



U.S. Department of the Interior • Bureau of Mines



MINERAL INDUSTRY SURVEYS

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Iron Ore, Monthly

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IRON ORE IN NOVEMBER 1989

U.S. mine production of iron ore in November was only slightly less than that of October, according to the Bureau of Mines, U.S. Department of the Interior. Mine shipments also decreased slightly. However, shipments from U.S. loading docks on the upper Great Lakes totaled only 4.3 million metric tons and were down 21% from the previous month. Monthly consumption of ore and agglomerates decreased by 11% to 5.5 million tons. On November 30, 48 blast furnaces were in operation, the same number as on October 31.

In late November, the board of directors of Inland Steel Industries Inc. approved the development of the Laurentian Reserve near Gilbert, MN, in the central part of the Mesabi Range. Inland Steel Mining Co., a wholly-owned subsidiary of the Inland Steel Co., expects to spend \$20 million on the proposed taconite mine, which would provide iron units for the parent company's integrated steelworks at Indiana Harbor, IN. The Laurentian ore would be trucked 6 miles to Inland's Minorca mining and pelletizing complex on the northeastern edge of the City of Virginia. Minorca produced about 2.5 million tons of fluxed pellets in 1989 and is still operating at almost full capacity. If the present rate of production is maintained, the existing pit at Minorca could be exhausted as early as 1992. The new orebody would provide Minorca with more than 15 years of reserves. (See May 1989 MIS.) Inland also hopes to negotiate leases on adjoining properties that could supply an additional 25 years of reserves.

The current plan calls for the Laurentian ore to be blended with Minorca ore, beginning in 1991. Blending would extend the life of the Minorca Pit until 1995, when mining would be shifted entirely to the new orebody. A dedicated haul road would be constructed from the pelletizing plant through the Pike River Basin to the proposed mine site. Inland plans to build a series of berms to reduce nuisance noise from the operation. Overburden and waste rock would be used to construct a 40-foot high sound barrier along the section of haul road that borders the City of Gilbert. The company is presently experimenting with several new methods of blasting designed to minimize ground shock to homeowners.

The Laurentian project would be the first entirely new taconite mine to come on line in Minnesota in more than a decade. However, environmental permits still have to be obtained from the U.S. Army Corps of Engineers, the Minnesota Dept. of Natural Resources, the Minnesota Pollution Control Agency, and three local governments. The required Environmental Impact Statement is scheduled for release in draft form next April.

Prepared in the Branch of Ferrous Metals, February 1, 1990.

Changes to the Mineral Industry Surveys for Iron Ore: Congress enacted the Omnibus Trade and Competitiveness Act (Public Law 100-418) on August 23, 1988, to enhance the competitiveness of the Nation's industries and to improve the management of U.S. trade strategy. This comprehensive act, included among other items, provisions modifying U.S. customs laws and tariff schedules. Subtitle B of the new law requires that all tariff schedules after January 1, 1989, conform to the nomenclature of the internationally established Harmonized System. All of the iron ore trade statistics collected by the Bureau of the Census are now being compiled and published in metric units. To avoid confusion, the Bureau of Mines has decided to also present all of its iron ore production and consumption statistics in metric units. To convert from metric tons to long tons, multiply the published number by 0.984207.

The November tables dealing with foreign trade and domestic consumption will appear in a subsequent issue.

