

# Mineral Industry Surveys

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## MOLYBDENUM IN JANUARY 2013

Domestic production of molybdenum (Mo) in concentrate in January 2013 was 4% more than the output of the previous month and was 11% less than that of January 2012. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 8,400 metric tons (t) at the beginning of 2013 and about 9,900 t at the end of January.

According to Ryan's Notes, the January 2013 monthly average price range for U.S. ferromolybdenum (FeMo) was \$12.725 to \$12.950 per pound of molybdenum content, compared with \$12.443 to \$12.607 per pound in December 2012. European FeMo monthly averages ranged from \$28.750 to \$29.250 per kilogram of molybdenum content in January compared with \$28.429 to \$28.971 per kilogram in December 2012. In January, worldwide molybdenum oxide (MoO<sub>3</sub>) prices ranged from \$11.750 to \$11.875 per pound compared with \$11.257 to \$11.500 per pound in December 2012.

Included in this Mineral Industry Surveys is U.S. production and shipments of molybdenum concentrates, U.S. consumption by end use, and consumer stocks of molybdenum material in December 2012 and January 2013. U.S. production and shipments of molybdenum products were excluded from this

Mineral Industry Surveys to avoid disclosing company proprietary data. Export data for December 2012 and January 2013 and import data for January 2013 are also included.

General Moly Inc. (Lakewood, CO) began preliminary construction activities at the Mt. Hope molybdenum project in Eureka County, NV. Ames Construction Inc. began clearing the administrative office, mill site areas, and water pipeline corridor in preparation for developing a well field and water distribution system to support heavy construction activities, scheduled to start in the spring. According to the company, Mt. Hope contains 590,000 t of Mo in proven and probable reserves and has an expected mine life of more than 40 years (General Moly Inc., 2013).

### Reference Cited

General Moly Inc., 2013, General Moly initiates preliminary construction activities at Mt. Hope: Lakewood, CO, General Moly Inc., January 9. (Accessed April 4, 2013, at [http://investor.generalmoly.com/phoenix.zhtml?c=181598&p=irol-newsArticle&ID=1772762&highlight=.](http://investor.generalmoly.com/phoenix.zhtml?c=181598&p=irol-newsArticle&ID=1772762&highlight=;))

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

(Metric tons, contained molybdenum)

	2012 <sup>p</sup>			2013 January
	January– December	January	December	
Production	56,100	5,150	4,430	4,600
Shipments: <sup>2</sup>				
Domestic	17,900	1,500 <sup>r</sup>	1,490	1,320
Export	W	W	W	W

<sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data.

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

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

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
2012:						
December:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,600	--	--	--	7,600
Stainless and heat-resisting	164,000	57,600	--	(3)	6,510	228,000
Full alloy	244,000	195,000 <sup>r</sup>	--	--	W	439,000 <sup>r</sup>
Tool	W	W	--	--	--	W
Total	408,000	260,000	--	--	6,510	675,000 <sup>r</sup>
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	(3)	88,100	88,100
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	53	W	--	--	--	53
Mill products made from metal powder <sup>4</sup>	W	--	--	--	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	142,000	43,500	257	--	331,000	517,000
Grand total	627,000	304,000 <sup>r</sup>	257	--	436,000	1,370,000
Stocks, December 31, 2012	384,000	294,000 <sup>r</sup>	2,040	(6)	(6)	1,570,000
2013:						
January:						
Steel:						
Carbon	W	W	--	--	W	W
High-strength low-alloy	W	7,380	--	--	--	7,380
Stainless and heat-resisting	162,000	57,400	--	W	6,510	226,000
Full alloy	246,000	214,000	--	--	W	459,000
Tool	W	W	--	--	--	W
Total	407,000	278,000	--	--	6,510	692,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	W	W	--	W	102,000	102,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	252	W	--	--	--	252
Mill products made from metal powder <sup>4</sup>	W	--	--	--	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	141,000	42,700	257	62,400	280,000	526,000
Grand total	626,000	321,000	257	62,400	400,000	1,410,000
Stocks, January 31, 2013	426,000	290,000	2,040	(6)	(6)	1,620,000

See footnotes at end of table.

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

<sup>1</sup>Revised. 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	2012			2013
	January– December	January	December	January
Austria	166,000	11,200	23,400	11,200
Belgium	6,190,000	504,000	150,000	--
Brazil	378,000	--	--	--
Canada	2,220,000	141,000	110,000	153,000
China	2,130,000	311,000	156,000	111,000
Colombia	7,190	--	--	--
Germany	71,900	98	24,000	12,100
Hungary	997	--	--	--
India	660,000	25,900	125,000	233,000
Japan	3,780,000	197,000	301,000	272,000
Korea, Republic of	420,000	26,100	24,600	43,000
Mexico	7,590,000	686,000	395,000	921,000
Netherlands	13,000,000	768,000	1,280,000	1,360,000
Peru	8,110	181	--	18,000
Philippines	8,170	--	--	--
South Africa	382,000	--	--	37,000
Taiwan	6,040	1,000	--	--
Thailand	30,000	--	88	--
United Kingdom	6,450,000	411,000	957,000	470,000
Vietnam	18,300	1,010	372	7,050
Total	43,500,000	3,080,000	3,550,000	3,650,000

-- 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	2012			2013 January
	January– December	January	December	
Argentina	26,200	--	--	--
Australia	223	223	--	--
Brazil	528	--	--	--
Canada	677,000	57,200	46,200	86,800
Colombia	224	--	105	--
Denmark	495	--	--	--
Mexico	188,000	318	57,800	13,300
Netherlands	76,600	12,000	--	6,000
Saudi Arabia	26,400	--	--	--
Total	996,000	69,800	104,000	106,000

-- 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 2012			January 2013		
	Gross weight	Contained molybdenum	Value <sup>2</sup> (thousands)	Gross weight	Contained molybdenum	Value <sup>2</sup> (thousands)
Ore and concentrates roasted	10,100,000	6,170,000	\$100,000	188,000	116,000	\$2,230
Ore and concentrates other	11,900,000	5,810,000	199,000	1,360,000	699,000	22,700
Molybdenum chemicals:						
Oxides and hydroxides	532,000	NA	10,600	60,000	NA	1,140
Molybdates of ammonium	813,000	460,000	14,900	60,000	33,300	935
Molybdates (all others)	41,800	16,300	748	1,000	396	21
Molybdenum orange	355,000	NA	2,910	19,900	NA	212
Ferromolybdenum	6,450,000	4,320,000	138,000	476,000	320,000	9,100
Molybdenum powders	408,000	362,000	16,700	35,600	34,600	1,360
Molybdenum unwrought	744,000	726,000	21,800	57,200	59,000	1,940
Molybdenum waste and scrap	971,000	925,000	31,400	27,000	26,800	825
Molybdenum wire	19,600	NA	2,760	1,870	NA	295
Molybdenum other	507,000	NA	31,700	21,000	NA	1,420
Total	32,900,000	XX	570,000	2,300,000	XX	42,200

NA Not available. XX Not applicable.

<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.