



# MINERAL INDUSTRY SURVEYS

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



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Iron Ore, Monthly

## IRON ORE IN OCTOBER 1987

U.S. mine production of iron ore was 9% less than that of September (revised), according to the Bureau of Mines, U.S. Department of the Interior. Mine shipments, in contrast, rose 4%. Shipments from U.S. loading docks on the Great Lakes totaled 5.4 million long tons, the highest monthly tonnage since May. Imports of ore and agglomerates remained at the 1.5 million ton level, while exports declined 23% to 480,000 tons. Combined stocks at consuming plants and U.S. receiving docks increased for the fifth consecutive month, reaching 16.0 million tons. Furnace yard supervisors traditionally build up stocks in the autumn so that ample ore is on hand when loading ports on the upper Great Lakes close for the winter. Although there had been a gradual increase in monthly pig iron production since August 1986, yard stocks were about 10% less than those of a year ago. Consumption of ore and agglomerates rose 5% during the month to 5.5 million tons and was 41% greater than that of October 1986. On October 31, 51 blast furnaces were in operation, 2 more than on September 30.

On October 9, USX Corp. announced that it would spend \$8 million to convert the Minntac pelletizing operation at Mountain Iron, MN, to fluxed pellet production. A small percentage of non-fluxed, or acid, pellets will continue to be produced for steel customers whose blast furnaces cannot use the new pellets. Minntac has also been successfully using 1/4-inch diameter particles of ground waste wood to fire one of its kilns. Waste wood now supplies more than 40% of the energy used on two of the facility's four active pelletizing lines, and is currently cheaper than natural gas.

In September, the court-appointed trustee for the Reserve Mining Co. decided to release all of the pellets left in the company's stockpile at Silver Bay, MN. A total of 164,991 tons had been sitting at the port since July 21, 1986, when the company suspended production in the wake of the Chapter 11 bankruptcy filing of LTV Corp. (See January 1987 MIS.) It took three shipments (October 1, 6 and 15) to move the pellets to the port of Ashtabula, OH. From Ashtabula, the pellets were later railed to LTV Steel Co. An additional 17,762 tons of pellets were recovered during cleanup operations and shipped out in November.

Update: The State of Minnesota has established an interagency task force to explore the possibility of reopening both the mine at Babbitt and the pelletizing plant at Silver Bay. Armco, Inc.- Reserve's remaining owner - has expressed a willingness to buy up to 900,000 tons of pellets annually from a successfully restructured operation. However, there are many roadblocks to reopening. If Reserve remains closed, an estimated \$57 million will have to be spent to decommission the company's sprawling Milepost 7 tailings basin.

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Prepared in the Branch of Ferrous Metals, May 24, 1988.

