

Mineral Industry Surveys

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MOLYBDENUM IN JUNE 2012

Domestic production of molybdenum (Mo) in concentrate in June 2012 was about 10% less than the output of the previous month but about 24% less than that of June 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 10,300 t at the end of June.

According to Ryan's Notes, the June monthly average price range for U.S. ferromolybdenum (FeMo) was \$15.278 to \$15.478 per pound of molybdenum content, compared with \$15.722 to \$15.944 in May. European FeMo monthly averages ranged from \$31.478 to \$31.944 per kilogram (kg) of molybdenum content in June compared with \$33.289 to \$33.656 per kg in May. In June, worldwide molybdenum oxide (MoO₃) prices ranged from \$13.244 to \$13.389 per pound compared with \$13.800 to \$13.983 per pound in May.

China's imports of MoO₃ (roasted molybdenum concentrate) decreased 31.9% to 4,626 t in the first 6 months of 2012 compared with the same period in 2011, according to official

customs data. According to traders, China cut imports of MoO₃ from foreign countries in the first 6 months of 2012 because many Chinese buyers would not sign long-term contracts in late 2011, as they were unsure of the market outlook for 2012 (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 May and June 2012. Export data for May and June 2012 and import data for June 2012 are also included.

Reference Cited

Metal-Pages, 2012, China Jan-June 2012 molybdenum oxide imports down 31.90%: Metal-Pages, August 6. (Accessed October 10, 2012, via [http://www.metal-pages.com/.](http://www.metal-pages.com/))

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2011 ^P		2012		
	January– December	January– June	May	June	January– June
Production	63,700	35,100 ^r	4,850 ^r	4,370	28,900
Shipments: ²					
Domestic	18,300	9,860 ^r	1,490	1,410	9,030
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– June	May	June	January– June
Gross production	W	W	W	W	W
Internal consumption ²	W	W	W	W	W
Gross shipments	W	W	3,640	4,210	23,600

^PPreliminary. 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 molyb- denum ²	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2012:						
May:						
Steel:						
Carbon	34,700	W	--	--	W	34,700
High-strength low-alloy	54,800	7,320	--	--	--	62,100
Stainless and heat-resisting	164,000	59,400	--	(3)	6,510	229,000
Full alloy	250,000	275,000	--	--	W	524,000
Tool	W	W	--	--	--	W
Total	503,000	341,000	--	--	6,510	851,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	(4)	(4)	--	(4)	95,700	95,700
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	216	W	--	--	--	216
Mill products made from metal powder ⁵	--	--	--	--	W	W
Cemented carbides and related products ⁶	--	--	--	--	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	52,200	56,400	218	--	273,000	382,000
Grand total	632,000	398,000	218	--	386,000	1,420,000
Stocks, May 31, 2012	409,000	317,000	1,940	(7)	(7)	1,630,000
June:						
Steel:						
Carbon	33,800	W	--	--	W	33,800
High-strength low-alloy	W	7,320	--	--	--	7,320
Stainless and heat-resisting	162,000	59,300	--	(3)	6,510	228,000
Full alloy	246,000	269,000	--	--	W	514,000
Tool	W	W	--	--	--	W
Total	442,000	335,000	--	--	6,510	783,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	W	W
Superalloys	(4)	(4)	--	(4)	95,300	95,300
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	W	W
Other alloys	216	W	--	--	--	216
Mill products made from metal powder ⁵	--	--	--	--	W	W
Cemented carbides and related products ⁶	--	--	--	--	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	93,400	62,900	218	--	268,000	424,000
Grand total	612,000	398,000	218	--	380,000	1,390,000
Stocks, June 30, 2012	425,000	313,000	1,940	(7)	(7)	1,640,000

See footnote 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.

⁴Withheld to avoid disclosing company proprietary data.

⁵Includes ingot, wire, rod, and sheet.

⁶Includes construction, mining, oil and gas, metalworking machinery.

⁷Withheld to avoid disclosing company proprietary data; included in "Total."

