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Mineral Industry Surveys

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MOLYBDENUM IN JANUARY 2002

Domestic production of molybdenum in concentrate in January 2002 was about 12% more than that of the previous month and was 6% more than January 2001, according to the U.S. Geological Survey (USGS). Producer stocks of molybdenum in concentrate, oxide, and other product forms were 9,740 metric tons at the beginning of 2002, and 8,810 metric tons at the end of January.

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, plus U.S. consumption, by end use, and stocks, of molybdenum material in December 2001 and January 2002; also included are trade data for November and December 2001. U.S. exports of molybdenum ores and concentrates in 2001 was about 18% (4,200 tons) more than that of the previous years. U.S. exports of ferromolybdenum in 2001 was about 15% (113 tons) less than that of the previous year. U.S. imports for consumption of molybdenum products in 2001 was about 14% (3,500 tons) less than that of the previous year.

The Platts Metals Week U.S. January average price for dealer molybdenum oxide was $5.750 per kilogram ($2.610 per pound), and that for dealer ferromolybdenum was $6.807 per kilogram ($3.088 per pound). The USGS estimated January average price for molybdenum concentrate was $4.65 per kilogram ($2.11 per pound). The Ryan's Notes worldwide oxide, 4-week average price for January, was $2.600 per pound; the U.S. ferromolybdenum, 4-week average price for January, was $3.124 per pound.

Update

For the week of March 25, 2002, the Platts Metals Week average price for dealer molybdenum oxide was $6.118 per kilogram ($2.775 per pound), and that for ferromolybdenum was $7.551 per kilogram ($3.425 per pound). The USGS estimated price for molybdenum concentrate was $5.02 per kilogram ($2.28 per pound).

The March 25, 2002, Ryan's Notes price for worldwide oxide, 4-week average price, was $2.746 per pound; the U.S. ferromolybdenum, 4-week average price, was $3.325 per pound.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS 1/

(Metric tons, contained molybdenum)

	2001		2002	
	January-December p/	December	January	Year to date
Production	37,600	3,030	3,400	3,400
Shipments: 2/				
Domestic	20,700	1,850	2,240	2,240
Export	16,300	788	1,320	1,320

p/ Preliminary.
1/ Data are rounded to no more than three significant digits.
2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 2
U.S. REPORTED PRODUCTION AND SHIPMENTS OF MOLYBDENUM PRODUCTS 1/

(Metric tons, contained molybdenum)

	2001		2002	
	January-December p/	December	January	Year to date
Gross production	40,300	2,710	2,910	2,910
Internal consumption 2/	24,600	1,630	1,800	1,800
Gross shipments	32,600	3,180	3,080	3,080

p/ Preliminary.
1/ Data are rounded to no more than three significant digits.
2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 3
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb-denum 2/	Ammonium and sodium molybdate	Molyb-denum scrap	Other	Total
2001, December:						
Steel:						
Carbon	10,600	W	--	--	1,810	12,400
High-strength low-alloy	22,800	5,730	--	--	11,300	39,900
Stainless and heat-resisting	101,000	19,400	--	--	8,520	128,000
Full alloy	85,100	101,000	--	--	2,330	189,000
Tool	56,700	W	--	--	1,450	58,100
Total	276,000	127,000	--	--	25,500	428,000
Cast irons (gray, malleable, and ductile iron)	W	19,600	--	--	W	19,600
Superalloys	63,000	W	--	(3/)	99,600	163,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	103	3,170	--	--	6,210	9,480
Mill products made from metal powder 4/	--	W	--	--	87,500	87,500
Cemented carbides and related products 5/	--	--	--	--	6	6
Chemical and ceramic uses:						
Pigments	--	--	W	--	W	W
Catalysts	77,300	--	W	--	14,900	92,200
Other	--		--	--	764	764
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	13,800	13,800
Other	1,390	54,400	77,300	--	763	134,000
Grand total	417,000	204,000	77,300	--	249,000	947,000
Stocks, December 31, 2001	435,000	146,000	5,010	7,880	863,000	1,460,000

See footnotes at end of table.

