

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 DECEMBER 2014

Domestic production of molybdenum (Mo) in concentrate in December 2014 was 16% more than that of the previous month and 19% more than in December 2013 production. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 6,600 metric tons (t) at yearend 2013 and about 6,700 t at yearend 2014.

According to Ryan's Notes, the December monthly average price range for U.S. ferromolybdenum (FeMo) was \$10.963 to \$11.863 per pound of molybdenum content, compared with \$12.071 to \$12.957 in November. European FeMo monthly averages ranged from \$23.050 to \$23.438 per kilogram (kg) of molybdenum content in December compared with \$24.300 to \$24.771 per kg in November. In December, worldwide molybdenum oxide (MoO₃) prices ranged from \$9.338 to \$9.738 per pound compared with \$9.629 to \$10.093 per pound in November.

Thompson Creek Metals Co. Inc. along with joint venture partner, Sojitz Moly Resources Inc., have agreed to place the Endako molybdenum mine on temporary suspension, effective December 31, 2014, owing to continued weakness in the molybdenum market. Approximately 50% of salaried employees at the mine were expected to be terminated. The Endako Mine is an open pit primary molybdenum mine and mill located west of Prince George, British Columbia, Canada (Thompson Creek Metals Co. Inc., 2014b).

The decision came only 2 months after Thompson Creek's October announcement that it would place its Thompson Creek molybdenum mine on care-and-maintenance status in the fourth quarter of 2014 after the remaining stockpiles of ore were processed. Mining of Phase 7 of the mine plan was completed in August. The Thompson Creek Mine is an open pit primary molybdenum mine and mill near Challis, ID (Thompson Creek Metals Co. Inc., 2014a).

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/>.

References Cited

- Thompson Creek Metals Co. Inc., 2014a, Thompson Creek Metals Company announces third quarter 2014 operating results: Littleton, CO, Thompson Creek Metals Co. Inc. news release, October 14, 3 p. (Accessed March 21, 2015, at http://www.thompsoncreekmetals.com/i/pdf/nr/2014-10-14_NR_4Kqb3N.pdf.)
- Thompson Creek Metals Co. Inc., 2014b, Thompson Creek Metals Company to place Endako molybdenum mine on temporary suspension: Littleton, CO, Thompson Creek Metals Co. Inc. news release, December 10, 2 p. (Accessed March 31, 2015, at http://www.thompsoncreekmetals.com/i/pdf/nr/2014-12-10_NR.pdf.)

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE
STATISTICS¹

(Metric tons, contained molybdenum)

Period	Production	Shipments ^{2,3}
2013:		
January–December	60,800	60,900
December	4,560	4,850
2014:		
January	5,050	4,960
February	4,530	4,580
March	5,050	5,000
April	5,490	5,510
May	6,420	6,390
June ^f	5,640	5,780
July ^f	6,820	7,000
August ^f	6,580	6,400
September ^f	6,610	6,560
October ^f	5,360	5,480
November ^f	4,660	4,380
December	5,420	5,500
January–December	67,600	67,500

^fRevised.

¹Data are rounded to no more than three significant digits.

²As reported by producers.

³Shipments 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 MATERIALS¹

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb- denum ²	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2014:						
November:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,380	--	--	--	7,380
Stainless and heat-resisting	202,000	57,700	--	(3)	W	259,000
Full alloy	275,000 ^r	263,000 ^r	--	--	W	537,000 ^r
Tool	W	W	--	--	--	W
Total	477,000 ^r	328,000 ^r	--	(3)	W	804,000 ^r
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	(3)	70,600	70,600
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	162 ^r	W	--	--	--	162 ^r
Mill products made from metal powder ⁴	--	--	--	--	W	W
Cemented carbides and related products ⁵	--	--	--	--	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	135,000	43,200	910	(3)	331,000	509,000
Grand total	689,000 ^r	371,000 ^r	910	(3)	412,000	1,470,000 ^r
Stocks, November 30, 2014	570,000 ^r	332,000 ^r	3,540	(6)	(6)	1,820,000
December:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,380	--	--	--	7,380
Stainless and heat-resisting	197,000	55,600	--	(3)	W	253,000
Full alloy	263,000	W	--	--	W	263,000
Tool	W	W	--	--	--	W
Total	460,000	63,000	--	(3)	W	523,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	(3)	62,000	62,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	198	W	--	--	--	198
Mill products made from metal powder ⁴	--	--	--	--	W	W
Cemented carbides and related products ⁵	--	--	--	--	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	144,000	337,000	910	(3)	327,000	809,000
Grand total	681,000	400,000	910	(3)	400,000	1,480,000
Stocks, December 31, 2014	545,000	320,000	3,540	(6)	(6)	1,780,000

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

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

²Includes calcium molybdate.

