, ETC.)	OF BOTH PURCHASED AND CHASED AND	SHIPMENTS	
SCRAP:							
CARBON STEEL							
LOW-PHOSPHORUS PLATE AND PUNCHINGS	59,869	345	18,987	--	73,565	181	59,747
CUT STRUCTURAL AND PLATE	16,112	2,697	2,685	--	21,147	8	20,387
NO.1 HEAVY MELTING STEEL	8,747	68	3,944	2,080	14,998	185	25,066
NO.2 HEAVY MELTING STEEL	7,141	--	2,065	--	7,113	--	5,044
NO.1 AND ELECTRIC FURNACE BUNDLES	3,454	--	207	--	4,527	--	545
NO.2 AND ALL OTHER BUNDLES	--	--	--	--	515	--	1,185
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)	5,887	100	1,467	--	6,909	94	4,687
RAILROAD RAILS	48	10	--	--	73	--	189
TURNINGS AND BORINGS	5,591	935	1,255	7	6,579	497	5,697
SLAB SCRAP (FE CONTENT 70 PERCENT)	170	--	8	--	140	8	144
SHREDDED OR FRAGMENTIZED	3,314	2,381	--	--	7,252	--	6,418
NO. 1 BUSHELING	3,842	2,180	996	--	5,847	--	7,849
ALL OTHER CARBON STEEL SCRAP	42,926	2,215	28,796	183	75,777	--	48,810
STAINLESS STEEL SCRAP							
ALLOY STEEL (EXCEPT STAINLESS)	1,820	80	2,846	--	3,894	457	4,653
INGOT MOLD AND STOOL SCRAP	4,848	427	12,259	--	12,971	10	27,894
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	--	7,403	18	10,276	64	19,493
	87	--	423	--	611	--	77
TOTAL SCRAP	172,302	11,394	86,896	2,288	261,906	1,538	246,310
TOTAL SCRAP THROUGH NOVEMBER 1978	1,812,196	109,655	986,678	7,377	2,775,476	34,017	246,310
PIG IRON							
	3,452	--	--	--	3,444	--	5,464
PIG IRON THROUGH NOVEMBER 1978	41,453	--	--	--	42,481	74	5,464

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

2/ BASED ON RETURNS FROM 82% OF REPORTING CONSUMERS, REPRESENTING 92% 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, NOVEMBER 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 OWN COMPANY PLANTS	FROM RECYCLATING SCRAP (INCLUDES INGOT MOLD, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	FROM RECYCLATING ORSOLITE SCRAP (INCLUDES INGOT MOLD, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	FROM RECYCLATING ORSOLITE SCRAP (INCLUDES INGOT MOLD, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	FROM RECYCLATING ORSOLITE SCRAP (INCLUDES INGOT MOLD, AND SCRAP FROM OLD EQUIPMENT, BUILDINGS, ETC.)	CONSUMPTION			
							OF BOTH PURCHASED AND RECYCLED	OF BOTH PURCHASED AND RECYCLED	OF BOTH PURCHASED AND RECYCLED	
SCRAP:										
CARBON STEEL-										
LOW-PHOSPHORUS PLATE AND PUNCHINGS	78,590	11,031	7,711	37	97,780	823				43,575
CUT STRUCTURAL AND PLATE	134,190	6,087	14,616	20	147,192	309				93,102
NO.1 HEAVY MELTING STEEL	31,630	6,637	5,021	--	35,297	3,410				56,411
NO.2 HEAVY MELTING STEEL	4,199	382	3,224	57	9,599	102				3,757
NO.1 AND ELECTRIC FURNACE BUNDLES	16,785	18,281	6,017	31	37,078	--				15,209
NO.2 AND ALL OTHER BUNDLES	57,027	9,783	--	--	59,824	--				38,392
ELECTRIC FURNACE 1 FOOT AND UNDER (NOT BUNDLES)	7,261	200	362	225	7,047	--				6,047
RAILROAD RAILS	9,013	1	288	--	9,148	24				13,822
TURNINGS AND BORINGS	63,350	15,013	1,423	3	72,520	1,455				91,739
SLAB SCRAP (FE CONTENT 70 PERCENT)	3,664	--	46	--	5,451	46				27,587
SHREDDED OR FRAGMENTIZED	74,345	13,282	--	--	92,211	--				37,819
NO. 1 BUSHING	23,660	7,918	1,077	--	32,392	--				9,875
ALL OTHER CARBON STEEL SCRAP	82,336	68,359	12,759	41	156,115	806				105,543
STAINLESS STEEL SCRAP	62	1	819	1	819	57				1,524
ALLOY STEEL (EXCEPT STAINLESS)	5,084	--	646	84	6,048	883				8,394
INGOT MOLD AND STUOL SCRAP	5,969	318	9,132	409	20,150	455				41,179
MACHINERY AND CUPOLA CAST IRON	68,428	7,913	62,673	26	135,135	2,860				87,570
CAST IRON BORINGS	52,757	66,078	36,556	45	150,581	4,594				78,053
MOTOR BLOCKS	48,013	15,780	38,256	--	94,845	120				67,443
OTHER IRON SCRAP	94,121	6,685	302,366	1,022	385,372	12,455				197,851
OTHER MIXED SCRAP	29,572	85,541	30,930	592	144,192	579				43,854
TOTAL SCRAP	890,056	339,160	533,922	2,593	1,698,798	28,478				1,074,947
TOTAL SCRAP THROUGH NOVEMBER 1978	9,389,097	3,519,454	5,631,167	48,016	18,354,600	290,657				1,074,947
RECEIPTS PRODUCTION CONSUMPTION SHIPMENTS STOCKS										
235,009 -- 221,834 474 111,813										
2,426,061 -- 2,455,861 6,524 111,813										
1/ BASED ON RETURNS FROM 74% OF REPORTING CONSUMERS, REPRESENTING 91% OF SCRAP CONSUMPTION.										

