

# Mineral Industry Surveys

---

**For information, contact:**

John F. Papp, Acting Molybdenum Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4963, Fax: (703) 648-7757  
E-mail: [jpapp@usgs.gov](mailto:jpapp@usgs.gov)

Barbara J. McNair (Data)  
Telephone: (703) 648-7952  
Fax: (703) 648-7975

**Internet:** <http://minerals.usgs.gov/minerals>

## MOLYBDENUM IN MAY 2002

Domestic production of molybdenum in concentrate in May 2002 was about 21% less than that of the previous month and was 53% less than that of May 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 6,160 metric tons at the end of May.

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 April and May 2002; also included are trade data for March and April 2002.

The Platts Metals Week U.S. May average price for dealer molybdenum oxide was \$7.110 per kilogram (\$3.225 per pound), and that for dealer ferromolybdenum was \$8.047 per kilogram (\$3.650 per pound). The USGS estimated May

average price for molybdenum concentrate was \$6.00 per kilogram (\$2.73 per pound). The Ryan's Notes worldwide oxide 4-week average price for reported May 27 was \$.950 per pound. The U.S. ferromolybdenum 4-week average price for April was \$3.606 per pound.

### Update

As of July 29, 2002, the Platts Metals Week average price for dealer molybdenum oxide was \$10.362 per kilogram (\$4.400 per pound), and that for ferromolybdenum was \$13.889 per kilogram (\$6.300 per pound). The USGS estimated price for molybdenum concentrate was \$9.20 per kilogram (\$4.20 per pound).

The July 29, 2002, Ryan's Notes worldwide oxide 4-week average price was \$4.506 per pound; the U.S. ferromolybdenum 4-week average price was \$6.513 per pound.

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

(Metric tons, contained molybdenum)

	2001	2002		
	January- December p/	April	May	Year to date
Production	37,600	1,940	1,530	11,200
Shipments: 2/				
Domestic	20,700	1,520	1,060	7,930
Export	16,300	502	429	4,560

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/	April r/	May	Year to date
Gross production	40,300	1,740	2,500	11,900
Internal consumption 2/	24,600	1,340	1,370	8,240
Gross shipments	32,600	2,270	2,480	11,400

p/ Preliminary. r/ Revised.

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
2002, April:						
Steel:						
Carbon	11,800	21,800	--	--	1,810	35,500
High-strength low-alloy	27,900	6,850	--	--	11,300	46,100
Stainless and heat-resisting	152,000	69,200	--	--	8,520	229,000
Full alloy	98,500	154,000	--	--	1,050	254,000
Tool	75,500	W	--	--	W	75,500
Total	365,000	252,000	--	--	22,700	640,000
Cast irons (gray, malleable, and ductile iron)	W	13,900	--	--	W	13,900
Superalloys	47,100	W	--	(3/)	107,000	154,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	--	2,520	--	--	6,320	8,840
Mill products made from metal powder 4/	--	--	--	--	112,000	112,000
Cemented carbides and related products 5/	--	--	--	--	14	14
Chemical and ceramic uses:						
Pigments	--	--	W	--	W	W
Catalysts	77,300	--	W	--	14,900	92,200
Other	--	--	--	--	1,360	1,360
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	12,300	12,300
Other	1,090	31,700	75,400	--	3,450	112,000
Grand total	491,000	300,000	75,400	--	279,000	1,150,000
Stocks, April 30, 2002	464,000	217,000	5,760	30,100	859,000	1,580,000

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 molybdenum 2/	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
2002, May:						
Steel:						
Carbon	12,200	23,400	--	--	1,810	37,400
High-strength low-alloy	31,100	6,970	--	--	11,300	49,400
Stainless and heat-resisting	172,000	23,600	--	--	8,520	205,000
Full alloy	99,100	155,000	--	--	2,700	257,000
Tool	53,700	27,100	--	--	1,450	82,200
Total	368,000	236,000	--	--	25,800	631,000
Cast irons (gray, malleable, and ductile iron)	W	14,100	--	--	W	14,100
Superalloys	50,800	W	--	(3/)	93,400	144,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	W	2,540	--	--	6,210	8,750
Mill products made from metal powder 4/	--	--	--	--	72,100	72,100
Cemented carbides and related products 5/	--	--	--	--	13	13
Chemical and ceramic uses:						
Pigments	--	--	W	--	W	W
Catalysts	77,300	--	W	--	W	77,300
Other	--	--	--	--	1,200	1,200
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	15,100	15,100
Other	1,730	6,040	75,100	--	--	82,900
Grand total	498,000	259,000	75,100	--	214,000	1,050,000
Stocks, May 31, 2002	364,000	146,000	6,470	18,400	862,000	1,400,000

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	2001	2002		
	January-December	March	April	Year to date
Australia	147,000	9,770	--	21,000
Belgium	3,380,000	292,000	366,000	2,110,000
Brazil	30,100	4,100	3,670	12,300
Canada	650,000	27,400	122,000	346,000
Chile	11,800	--	--	3,670
China	201,000	--	32,900	32,900
Germany	512,000	11,200	--	58,700
India	294,000	22,900	46	114,000
Italy	95,000	2,960	22,400	47,900
Japan	1,700,000	88,300	57,300	486,000
Korea, Republic of	29,200	300	4,000	42,800
Mexico	764,000	525	1,000	114,000
Netherlands	13,500,000	692,000	540,000	2,430,000
Spain	63,400	11,700	--	35,900
Sweden	48,200	--	23,700	24,300
United Kingdom	6,210,000	398,000	448,000	1,840,000
Other	187,000	35,400	14,100	138,000
Total	27,800,000	1,600,000	1,640,000	7,860,000

-- 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	2001	2002		Year to date
	January-December	March	April	
Australia	599	--	--	--
Canada	442,000	44,800	50,400	178,000
China	11,500	--	--	240
Germany	111,000	--	--	--
Korea, Republic of	876	--	--	--
Mexico	50,300	927	--	5,070
Netherlands	12,600	--	--	--
Total	629,000	45,800	50,400	183,000

-- 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 2001			April 2002		
	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)
Ore and concentrates roasted	9,470,000	6,000,000	\$32,900	499,000	309,000	\$1,910
Ore and concentrates other	10,000	11,600	73	3,000	1,740	17
Molybdenum chemicals:						
Oxides and hydroxides	1,010,000	NA	5,530	116,000	NA	682
Molybdates of ammonium	2,740,000	1,610,000	15,100	95,500	62,400	610
Molybdates (all others)	318,000	113,000	1,050	18,000	7,020	57
Molybdenum orange	1,120,000	NA	5,180	96,900	NA	361
Ferromolybdenum	5,570,000	3,580,000	21,400	348,000	222,000	1,430
Molybdenum powders	172,000	163,000	3,390	1,520	1,520	23
Molybdenum unwrought	24,700	24,400	267	--	--	--
Molybdenum waste and scrap	776,000	749,000	7,160	--	--	--
Molybdenum wire	16,900	NA	1,080	--	NA	--
Molybdenum other	14,400	NA	1,940	942	NA	143
Total	21,200,000	12,200,000	95,100	1,180,000	603,000	5,230

NA Not available. -- Zero.

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

Source: U.S. Census Bureau.