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

⁴Includes ingot, wire, rod, and sheet.

⁵Includes construction, mining, oil and gas, metalworking machinery.

⁶Withheld to avoid disclosing company proprietary data; included in "Total."

TABLE 3
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(including roasted concentrate), BY COUNTRY¹

(Kilograms, contained molybdenum)

Country	2013		2014		
	January– December	December	November	December	January– December
Antigua and Barbuda	--	--	--	--	22,400
Argentina	--	--	--	--	5,110
Australia	214,000	--	--	--	--
Austria	31,800	--	--	--	--
Belgium	3,770,000	415,000	246,000	525,000	11,000,000
Brazil	690,000	48,000	12,900	--	332,000
Canada	2,070,000	165,000	165,000	111,000	2,210,000
Chile	--	--	--	--	1,580,000
China	1,520,000	200,000	252,000	126,000	1,430,000
Germany	172,000	--	--	--	89
India	1,310,000	116,000	34,900	12,400	498,000
Israel	--	--	--	--	795
Japan	4,900,000	447,000	562,000	450,000	6,480,000
Korea, Republic of	898,000	35,500	60,900	96,600	1,320,000
Mexico	9,160,000	824,000	407,000	435,000	7,060,000
Netherlands	21,100,000	1,320,000	1,560,000	1,420,000	17,300,000
Peru	24,700	--	--	--	--
Philippines	2,180	--	--	--	--
Singapore	1,370	--	--	--	--
South Africa	194,000	--	--	--	--
Taiwan	24,900	--	--	--	27,200
Thailand	46,700	2,440	--	8,210	21,500
United Kingdom	2,380,000	466,000	1,140,000	1,090,000	11,200,000
Venezuela	210	--	--	--	--
Vietnam	57,100	8,010	--	2,870	59,700
Total	48,600,000	4,050,000	4,440,000	4,270,000	60,500,000

-- Zero.

¹Data 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 COUNTRY¹

(Kilograms, contained molybdenum)

Country	2013		2014		
	January– December	December	November	December	January– December
Argentina	382	382	--	--	--
Canada	635,000	9,330	21,800	29,700	542,000
Chile	1,480	1,480	--	--	--
Colombia	238	--	--	--	400
Denmark	513	--	140	--	311
Israel	168	--	--	--	--
Mexico	156,000	16,700	508	--	27,000
Netherlands	48,600	--	--	--	--
Panama	13,200	--	--	--	--
Peru	6,550	--	--	--	--
Vietnam	--	--	--	--	135
Total	862,000	27,900	22,400	29,700	569,000

-- Zero.

¹Data 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 PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	January–December 2013			2014					
	Gross weight	Contained molybdenum	Value ² (thousands)	December			January–December		
				Gross weight	Contained molybdenum	Value ² (thousands)	Gross weight	Contained molybdenum	Value ² (thousands)
Ore and concentrates roasted	6,870,000	4,160,000	\$47,100	1,140,000	681,000	\$15,100	8,180,000	47,000,000	\$117,000
Ore and concentrates other	18,100,000	8,890,000	250,000	2,510,000	1,260,000	24,200	21,100,000	10,800,000	282,000
Molybdenum chemicals:									
Oxides and hydroxides	283,000	NA	5,390	19,100	NA	322	448,000	NA	8,410
Molybdates of ammonium	1,080,000	6,410,000	17,000	21,700	12,500	391	1,170,000	660,000	20,400
Molybdates (all others)	3,770	1,550	190	580	230	5	28,800	11,400	362
Molybdenum orange	274,000	NA	2,430	56,900	NA	267	431,000	NA	3,010
Ferromolybdenum	6,120,000	4,090,000	108,000	668,000	443,000	10,300	7,650,000	5,110,000	147,000
Molybdenum powders	448,000	433,000	16,000	51,900	51,500	1,920	536,000	513,000	19,800
Molybdenum unwrought	762,000	747,000	22,100	39,100	39,000	1,250	1,140,000	1,120,000	32,800
Molybdenum waste and scrap	739,000	690,000	21,900	72,400	72,000	1,970	1,240,000	1,220,000	37,100
Molybdenum wire	22,700	NA	3,490	849	--	110	14,700	NA	2,240
Molybdenum other	298,000	NA	20,800	24,200	--	1,640	392,000	NA	27,100
Total	35,000,000	XX	514,000	4,610,000	2,560,000	57,500	42,300,000	XX	697,000

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

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

²Customs value.

Source: U.S. Census Bureau.