

Mineral Industry Surveys

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MOLYBDENUM IN FEBRUARY 2012

Domestic production of molybdenum (Mo) in concentrate in February 2012 was slightly less than the output of the previous month and slightly more than that of February 2011. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 8,900 metric tons (t) at the beginning of 2012 and about 9,170 t at the end of February.

According to Ryan's Notes, the February 2012 monthly average price range for U.S. ferromolybdenum (FeMo) was \$16.150 to \$16.538 per pound of molybdenum content, compared with \$16.044 to \$16.300 per pound in January 2012. European FeMo monthly averages ranged from \$35.300 to \$35.613 per kilogram of molybdenum content in February compared with \$33.317 to \$33.644 per kilogram in January. In February, worldwide molybdenum oxide (MoO₃) prices ranged from \$14.531 to \$14.800 per pound compared with \$13.717 to \$13.933 per pound in January.

Molybdenum production in Peru increased by about 13% in 2011 to 19,141 t molybdenum according to figures published by the country's mining ministry (Metal-Pages, 2012).

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, U.S. consumption by end use, and consumer stocks of molybdenum material in January and February 2012. Export data for January and February 2012 and import data for February 2012 are also included.

Reference Cited

Metal-Pages, 2012, Peru produces 13% more molybdenum in 2011: Metal-Pages, February 6. (Accessed May 8, 2012, via <http://www.metal-pages.com/>.)

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2011 ^P		2012		
	January– December	January– February	January	February	January– February
Production	62,700	10,800	5,170 ^r	5,090	10,300
Shipments: ²					
Domestic	18,300	2,140 ^r	1,480	1,590	3,070
Export	W	W	W	W	W

^PPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data.

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

²As reported by producers.

TABLE 2
U.S. REPORTED PRODUCTION AND SHIPMENTS OF MOLYBDENUM
PRODUCTS¹

(Metric tons, contained molybdenum)

	2011 ^P		2012		
	January– December	January– February	January	February	January– February
Gross production	W	W	6,350	6,560	12,900
Internal consumption ²	W	W	W	W	W
Gross shipments	W	9,880 ^r	4,100	4,080	8,180

^PPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data.

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

²Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 3
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS¹

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molybdenum ²	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
2012:						
January:						
Steel:						
Carbon	32,300	W	--	--	W	32,300
High-strength low-alloy	67,500	7,320	--	--	--	74,800
Stainless and heat-resisting	167,000	59,900	--	(3)	6,510	233,000
Full alloy	271,000	347,000	--	--	W	618,000
Tool	W	W	--	--	--	W
Total	537,000	414,000	--	--	6,510	958,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	25,900	W	--	(3)	91,500	117,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	88	W	--	--	--	88
Mill products made from metal powder ⁴	W	--	--	--	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	54,300	60,900	--	--	370,000	486,000
Grand total	695,000	475,000	--	--	479,000	1,650,000
Stocks, January 31, 2012	408,000	323,000	2,160	(6)	(6)	1,630,000
February:						
Steel:						
Carbon	34,200	W	--	--	W	34,200
High-strength low-alloy	67,500	7,320	--	--	--	74,800
Stainless and heat-resisting	162,000	59,300	--	(3)	6,510	228,000
Full alloy	255,000	342,000	--	--	W	597,000
Tool	W	W	--	--	--	W
Total	518,000	409,000	--	--	6,510	933,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	25,400	W	--	(3)	96,200	122,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	191	W	--	--	--	191
Mill products made from metal powder ⁴	W	--	--	--	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	54,400	61,000	--	--	362,000	478,000
Grand total	675,000	470,000	--	--	476,000	1,620,000
Stocks, February 29, 2012	404,000	324,000	2,160	(6)	(6)	1,660,000

See footnotes at end of table.

