

# Mineral Industry Surveys

---

**For information, contact:**

Désirée E. Polyak, Molybdenum Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4909, Fax: (703) 648-7757  
Email: dpolyak@usgs.gov

Raymond I. Eldridge III (Data)  
Telephone: (703) 648-7982  
Fax: (703) 648-7975  
Email: reldridge@usgs.gov

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

## MOLYBDENUM IN MAY 2014

Domestic production of molybdenum (Mo) in concentrate in May 2014 was 16% more than the output of the previous month and 32% more than that of May 2013. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 6,600 metric tons (t) at yearend 2013 and about 7,100 t at the end of May.

According to Ryan's Notes, the May monthly average price range for U.S. ferromolybdenum (FeMo) was \$17.322 to \$17.983 per pound (lb) of molybdenum content, compared with \$13.472 to \$13.956 per lb in April. European FeMo monthly averages ranged from \$33.822 to \$34.389 per kilogram (kg) of molybdenum content in May compared with \$29.378 to \$29.917

per kg in April. In May, worldwide molybdenum oxide (MoO<sub>3</sub>) prices ranged from \$13.728 to \$14.633 per lb compared with \$11.000 to \$12.267 per lb in April.

*List services and Web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <http://minerals.usgs.gov/minerals/>.*

TABLE 1  
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS<sup>1</sup>

(Metric tons, contained molybdenum)

Period	Production	Shipments <sup>2,3</sup>
2013:		
January–May	26,100 <sup>r</sup>	25,800
May	4,880	5,040
June	5,090	5,130
July	4,960	5,090
August	4,940	4,930
September	5,230	5,090
October	5,070	5,420
November	4,800	4,570
December	4,560	4,850
January–December	60,800	60,900
2014:		
January	5,050	4,960
February	4,540	4,580
March	4,960	4,910
April	5,560	5,570
May	6,460	6,420
January–May	26,600	26,400

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>As reported by producers.

<sup>3</sup>Shipments include sales to domestic customers, sales for export, and transfers to other company plants.

TABLE 2  
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS<sup>1</sup>

(Kilograms, contained molybdenum)

End use	Molybdc oxides	Ferro molyb- denum <sup>2</sup>	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2014:						
April:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,380	--	--	--	7,380
Stainless and heat-resisting	172,000	51,400	--	(3)	W	224,000
Full alloy	275,000	250,000	--	--	W	525,000
Tool	W	W	--	--	--	W
Total	448,000	309,000	--	--	--	756,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	(3)	70,700	70,700
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	78	W	--	--	--	78
Mill products made from metal powder <sup>4</sup>	--	--	--	--	W	W
Cemented carbides and related products <sup>5</sup>	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	(3)	--	--	--
Catalysts	77,300	--	(3)	--	W	77,300
Other chemicals	--	--	--	--	--	--
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,800	10,800
Other	148,000	47,800	384	(3)	307,000	503,000
Grand total	673,000	356,000	384	--	389,000	1,420,000
Stocks, April 30, 2014	503,000	288,000	2,780	(6)	(6)	1,680,000
May:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,380	--	--	--	7,380
Stainless and heat-resisting	174,000	50,600	--	(3)	W	224,000
Full alloy	294,000	260,000	--	--	W	554,000
Tool	W	W	--	--	--	W
Total	468,000	318,000	--	--	W	785,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	--	70,700	70,700
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	500	W	--	--	--	500
Mill products made from metal powder <sup>4</sup>	--	--	--	--	W	W
Cemented carbides and related products <sup>5</sup>	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	(3)	--	--	--
Catalysts	77,300	--	(3)	--	W	77,300
Other chemicals	--	--	--	--	--	--
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,800	10,800
Other	152,000	50,000	1,110	(3)	354,000	557,000
Grand total	698,000	368,000	1,110	--	435,000	1,500,000
Stocks, May 31, 2014	531,000	305,000	3,570	(6)	(6)	1,710,000

W Withheld to avoid disclosing company proprietary data; included in "Miscellaneous and unspecified uses: Other" category. -- Zero.

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

<sup>2</sup>Includes calcium molybdate.

<sup>3</sup>Withheld to avoid disclosing company proprietary data; included in "Other, Miscellaneous and unspecified uses: Other" category.

<sup>4</sup>Includes ingot, wire, rod, and sheet.

<sup>5</sup>Includes construction, mining, oil and gas, metalworking machinery.

<sup>6</sup>Withheld to avoid disclosing company proprietary data; included in "Total."