# U.S. IRON ORE

## MONTHLY PRODUCTION AND SHIPMENTS

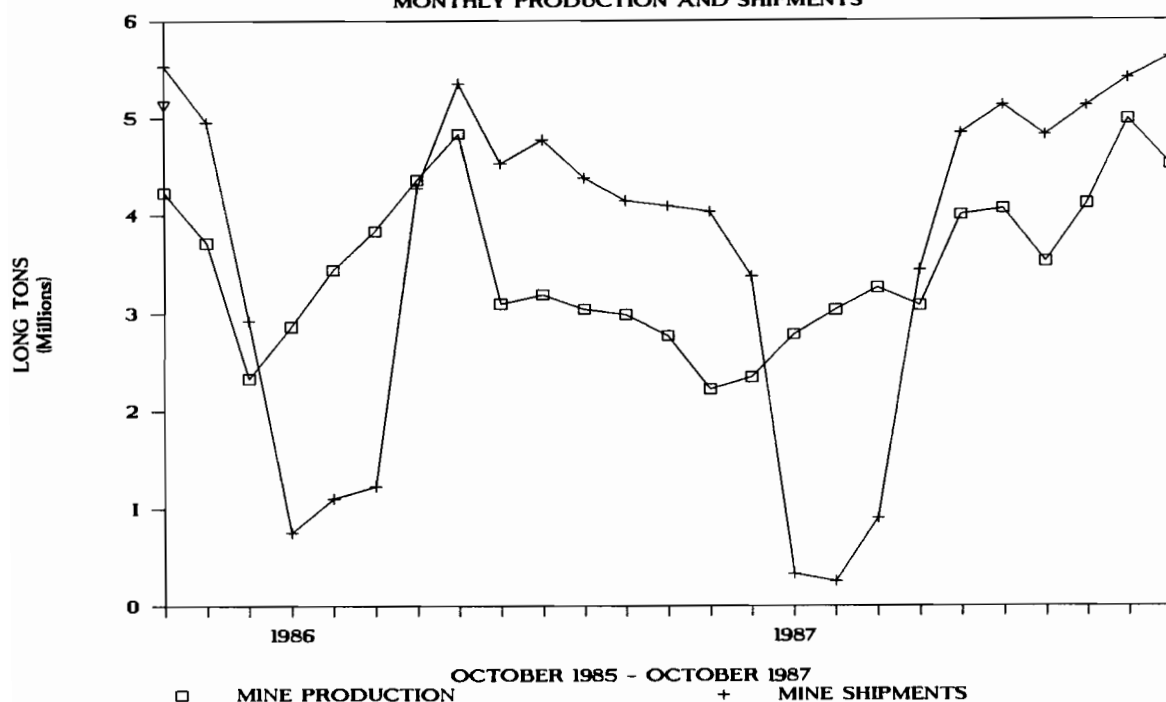


Table 1. - U.S. production and shipments of iron ore, by districts 1/  
(Exclusive of ore containing 5% or more manganese)  
(Thousand long tons)

Period	Lake Superior	Other U.S.	Total <u>2/</u>	
			1987	1986
<b>Production:</b>				
1986-----	37,564	1,262	--	38,825
<b>1987:</b>				
1st Quarter-----	8,897	172	9,069	10,144
2nd Quarter-----	10,970	170	11,140	12,297
3rd Quarter-----	<u>r/</u> 12,462	156	<u>r/</u> 12,619	9,218
October-----	4,428	87	4,515	2,767
<b>Shipments:</b>				
1986 <u>3/</u> -----	39,737	1,591	--	41,327
<b>1987:</b>				
1st Quarter-----	1,341	143	1,484	3,087
2nd Quarter-----	13,217	191	13,408	14,158
3rd Quarter-----	15,139	203	15,341	13,299
October-----	5,565	65	5,630	4,093

r/ Revised.

1/ Excludes byproduct ore, except where noted.

2/ Includes estimated data. Data may not add to totals shown because of independent rounding.

3/ Includes byproduct ore.

Table 2. - U.S. mine production, shipments, and stocks of iron ore 1/  
 (Exclusive of ore containing 5% or more manganese)  
 (Thousand long tons)

District	Production October		Shipments October		Mine Stocks October 31	
	1987	1986	1987	1986	1987	1986
Lake Superior:						
Michigan-----	842	552	1,491	1,270	1,632	1,793
Minnesota-----	3,585	2,157	4,074	2,768	2,416	3,840
Other U.S.-----	87	58	65	55	228	242
Total <u>2/</u> -----	4,515	2,767	5,630	4,093	4,276	5,875

1/ Excludes byproduct ore.

2/ Includes estimated data. Data may not add to totals shown because of independent rounding.

Table 3. - U.S. exports of iron ore  
 (Thousand long tons)

Period	Canada	Other	Total <u>1/</u>	
			1987	1986
1986-----	4,479	3	--	4,482
1987:				
1st Quarter-----	92	( <u>2/</u> )	92	157
2nd Quarter-----	1,873	( <u>2/</u> )	1,873	1,340
3rd Quarter-----	1,476	1	1,477	1,618
October-----	479	( <u>2/</u> )	480	529

1/ Data may not add to totals shown because of independent rounding.

2/ Less than one-half unit.

Source: Bureau of the Census.

Table 4. - Canada: Shipments of iron ore  
(Thousand dry long tons)

Period	Newfound- land	Quebec	Ontario	British Columbia	1987 Total <u>1/</u>	1986 Total <u>1/</u>
1986 p/-----	19,158	12,992	3,314	63	--	35,525
1987:						
1st Quarter---	2,249	2,977	848	6	6,081	5,648
2nd Quarter---	4,580	4,565	838	6	9,989	10,579
3rd Quarter---	5,185	3,548	710	6	9,449	9,411
October-----	2,198	1,265	274	2	3,739	<u>r/</u> 3,583

p/ Preliminary.

r/ Revised.

1/ Data may not add to totals shown because of independent rounding.

Source: Energy, Mines, and Resources Canada.