U.S. IRON ORE

MONTHLY PRODUCTION AND SHIPMENTS

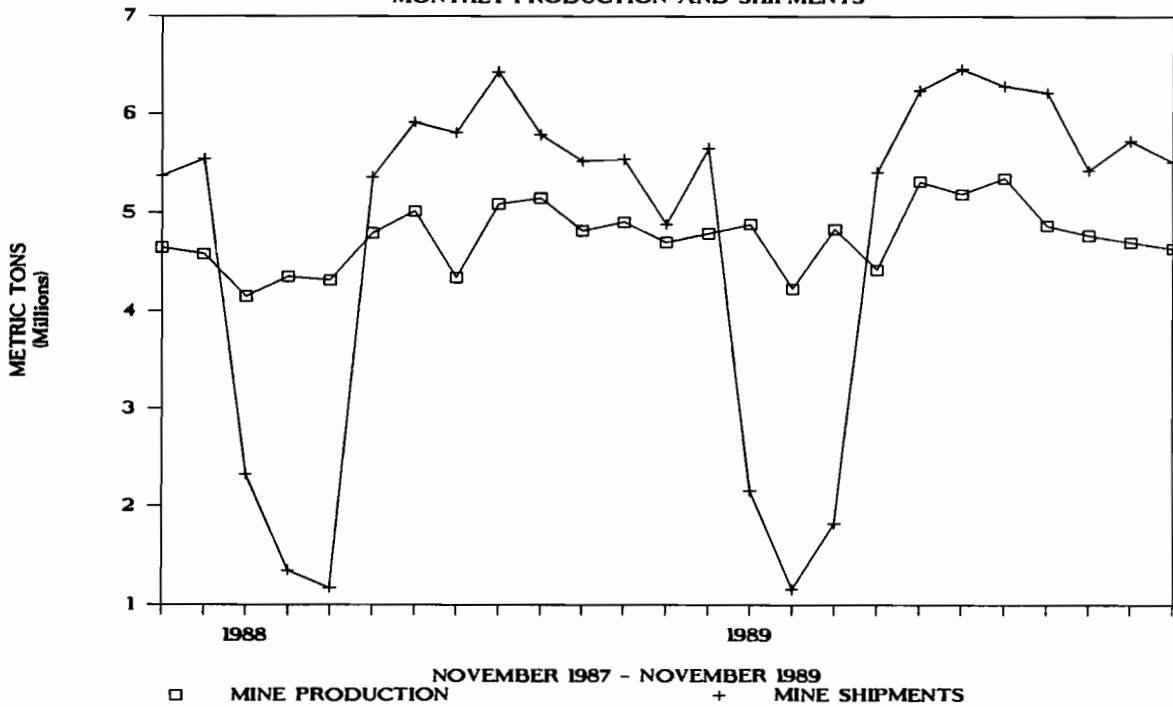


Table 1. - U.S. production and shipments of iron ore, by districts 1/
(Exclusive of ore containing 5% or more manganese)
(Thousand metric tons)

Period	Lake Superior	Other U.S.	Total <u>2/</u>	
			1989	1988
Production:				
1988-----	56,038	1,477	--	57,515
1989:				
1st Quarter-----	13,750	210	13,960	12,809
2nd Quarter-----	14,664	282	14,946	14,156
3rd Quarter-----	14,730	278	15,009	15,069
October-----	4,624	80	4,703	4,910
November-----	4,559	85	4,645	4,706
Shipments:				
1988-----	55,358	1,755	--	57,113
1989:				
1st Quarter-----	4,957	174	5,131	4,846
2nd Quarter-----	17,757	364	18,121	17,100
3rd Quarter-----	17,653	292	17,945	17,755
October-----	5,643	92	5,735	5,551
November-----	5,459	62	5,520	4,890

1/ Excludes byproduct ore, except where noted.

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

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

District	Production November		Shipments November		Mine Stocks November 30	
	1989	1988	1989	1988	1989	1988
Lake Superior:						
Michigan-----	1,135	1,367	1,502	1,157	1,092	1,081
Minnesota-----	3,424	3,261	3,956	3,659	2,881	2,915
Other U.S.-----	85	77	62	75	134	175
Total <u>2/</u> -----	4,645	4,706	5,520	4,890	4,107	4,171

1/ Excludes byproduct ore.

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

Table 3. - Canada: Shipments of iron ore
(Thousand dry metric tons)

Period	Newfound- land	Quebec	Ontario	British Columbia	Total <u>1/</u>	
					1989	1988
1988 <u>p/</u> -----	20,395	16,446	2,941	59	--	39,840
1989:						
1st Quarter-----	2,679	2,448	870	11	6,008	7,052
2nd Quarter-----	6,345	3,936	929	20	11,230	10,550
3rd Quarter-----	5,859	4,703	779	15	11,355	10,777
October-----	1,558	1,558	273	7	3,396	3,852
November-----	2,100	1,506	307	7	3,920	3,740

p/ Preliminary.

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

Source: Energy, Mines, and Resources Canada.

Table 4. - U.S. consumption and stocks of iron ore and agglomerates
at consuming plants and production of pig iron
(Thousand metric tons)

State or Region	Consumption			Stocks	
	October 1989	Year to date 1/ 1989 1988		October 31 1989	1988
Alabama, Kentucky, Tennessee, Texas, and Missouri-----	672	4,963	3,534	1,203	1,224
California, Colorado, and Utah- Delaware, Maryland, and West Virginia-----	186	1,828	48	124	17
Illinois and Indiana-----	629	6,695	7,285	2,235	1,798
Michigan and Minnesota-----	2,347	23,665	23,832	5,866	7,113
New York, Ohio, Pennsylvania, New Jersey, and Rhode Island-	636	6,063	4,987	1,833	2,030
	1,720	18,977	19,055	3,673	3,992
Total 2/-----	6,190	62,191	58,743	14,933	16,175

Stocks at U.S. receiving/transfer docks----- 1,520 r/2,713

Consuming Sector	Consumption by process			Pig iron produced		
	October 1989	Year to date 1/ 1989 1988		October 1989	Year to date 1/ 1989 1988	
Blast furnaces-----	5,737	55,499	51,655	4,257	42,954	42,383
Steel furnaces-----	53	269	231	--	--	--
Agglomerating plants 3/--	400	6,419	6,835	--	--	--
Miscellaneous 4/-----	(5/)	4	22	--	--	--
Total 2/-----	6,190	62,191	58,743	4,257	42,954	42,383

r/ Revised.