TABLE 9. - CONSUMPTION OF IRON AND STEEL SCRAP AND PIG IRON IN THE UNITED STATES
IN NOVEMBER 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		SCRAP		SCRAP	
	PIG IRON		PIG IRON		PIG IRON		PIG IRON		PIG IRON	
BLAST FURNACE 3/	397,454	--	--	--	--	--	--	--	397,454	--
BASIC OXYGEN PROCESS 4/	2,323,070	6,017,866	--	--	--	--	--	--	2,323,070	6,017,866
OPEN-HEARTH FURNACE	950,322	1,106,263	--	--	9,282	462	--	--	959,604	1,106,725
ELECTRIC FURNACE	2,627,289	49,939	--	--	238,843	2,457	508,559	23,130	3,374,691	75,526
CUPOLA FURNACE	38,294	15,960	--	--	10,997	50	1,144,286	69,867	1,193,577	85,877
OTHER (INCLUDING AIR FURNACE) 5/	99,815	28,561	--	--	2,784	475	45,953	3,015	148,552	32,051
DIRECT CASTINGS 6/	--	149,917	--	--	--	--	--	125,822	--	275,739
TOTAL	6,436,244	7,368,506	261,986	3,444	1,698,798	221,834	8,396,948	7,593,784		

1/ INCLUDES ONLY THOSE CASTINGS MADE BY COMPANIES PRODUCING STEEL INGOTS.

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

3/ INCLUDES CONSUMPTION IN ALL BLAST FURNACES PRODUCING PIG IRON.

4/ INCLUDES SCRAP AND PIG IRON PROCESSED IN METALLURGICAL BLAST CUPOLAS AND USED IN OXYGEN CONVERTERS.

5/ INCLUDES VACUUM MELTING FURNACES AND MISCELLANEOUS USES.

6/ INCLUDES INGOT MOLDS AND STOOLS.

FOREIGN TRADE

Exports of iron and steel scrap totaled 943,802 short tons in December compared with 973,355 tons in November. Exports of pig iron during December totaled 10,625 tons and 8,134 tons in November. Imports of scrap totaled 59,957 short tons in December compared with 67,329 tons in November. Of the scrap imported during December 51,243 short tons came from Canada and 8,714 tons from other sources. Imports of pig iron totaled 43,078 short tons in December and 75,025 tons in November. In addition to the foregoing imports of pig iron during December, there were 89 tons of sponge iron, valued at \$55,561 imported, of which 81 tons came from Canada, and 7 tons from Sweden.

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

Country	December 1978		Year to date	
	Short tons	Value	Short tons	Value
Canada-----	81,015	\$4,683,190	795,189	\$41,697,503
Egypt-----	--	--	23,694	1,217,657
Greece-----	27,413	2,170,399	339,547	25,079,136
Indonesia-----	--	--	44,902	3,260,037
Italy-----	46,860	4,862,367	657,294	54,522,188
Japan-----	295,584	27,372,644	3,190,379	238,979,465
Korea, Republic of-----	131,186	11,129,330	1,503,362	117,742,454
Mexico-----	58,937	5,355,759	450,377	35,808,249
Qatar-----	--	--	71,377	5,285,785
Singapore-----	--	--	80,213	5,742,629
Spain-----	189,438	14,637,823	743,849	53,037,637
Taiwan-----	19,371	2,964,740	393,553	41,125,511
Turkey-----	31,515	2,983,037	258,079	19,582,772
United Kingdom-----	940	150,344	5,282	686,723
Other countries <u>2</u> /-----	61,543	6,192,003	481,751	54,469,482
Total-----	943,802	82,501,636	9,038,848	698,237,228

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 of scrap	December 1978		Year to date	
	Short tons	Value	Short tons	Value
No. 1 heavy melting steel scrap-----	266,544	\$23,038,148	2,361,502	\$175,932,563
No. 2 heavy melting steel scrap-----	81,386	6,652,051	837,045	56,432,522
No. 1 bundles-----	36,195	3,620,226	148,345	11,230,635
No. 2 bundles-----	27,025	1,388,261	326,393	17,055,068
Borings, shoveling and turnings-----	59,185	2,874,080	750,340	33,163,089
Stainless steel-----	6,793	3,121,054	114,939	44,438,504
Shredded steel scrap-----	257,543	21,768,655	2,684,232	198,376,540
Iron scrap (excluding borings and shoveling)	46,611	3,910,362	434,386	33,258,270
All other steel scrap <u>1</u> /-----	162,520	16,128,799	1,381,666	128,350,037
Total-----	943,802	82,501,636	9,038,848	698,237,228
Ships, boats, and other vessels for breaking up (for scrapping)-----	6	900	1,540	231,093
Total-----	943,808	82,502,536	9,040,388	698,468,321

1/ Includes tinplate and terneplate.

Source: Bureau of Census.