Table 5. - U.S. imports for consumption of iron ore, by country  
(Exclusive of ore containing 10% or more manganese)

Country of origin	October 1987		Year to date 1987			Year to date 1986 (thousand long tons)
	Thousand long tons	Value <u>1/</u> (thousand dollars)	Thousand long tons	Value <u>1/</u> (thousand dollars)	Value <u>1/</u> (dollars per ton)	
Australia-----	87	2,079	119	3,740	31.32	10
Brazil-----	427	7,815	3,120	55,425	17.77	3,060
Canada-----	612	19,119	5,978	186,096	31.13	7,244
Chile-----	--	--	470	8,647	18.38	93
Liberia-----	40	471	698	10,407	14.91	1,195
Mauritania-----	71	1,152	332	5,342	16.08	65
Peru-----	20	399	83	1,687	20.37	92
Spain-----	--	--	1	27	51.76	--
Sweden-----	--	--	99	2,334	23.53	104
Venezuela-----	235	4,066	1,962	39,980	20.38	2,201
Other-----	--	--	<u>2/87</u>	<u>2/1,987</u>	22.92	<u>r/</u> 137
Total <u>3/</u> ----	1,493	35,100	12,949	315,671	24.38	14,201

r/ Revised.

1/ Customs value. Excludes international freight, insurance, and other c.i.f. charges.

2/ Part being questioned.

3/ Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census data reported under item 601.24 of the Tariff Schedules of the United States.

Table 6. - U.S. consumption and stocks of iron ore and agglomerates  
at consuming plants and production of pig iron  
(Thousand long tons)

State or Region	Consumption			Stocks	
	October 1987	Year to date		October 31	
		1987	1986	1987	1986
Alabama, Kentucky, Tennessee, Texas, and Missouri-----	331	3,214	3,522	1,189	1,115
California, Colorado, and Utah- Delaware, Maryland, and West Virginia-----	NA	NA	1,059	NA	138
Illinois and Indiana-----	637	6,124	5,204	1,771	2,129
Michigan and Minnesota-----	2,201	19,628	18,249	6,740	7,154
New York, Ohio, Pennsylvania, New Jersey, and Rhode Island-	459	4,594	4,495	2,025	1,906
	1,823	15,367	15,069	2,830	3,644
<b>Total 1/-----</b>	<b>5,450</b>	<b>48,926</b>	<b>47,599</b>	<b>14,554</b>	<b>16,086</b>

Stocks at U.S. receiving/transfer docks----- 1,485 1,663

Consuming Sector	Consumption by process			Pig iron produced		
	October 1987	Year to date		October 1987	Year to date	
		1987	1986		1987	1986
Blast furnaces-----	4,885	43,667	41,206	3,935	35,302	33,654
Steel furnaces-----	29	112	89	--	--	--
Agglomerating plants 2/--	536	5,127	6,220	--	--	--
Miscellaneous 3/-----	1	20	84	--	--	--
<b>Total 1/-----</b>	<b>5,450</b>	<b>48,926</b>	<b>47,599</b>	<b>3,935</b>	<b>35,302</b>	<b>33,654</b>

NA Not available.

1/ Data may not add to totals shown because of independent rounding.

2/ Iron ore and iron ore concentrates consumed in agglomerating plants not located at the mine site.

3/ Sold to nonreporting companies or used for purposes not listed.

Source: American Iron Ore Association (consumption of iron ore).  
American Iron and Steel Institute (production of pig iron).

Table 7. - U.S. imports for consumption of iron ore, by customs district  
 (Exclusive of ore containing 10% or more manganese)  
 (Thousand long tons)

Customs district	October 1987	Year to date	
		1987	1986
Baltimore-----	579	4,478	4,684
Buffalo-----	--	(1/)	<u>r/</u> (1/)
Charleston, SC-----	70	317	240
Chicago-----	189	1,508	1,156
Cleveland-----	175	1,136	1,221
Detroit-----	96	419	309
Honolulu-----	--	--	<u>r/</u> 10
Houston-----	9	9	<u>r/</u> 42
Los Angeles-----	--	--	(1/)
Milwaukee-----	--	--	13
Mobile-----	62	876	2,248
New Orleans-----	132	1,309	1,385
New York-----	--	(1/)	(1/)
Philadelphia-----	174	2,890	2,890
San Juan, PR-----	--	1	4
Wilmington, NC-----	--	(1/)	(1/)
Other-----	6	6	0
Total <u>2/</u> -----	1,493	12,949	<u>r/</u> 14,201

r/ Revised.

1/ Less than one-half unit.

2/ Data may not add to totals shown because of independent rounding.