TABLE 3  
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES  
(including roasted concentrate), BY COUNTRY<sup>1</sup>

(Kilograms, contained molybdenum)

Country	2013			2014		
	January– December	May	January– May	April	May	January– May
Antigua and Barbuda	--	--	--	22,400	--	22,400
Argentina	--	--	--	--	--	5,110
Australia	214,000	--	--	--	--	--
Austria	31,800	12,000	31,800	--	--	--
Belgium	3,770,000	208,000	1,240,000	286,000	860,000	1,760,000
Brazil	690,000	83,000	275,000	23,400	25,500	104,000
Canada	2,070,000	173,000	843,000	260,000	161,000	960,000
China	1,520,000	11,300	434,000	66,400	216,000	493,000
Germany	172,000	37,500	160,000	--	--	89
India	1,310,000	150,000	622,000	31,000	12,500	251,000
Israel	--	--	--	244	363	795
Japan	4,900,000	441,000	1,690,000	438,000	607,000	2,530,000
Korea, Republic of	898,000	89,800	420,000	58,100	97,800	676,000
Mexico	9,160,000	596,000	3,690,000	275,000	891,000	2,840,000
Netherlands	21,100,000	1,470,000	8,280,000	745,000	1,940,000	5,710,000
Peru	24,700	--	18,200	--	--	--
Philippines	2,180	2,180	2,180	--	--	--
Singapore	1,370	--	--	--	--	--
South Africa	194,000	--	57,000	--	--	--
Taiwan	24,900	--	13,100	--	--	--
Thailand	46,700	22,100	37,000	10,300	--	13,300
United Kingdom	2,380,000	47,900	1,400,000	1,400,000	959,000	5,900,000
Venezuela	210	--	--	--	--	--
Vietnam	57,100	14,800	29,700	5,470	16,900	34,200
Total	48,600,000	3,360,000	19,200,000	3,630,000	5,780,000	21,300,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY<sup>1</sup>

(Kilograms, contained molybdenum)

Country	2013			2014		
	January– December	May	January– May	April	May	January– May
Argentina	382	--	--	--	--	--
Canada	635,000	30,500	296,000	41,400	55,800	231,000
Chile	1,480	--	--	--	--	--
Colombia	238	119	119	--	--	134
Denmark	513	--	171	--	--	--
Israel	168	168	168	--	--	--
Mexico	156,000	735	36,700	--	890	25,500
Netherlands	48,600	--	13,300	--	--	--
Panama	13,200	--	13,200	--	--	--
Peru	6,550	--	6,000	--	--	--
Total	862,000	31,500	365,000	41,400	56,700	257,000

-- Zero.

<sup>1</sup>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. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS<sup>1</sup>

(Kilograms, unless otherwise specified)

Material	January–December 2013			May 2014			January–May 2014		
	Gross weight	Contained molybdenum	Value <sup>2</sup> (thousands)	Gross weight	Contained molybdenum	Value <sup>2</sup> (thousands)	Gross weight	Contained molybdenum	Value <sup>2</sup> (thousands)
Ore and concentrates roasted	6,870,000	4,160,000	\$47,100	650,000	397,000	\$10,400	3,050,000	1,860,000	\$39,000
Ore and concentrates other	18,100,000	8,890,000	250,000	1,990,000	1,050,000	26,400	7,210,000	3,630,000	100,000
Molybdenum chemicals:									
Oxides and hydroxides	283,000	NA	5,390	138,000	NA	2,510	214,000	NA	3,690
Molybdates of ammonium	1,080,000	611,000	17,000	160,000	90,100	2,740	403,000	227,000	6,250
Molybdates (all others)	3,770	1,550	190	519	208	17	1,670	665	28
Molybdenum orange	274,000	--	2,430	25,500	--	198	179,000	NA	1,330
Ferromolybdenum	6,120,000	4,090,000	108,000	758,000	510,000	14,500	2,640,000	1,770,000	46,400
Molybdenum powders	448,000	433,000	16,000	25,600	21,400	1,030	199,000	189,000	6,810
Molybdenum unwrought	762,000	747,000	22,100	182,000	181,000	4,700	565,000	543,000	14,300
Molybdenum waste and scrap	739,000	690,000	21,900	57,000	54,800	1,750	463,000	453,000	13,500
Molybdenum wire	22,700	NA	3,490	978	NA	158	7,280	NA	1,140
Molybdenum other	298,000	NA	20,800	28,000	NA	2,210	174,000	NA	11,800
Total	35,000,000	XX	514,000	4,010,000	XX	66,600	15,100,000	XX	244,000

NA Not available. XX Not applicable. -- Zero.

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

<sup>2</sup>Customs value.

Source: U.S. Census Bureau.