1/ May include revisions for previous month.

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

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

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

5/ Less than one-half unit.

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

Table 5. - U.S. exports of iron ore and agglomerates, by country of destination
(Thousand metric tons)

Period	Canada	Mexico	Other	Total <u>1/</u>	
				1989	1988
1988 -----	5,277	1	7	--	5,285
1989:					
1st Quarter-----	346	(<u>2/</u>)	2	348	340
2nd Quarter-----	1,990	(<u>2/</u>)	2	1,991	1,613
3rd Quarter-----	1,698	(<u>2/</u>)	2	1,700	1,478
October-----	527	--	--	527	573

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

2/ Less than one-half unit.

Source: Bureau of the Census data reported under heading 2601 of the export classification system (Schedule B).

Table 6. - U.S. exports of iron ore and agglomerates, by type
(Thousand metric tons)

Period	Pellets	Concentrates	Direct shipping ores	Other	Total <u>1/</u>
1988 -----	NA	NA	NA	NA	5,285
1989:					
1st Quarter-----	1	347	(<u>2/</u>)	(<u>2/</u>)	348
2nd Quarter-----	1,158	824	1	9	1,991
3rd Quarter-----	833	717	144	6	1,700
October-----	323	205	--	--	527

NA Not Available.

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

2/ Less than one-half unit.

Source: Bureau of the Census data reported under heading 2601 of the export classification system (Schedule B).

Table 7. - U.S. imports for consumption of iron ore and agglomerates, by country
(Exclusive of ore containing 20% or more manganese)

Country of origin	October 1989		Year to date 1989			Year to date 1988
	Thousand metric tons	Value <u>1</u> / (thousand dollars)	Thousand metric tons	Value <u>1</u> / (thousand dollars)	Value <u>1</u> / (dollars per ton)	(thousand metric tons)
Australia-----	26	569	329	4,481	13.61	778
Brazil-----	387	6,726	4,554	80,606	17.70	4,433
Canada-----	845	30,130	7,002	240,412	34.34	7,779
Chile-----	--	--	61	1,200	19.74	139
India-----	--	--	59	1,037	17.58	62
Liberia-----	--	--	200	2,950	14.77	128
Mauritania-----	66	1,134	526	8,954	17.02	330
Norway-----	--	--	40	693	17.24	--
Peru-----	16	413	121	2,658	21.98	154
Philippines <u>2</u> /--	--	--	66	1,622	24.49	173
Sweden-----	--	--	--	--	--	88
Venezuela-----	364	10,903	3,725	96,722	25.97	2,844
Other-----	(<u>3</u> /)	1	<u>4</u> / <u>(3</u> /)	<u>4</u> /21	154.52	24
Total <u>5</u>/-----	1,705	49,876	<u>4</u>/16,683	<u>4</u>/441,356	<u>6</u>/26.46	16,931

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

2/ Sinter made from raw materials supplied by Australia, Brazil, and other countries.

3/ Less than one-half unit.

4/ Excludes 1,647 tons of sodium azide erroneously reported in August as iron ore pellets from the Federal Republic of Germany. The material had a value of \$88,959.

5/ Data may not add to totals shown because of independent rounding. Unit values shown above are calculated from unrounded data.

6/ Weighted average calculated by dividing total value by total tonnage.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

Table 8. - U.S. imports for consumption of iron ore and agglomerates, by type
(Exclusive of ore containing 20% or more manganese)

Type of product	October 1989		Year to date 1989			Year to date 1988
	Thousand metric tons	Value <u>1/</u> (thousand dollars)	Thousand metric tons	Value <u>1/</u> (thousand dollars)	Value <u>1/</u> (dollars per ton)	(thousand metric tons)
Concentrates-----	1	82	314	6,725	21.44	NA
Coarse ores-----	84	1,988	546	12,827	23.51	NA
Fine ores-----	775	22,280	9,728	247,356	25.43	NA
Pellets-----	673	22,731	<u>2/4,867</u>	<u>2/150,951</u>	31.02	NA
Briquettes-----	--	--	--	--	--	NA
Other						
agglomerates---	173	2,796	1,108	21,453	19.36	NA
Roasted pyrites--	--	--	121	2,045	16.97	NA
Total <u>3/</u>-----	1,705	49,876	<u>2/16,683</u>	<u>2/441,356</u>	<u>4/26.46</u>	16,931

NA Not Available.