TABLE 3--Continued
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb-denum 2/	Ammonium and sodium molybdate	Molyb-denum scrap	Other	Total
2002, January:						
Steel:						
Carbon	8,580	22,400	--	--	1,810	32,800
High-strength low-alloy	24,500	6,690	--	--	11,300	42,500
Stainless and heat-resisting	164,000	20,700	--	--	8,520	194,000
Full alloy	83,000	154,000	--	--	2,330	239,000
Tool	80,700	W	--	--	1,450	82,100
Total	361,000	203,000	--	--	25,500	590,000
Cast irons (gray, malleable, and ductile iron)	W	22,100	--	--	W	22,100
Superalloys	101,000	W	--	(3/)	105,000	206,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	3,170	--	--	6	3,170
Other alloys	--	--	--	--	6,210	6,210
Mill products made from metal powder 4/	--	--	--	--	127,000	127,000
Cemented carbides and related products 5/	--	--	--	--	13	13
Chemical and ceramic uses:						
Pigments	--	--	W	--	W	W
Catalysts	77,300	--	W	--	14,900	92,200
Other	--		--	--	--	--
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	11,700	11,700
Other	1,390	42,900	77,200	--	1,240	123,000
Grand total	541,000	272,000	77,200	--	292,000	1,180,000
Stocks, January 31, 2002	489,000	175,000	4,930	9,830	867,000	1,550,000

W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. -- Zero.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Includes calcium molybdate.
3/ Included in "Other" of the "Superalloys" category.
4/ Includes ingot, wire, rod, and sheet.
5/ Includes construction, mining, oil and gas, metal working machinery.

TABLE 4
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(including roasted concentrate), BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	2000 January-December	2001 November	2001 December	2001 Year to date
Australia	31,400	5,600	3,000	147,000
Belgium	5,120,000	405,000	205,000	3,380,000
Brazil	31,300	2,800	3,230	30,100
Canada	1,420,000	7,050	34,600	650,000
Chile	35,000	--	--	11,800
China	795,000	--	--	201,000
Germany	672,000	23,700	23,500	512,000
India	687	22,000	22,200	294,000
Italy	89,800	--	35,500	95,000
Japan	3,100,000	108,000	116,000	1,700,000
Korea, Republic of	16,100	2,760	2,670	29,200
Mexico	61,800	184,000	270,000	764,000
Netherlands	8,780,000	1,180,000	927,000	13,500,000
Spain	57,500	--	12,000	63,400
Sweden	454,000	--	--	48,200
United Kingdom	2,910,000	521,000	581,000	6,210,000
Other	42,600	73,600	26,400	187,000
Total	23,600,000	2,540,000	2,260,000	27,800,000

-- Zero.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	2000	2001		
	January-December	November	December	Year to date
Australia	1,140	--	--	599
Canada	553,000	34,500	16,600	442,000
China	--	--	--	11,500
Germany	196	--	--	111,000
Japan	57,000	--	--	--
Korea, Republic of	2,990	--	--	876
Mexico	128,000	--	987	50,300
Netherlands	--	--	--	12,600
Total	742,000	34,500	17,600	629,000

-- Zero.
1/ Data are rounded to no more than three significant digits, may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS 1/

(Kilograms, unless otherwise specified)

Material	January-December 2000			December 2001			January-December 2001		
	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)
Ore and concentrates roasted	6,900,000	4,340,000	$25,800	741,000	467,000	$2,510	9,470,000	6,000,000	$32,900
Ore and concentrates other	3,440,000	1,780,000	9,660	--	--	--	10,000	11,600	73
Molybdenum chemicals:									
Oxides and hydroxides	1,210,000	NA	7,400	166,000	NA	948	1,010,000	NA	5,530
Molybdates of ammonium	2,270,000	1,310,000	12,200	83,800	52,400	540	2,740,000	1,610,000	15,100
Molybdates (all others)	332,000	236,000	1,170	18,300	144	58	318,000	113,000	1,050
Molybdenum orange	1,620,000	NA	7,320	37,100	NA	156	1,120,000	NA	5,180
Ferromolybdenum	8,310,000	5,310,000	35,600	609,000	397,000	2,470	5,570,000	3,580,000	21,400
Molybdenum powders	137,000	125,000	3,770	2,870	2,020	97	172,000	163,000	3,390
Molybdenum unwrought	15,900	16,100	328	--	--	--	24,700	24,400	267
Molybdenum waste and scrap	475,000	466,000	5,670	9,080 2/	9,030 2/	80	776,000	749,000	7,160
Molybdenum wire	16,700	NA	894	3,030	NA	93	16,900	NA	1,080
Molybdenum other	7,420	NA	1,600	1,020	NA	166	14,400	NA	1,940
Total	24,700,000	13,600,000	111,000	1,670,000	928,000	7,120	21,200,000	12,200,000	95,100

NA Not available. -- Zero.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.