TABLE 3—Continued
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS¹

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 4
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(including roasted concentrate), BY COUNTRY¹

(Kilograms, contained molybdenum)

Country	2011			2012		
	January– December	February	January– February	January	February	January– February
Australia	800	--	800	--	--	--
Austria	278,000	107,000	145,000	11,200	11,200	22,400
Azerbaijan	9,370	--	--	--	--	--
Belgium	6,620,000	858,000	2,020,000	504,000	669,000	1,170,000
Brazil	374,000	32,800	52,800	--	6,760	6,760
Canada	1,400,000	122,000	269,000	141,000	188,000	329,000
Chile	3,220,000	--	--	--	--	--
China	2,570,000	338,000	690,000	311,000	218,000	529,000
Czech Republic	31	--	--	--	--	--
El Salvador	881	881	881	--	--	--
Finland	283,000	23,700	71,700	--	--	--
France	121,000	11,900	24,300	--	--	--
Germany	133,000	11,800	24,100	98	12,100	12,200
India	901,000	175,000	280,000	25,900	70,300	96,100
Italy	37,300	11,700	11,700	--	--	--
Japan	4,150,000	282,000	615,000	197,000	184,000	381,000
Korea, Republic of	1,460,000	162,000	350,000	26,100	47,800	74,000
Luxembourg	24,800	12,500	12,500	--	--	--
Mexico	7,270,000	551,000	1,250,000	686,000	764,000	1,450,000
Netherlands	11,500,000	511,000	1,110,000	768,000	887,000	1,660,000
Peru	--	--	--	181	362	543
Spain	330	--	--	--	--	--
Sweden	145,000	19,000	31,000	--	--	--
Taiwan	40,500	--	17,600	1,000	--	1,000
Thailand	7,260	--	--	--	15,400	15,400
United Arab Emirates	12,600	--	12,600	--	--	--
United Kingdom	6,210,000	672,000	1,250,000	411,000	269,000	697,000
Venezuela	838	--	--	--	--	--
Vietnam	301,000	--	14,900	1,010	887	1,900
Total	47,100,000	3,900,000	8,240,000	3,080,000	3,340,000	6,440,000

-- 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. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY¹

(Kilograms, contained molybdenum)

Country	2011			2012		
	January– December	February	January– February	January	February	January– February
Australia	497	--	--	223	--	223
Canada	871,000	40,300	110,000	57,200	68,200	125,000
Colombia	119	--	--	--	--	--
Denmark	501	--	--	--	--	--
Mexico	47,800	476	6,660	318	13,200	13,500
Netherlands	293,000	49,900	87,500	12,000	--	12,000
Turkey	116,000	12,700	24,500	--	--	--
Total	1,330,000	103,000	229,000	69,800	81,400	151,000

-- Zero.

¹Data 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 PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	January–December 2011			2012					
	Gross weight	Contained molybdenum	Value ² (thousands)	February			January–February		
				Gross weight	Contained molybdenum	Value ² (thousands)	Gross weight	Contained molybdenum	Value ² (thousands)
Ore and concentrates roasted	11,700,000	7,080,000	\$136,000	1,310,000	794,000	\$16,500	2,300,000	1,400,000	\$27,600
Ore and concentrates other	18,700,000	7,570,000	323,000	584,000	287,000	12,200	1,870,000	923,000	31,000
Molybdenum chemicals:									
Oxides and hydroxides	146,000	NA	3,820	25,000	--	578	28,000	--	578
Molybdates of ammonium	982,000	578,000	21,400	81,400	45,900	1,530	81,500	46,000	1,540
Molybdates (all others)	22,300	9,840	1,120	--	--	--	--	--	--
Molybdenum orange	328,000	NA	2,790	15,000	NA	142	71,600	NA	581
Ferromolybdenum	4,800,000	3,210,000	119,000	800,000	534,000	17,800	1,290,000	861,000	28,400
Molybdenum powders	281,000	264,000	13,600	30,800	27,200	1,230	86,700	74,500	3,530
Molybdenum unwrought	566,000	545,000	20,800	47,500	46,000	1,490	122,000	117,000	3,870
Molybdenum waste and scrap	748,000	700,000	27,400	66,300	58,000	1,960	182,000	167,000	6,040
Molybdenum wire	21,300	NA	3,230	872	NA	153	2,240	NA	365
Molybdenum other	903,000	NA	63,200	27,700	NA	2,340	66,400	NA	5,170
Total	39,200,000	XX	736,000	2,990,000	XX	56,000	6,100,000	XX	109,000

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.