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

2/ Excludes 1,647 tons of sodium azide erroneously reported in August as iron ore pellets. The material had a value of \$88,959.

3/ Data may not add to totals shown because of independent rounding. Unit values shown above are calculated from unrounded data.

4/ Weighted average calculated by dividing total value by total tonnage.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

Table 9. - U.S. imports for consumption of iron ore and agglomerates in October 1989
(Exclusive of ore containing 20% or more manganese)
(Thousand metric tons)

Country of origin	Type of Product						Total <u>1/</u>
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	
Australia----	--	--	26	--	--	--	26
Brazil-----	--	--	196	18	173	--	387
Canada-----	1	--	386	459	--	--	845
Mauritania---	--	--	66	--	--	--	66
Peru-----	--	--	--	16	--	--	16
Venezuela----	--	84	100	180	--	--	364
Other-----	(<u>2/</u>)	--	--	--	--	--	(<u>2/</u>)
Total <u>1/</u>---	1	84	775	673	173	--	1,705

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

2/ Less than one-half unit.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

Table 10. - U.S. imports for consumption of pellets, by country

Country of origin	October 1989		Year to date 1989			Year to date 1988 (thousand metric tons)
	Thousand metric tons	Value <u>1/</u> (thousand dollars)	Thousand metric tons	Value <u>1/</u> (thousand dollars)	Value <u>1/</u> (dollars per ton)	
Brazil-----	18	447	372	10,769	28.91	NA
Canada-----	459	15,738	2,646	87,137	32.94	NA
India-----	--	--	59	1,037	17.58	NA
Peru-----	16	413	95	2,307	24.34	NA
Venezuela-----	180	6,132	1,695	49,700	29.32	NA
Other-----	--	--	<u>2/</u> --	<u>2/</u> --	<u>2/</u> --	NA
Total <u>3/</u>-----	673	22,731	<u>2/</u>4,867	<u>2/</u>150,951	<u>4/</u>31.02	NA

NA Not Available.

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

2/ Excludes 1,647 tons of sodium azide erroneously reported in August as iron ore pellets from the Federal Republic of Germany. The material had a value of \$88,959.

3/ Data may not add to totals shown because of independent rounding. Unit values shown above are calculated from unrounded data.

4/ Weighted average calculated by dividing total value by total tonnage.

Source: Bureau of the Census data reported under item 2601.12.00.30 of the Harmonized Tariff Schedules of the United States.

Table 11. - U.S. imports for consumption of iron ore and agglomerates,
by customs district
(Exclusive of ore containing 20% or more manganese)
(Thousand metric tons)

Customs district	October 1989	Year to date	
		1989	1988
Baltimore-----	325	<u>1</u> /5,231	6,354
Charleston, SC-----	58	413	367
Chicago-----	346	2,556	1,579
Cleveland-----	134	1,218	1,040
Detroit-----	46	524	469
Houston-----	--	(<u>2</u> /)	31
Mobile-----	187	1,641	1,207
New Orleans-----	131	1,583	1,409
New York-----	--	<u>3</u> / <u>(2)</u> /	1
Philadelphia-----	477	3,514	4,431
San Juan, PR-----	--	--	(<u>2</u> /)
Seattle-----	--	--	26
Other-----	1	<u>1</u> /4	16
Total <u>4</u> /-----	1,705	16,683	16,931

1/ Port data for February were revised. Fine ore from Mauritania totaling 69,158 tons entered the Baltimore Customs district, not the Boston Customs district as was originally reported.

2/ Less than one-half unit.

3/ Excludes 1,647 tons of sodium azide erroneously reported in August as iron ore pellets from the Federal Republic of Germany.

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

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

Table 12. - U.S. imports for consumption of pellets, by customs district
(Thousand metric tons)

Customs district	October 1989	Year to date	
		1989	1988
Baltimore-----	60	688	NA
Charleston, SC-----	34	305	NA
Chicago-----	132	694	NA
Cleveland-----	26	369	NA
Philadelphia-----	421	2,812	NA
Other-----	--	<u>1</u> /--	NA
Total <u>2</u> /-----	673	4,867	NA

NA Not available.

1/ Excludes 1,647 tons of sodium azide erroneously reported in August as iron ore pellets from the Federal Republic of Germany. The material entered through the New York Customs district.

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

Source: Bureau of the Census data reported under item 2601.12.00.30 of the Harmonized Tariff Schedules of the United States.