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

(Kilograms, contained molybdenum)

Country	2011			2012		
	January– December	June	January– June	May	June	January– June
Australia	800	--	800	--	--	--
Austria	278,000	58,500	267,000	20,400	11,200	76,400
Azerbaijan	9,370	--	--	--	--	--
Belgium	6,620,000	424,000	4,560,000	495,000	534,000	3,630,000
Brazil	374,000	71,600	245,000	58,100	63,800	210,000
Canada	1,400,000	218,000	959,000	206,000	256,000	1,230,000
Chile	3,220,000	482,000	1,420,000	--	--	--
China	2,570,000	253,000	1,520,000	185,000	291,000	1,350,000
Colombia	--	--	--	--	7,190	7,190
Czech Republic	31	--	--	--	--	--
El Salvador	881	--	881	--	--	--
Finland	283,000	23,500	167,000	--	--	--
France	121,000	24,000	109,000	--	--	--
Germany	133,000	--	119,000	--	12,200	36,500
Hungary	--	--	--	--	--	997
India	901,000	110,000	638,000	1,450	29,600	239,000
Italy	37,300	--	37,300	--	--	--
Japan	4,150,000	401,000	2,050,000	347,000	386,000	1,730,000
Korea, Republic of	1,460,000	130,000	924,000	31,700	29,600	187,000
Luxembourg	24,800	--	24,800	--	--	--
Mexico	7,270,000	382,000	3,600,000	672,000	643,000	4,060,000
Netherlands	11,500,000	1,040,000	5,200,000	1,160,000	835,000	6,420,000
Peru	--	--	--	--	181	724
Philippines	--	--	--	--	--	8,170
South Africa	--	--	--	--	--	180,000
Spain	330	231	330	--	--	--
Sweden	145,000	11,700	97,600	--	--	--
Taiwan	40,500	--	40,500	4,700	--	5,700
Thailand	7,260	--	7,260	7,260	--	22,700
United Arab Emirates	12,600	--	12,600	--	--	--
United Kingdom	6,210,000	356,000	3,790,000	396,000	326,000	2,420,000
Venezuela	838	--	--	--	--	--
Vietnam	301,000	--	21,500	5,900	2,970	10,900
Total	47,100,000	3,980,000	25,800,000	3,590,000	3,430,000	21,800,000

-- 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	June	January– June	May	June	January– June
Australia	497	--	--	--	--	223
Canada	871,000	109,000	470,000	81,800	59,500	415,000
Colombia	119	--	--	--	--	--
Denmark	501	--	330	173	--	323
Mexico	47,800	--	7,610	--	318	20,800
Netherlands	293,000	13,200	190,000	13,700	13,300	64,600
Turkey	116,000	13,200	75,500	--	--	--
Total	1,330,000	135,000	744,000	95,700	73,100	501,000

-- 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)	June			January–June		
				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	1,020,000	630,000	\$12,400	5,990,000	3,640,000	\$66,700
Ore and concentrates other	18,700,000	7,570,000	323,000	1,110,000	538,000	19,900	6,230,000	3,090,000	111,000
Molybdenum chemicals:									
Oxides and hydroxides	146,000	NA	3,820	20,000	NA	462	283,000	NA	5,700
Molybdates of ammonium	982,000	578,000	21,400	62,100	34,900	1,250	364,000	205,000	7,220
Molybdates (all others)	22,300	9,840	1,120	--	--	--	18,100	7,010	303
Molybdenum orange	328,000	NA	2,790	22,100	NA	235	245,000	NA	1,860
Ferromolybdenum	4,800,000	3,210,000	119,000	675,000	456,000	14,900	3,880,000	2,590,000	87,100
Molybdenum powders	281,000	264,000	13,600	37,400	32,000	1,660	228,000	197,000	9,480
Molybdenum unwrought	566,000	545,000	20,800	87,200	86,600	2,720	476,000	463,000	13,800
Molybdenum waste and scrap	748,000	700,000	27,400	75,100	72,800	2,550	517,000	484,000	17,200
Molybdenum wire	21,300	NA	3,230	2,590	NA	338	8,930	NA	1,320
Molybdenum other	903,000	NA	63,200	63,400	NA	3,280	302,000	NA	18,100
Total	39,200,000	XX	736,000	3,180,000	XX	59,800	18,600,000	XX	340,000

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.