

# Mineral Industry Surveys

---

**For information, contact:**

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

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

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

## MOLYBDENUM IN FEBRUARY 2014

Domestic production of molybdenum (Mo) in concentrate in February 2014 was 10% less than the output of the previous month and 7% less than that of February 2013. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 6,700 metric tons (t) at yearend 2013 and about 6,600 t at the end of February.

According to Ryan's Notes, the February 2014 monthly average price range for U.S. ferromolybdenum (FeMo) was \$11.544 to \$11.831 per pound of molybdenum content, compared with \$11.294 to \$11.483 per pound in January 2014. European FeMo monthly averages ranged from \$24.713 to \$24.950 per kilogram of molybdenum content in February compared with \$25.017 to \$25.367 per kilogram in January. In February, worldwide molybdenum oxide (MoO<sub>3</sub>) prices ranged from \$9.869 to \$10.106 per pound compared with \$9.922 to \$10.067 per pound in January.

Thompson Creek Metals Co. Inc. announced that its Thompson Creek molybdenum mine would be placed on care and maintenance in the fourth quarter of 2014, once the mining and processing of Phase 7 ore was completed. The company

announced it would preserve the assets of the mine while it was on care and maintenance to enable operations to recommence when molybdenum market conditions improved. The Thompson Creek Mine is an open pit primary molybdenum mine and mill near Challis, ID (Thompson Creek Metals Co. Inc., 2014, p. 2–4).

*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/>.*

### Reference Cited

Thompson Creek Metals Co. Inc., 2014, Thompson Creek Metals Co. achieves commercial production at Mt. Milligan and reports fourth quarter and full year 2013 financial results: Littleton, CO, Thompson Creek Metals Co. Inc. news release, February 20, 16 p. (Accessed August 12, 2014, at [http://www.thompsoncreekmetals.com/i/pdf/nr/2014-02-20\\_TCM\\_NR.pdf](http://www.thompsoncreekmetals.com/i/pdf/nr/2014-02-20_TCM_NR.pdf).)

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

(Metric tons, contained molybdenum)

Period	Production	Shipments <sup>2,3</sup>
2013:		
January–February	10,200	10,100
February	4,880	5,060
March	5,730	5,420
April	5,340	5,270
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	65,700	65,900
2014:		
January	5,050	4,960
February	4,540	4,580
January–February	9,590	9,540

<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	Molybdic oxides	Ferro molyb- denum <sup>2</sup>	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2014:						
January:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,400	--	--	--	7,400
Stainless and heat-resisting	178,000	52,100	--	(3)	W	230,000
Full alloy	251,000	248,000	--	--	W	499,000
Tool	W	W	--	--	--	W
Total	429,000	307,000	--	--	--	736,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	(3)	70,300	70,300
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	153	W	--	--	--	153
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	215,000	45,100	(3)	(3)	380,000	640,000
Grand total	721,000	353,000	--	--	462,000	1,540,000
Stocks, January 31, 2014	453,000	282,000	2,890	(6)	(6)	1,630,000
February:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,690	--	--	--	7,690
Stainless and heat-resisting	166,000	51,200	--	(3)	W	217,000
Full alloy	254,000	197,000	--	--	W	451,000
Tool	W	W	--	--	--	W
Total	420,000	256,000	--	--	--	675,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	56,300	W	--	(3)	67,300	124,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	303	W	--	--	--	303
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	131,000	46,300	(3)	(3)	346,000	523,000
Grand total	685,000	302,000	--	--	424,000	1,410,000
Stocks, February 28, 2014	442,000	307,000	2,890	(6)	(6)	1,630,000

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	February	January– February	January	February	January– February
Argentina	--	--	--	5,110	--	5,110
Australia	214,000	--	--	--	--	--
Austria	31,800	8,630	19,800	--	--	--
Belgium	3,770,000	34,800	34,800	268,000	128,000	396,000
Brazil	690,000	12,000	12,000	48,000	--	48,000
Canada	2,070,000	128,000	282,000	184,000	190,000	374,000
China	1,520,000	133,000	244,000	91,300	--	91,300
Germany	172,000	37,200	49,300	--	--	--
India	1,310,000	69,200	302,000	67,700	55,500	123,000
Japan	4,900,000	292,000	564,000	375,000	547,000	922,000
Korea, Republic of	898,000	70,300	113,000	253,000	134,000	387,000
Mexico	9,160,000	674,000	1,600,000	605,000	365,000	970,000
Netherlands	21,100,000	1,310,000	2,680,000	840,000	1,060,000	1,900,000
Peru	24,700	--	18,000	--	--	--
Philippines	2,180	--	--	--	--	--
Singapore	1,370	--	--	--	--	--
South Africa	194,000	20,000	57,000	--	--	--
Taiwan	24,900	--	--	--	--	--
Thailand	46,700	--	--	--	--	--
United Kingdom	2,380,000	301,000	771,000	1,060,000	1,100,000	2,160,000
Venezuela	210	--	--	--	--	--
Vietnam	57,100	7,820	14,900	721	9,160	9,880
Total	48,600,000	3,100,000	6,750,000	3,800,000	3,590,000	7,390,000

-- 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	February	January– February	January	February	January– February
Argentina	382	--	--	--	--	--
Canada	635,000	31,200	118,000	63,800	37,800	102,000
Chile	1,480	--	--	--	--	--
Colombia	238	--	--	134	--	134
Denmark	513	--	--	--	--	--
Israel	168	--	--	--	--	--
Mexico	156,000	7,220	7,220	12,600	11,600	24,200
Netherlands	48,600	--	13,300	--	--	--
Panama	13,200	--	--	--	--	--
Peru	6,550	--	6,000	--	--	--
Total	862,000	38,400	145,000	76,600	49,400	126,000

-- 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			February 2014			January–February 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	623,000	383,000	\$9,220	1,370,000	837,000	\$14,300
Ore and concentrates other	18,100,000	8,890,000	250,000	1,140,000	606,000	16,200	2,680,000	1,390,000	38,400
Molybdenum chemicals:									
Oxides and hydroxides	283,000	NA	5,390	--	--	--	20,000	NA	339
Molybdates of ammonium	1,080,000	611,000	17,000	103,000	58,300	1,460	167,000	94,000	2,380
Molybdates (all others)	3,770	1,550	190	1,150	457	12	1,150	457	12
Molybdenum orange	274,000	NA	2,430	29,700	NA	212	60,200	NA	459
Ferromolybdenum	6,120,000	4,090,000	108,000	482,000	322,000	8,020	819,000	547,000	13,500
Molybdenum powders	448,000	433,000	16,000	20,100	19,100	679	73,400	71,100	2,420
Molybdenum unwrought	762,000	747,000	22,100	94,700	93,800	2,530	163,000	162,000	4,250
Molybdenum waste and scrap	739,000	690,000	21,900	95,200	94,300	2,720	143,000	138,000	4,110
Molybdenum wire	22,700	NA	3,490	904	NA	186	2,520	NA	382
Molybdenum other	298,000	NA	20,800	36,600	NA	2,170	66,600	NA	4,060
Total	35,000,000	XX	514,000	2,620,000	XX	43,400	5,560,000	XX	84,600

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.