

Mineral Industry Surveys

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MOLYBDENUM IN JUNE 2007

Domestic production of molybdenum (Mo) in concentrate in June 2007 was slightly more than the output of the previous month and about 7% more than that of June 2006, according to the U.S. Geological Survey. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 5,330 metric tons (t) at the beginning of 2007 and about 5,410 t at the end of June.

According to Ryan's Notes (2007), the June monthly average price range for U.S. ferromolybdenum (FeMo) was from \$36.000 to \$37.000 per pound of molybdenum content, compared with \$34.556 to \$35.278 in May. European FeMo monthly averages ranged from \$75.000 to \$76.333 per kilogram (kg) of molybdenum content in June compared with \$75.333 to \$76.611 per kg in May. In June, worldwide molybdenum oxide (MoO₃) prices ranged from \$32.267 to \$33.028 per pound versus \$30.522 to \$31.411 per pound in May.

China's Ministry of Commerce announced that 32 molybdenum producers and traders met government standards and were issued licenses to export molybdenum products, effective June 18, 2007. Industry sources in China indicated that

China was likely to impose export quotas for a total of 12,000 t of molybdenum-related products for the remainder of 2007, but there were no details on the quantity granted to each approved exporter. China exported about 50,000 t of molybdenum-related products in 2006, but it was unclear if the 12,000-t figure referred to total tonnage or contained weight of molybdenum. If the indicated export quota is based on molybdenum content, it would be about an 8.5% reduction from 2006 export levels (Platts Metals Week, 2007).

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 2007. Export data for April and May 2007 and import data for May 2007 are also included.

References Cited

Platts Metals Week, 2007, Moly market wary as Chinese quota system remains unclear: Platts Metals Week, v. 78, no. 26, June 25, p. 1.
Ryan's Notes, 2007, [untitled]: Ryan's Notes, v. 13, no. 27, July 2, p. 10.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2006 ^p		2007		
	January- December	January- June ^r	May ^r	June	January- June
Production	59,800	30,100	5,050	5,110	30,100
Shipments: ²					
Domestic	38,600	20,200	3,510	3,220	20,800
Export	21,300	10,300	1,290	1,710	9,010

^pPreliminary. ^rRevised.

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

²As reported by producers.

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

(Metric tons, contained molybdenum)

	2006 ^p		2007		
	January- December	January- June ^r	May ^r	June	January- June ²
Gross production	78,000	41,000	4,650	3,700	33,900
Internal consumption ³	47,400	25,700	2,160	1,140	18,600
Gross shipments	51,000	26,400	3,620	3,910	24,500

^pPreliminary. ^rRevised.

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

²Includes revisions to previous months' data.

³Includes 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	Molybdc oxides	Ferro molyb- denum ²	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2007, May:						
Steel:						
Carbon	14,400	W	--	--	W	14,400
High-strength low-alloy	28,900	7,520	--	--	11,300	47,700
Stainless and heat-resisting	162,000	63,000	--	W	6,510	231,000
Full alloy	156,000	314,000	--	--	1,510	471,000
Tool	81,700	W	--	--	--	81,700
Total	442,000	385,000	--	W	19,400	847,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	80,200	W	--	W	75,300	156,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	--	2,960	--	--	--	2,960
Mill products made from metal powder ³	--	--	--	--	193,000	193,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	265	265
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	30,500	74,000	66,200	16,800	188,000
Grand total	601,000	425,000	74,000	66,200	316,000	1,480,000
Stocks, May 31, 2007	563,000	304,000 ^r	2,880 ^r	34,800	847,000	1,750,000 ^r
2007, June:						
Steel:						
Carbon	75,500	W	--	--	W	75,500
High-strength low-alloy	37,900	7,920	--	--	11,300	57,200
Stainless and heat-resisting	178,000	65,800	--	W	6,510	250,000
Full alloy	145,000	177,000	--	--	1,510	323,000
Tool	57,000	W	--	--	--	57,000
Total	493,000	250,000	--	W	19,400	763,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	72,300	W	--	W	78,600	151,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	--	5,400	--	--	--	5,400
Mill products made from metal powder ³	--	--	--	--	184,000	184,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	599	599
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	32,300	72,700	47,400	21,400	175,000
Grand total	644,000	295,000	72,700	47,400	316,000	1,370,000
Stocks, June 30, 2007	574,000	302,000	2,790	46,300	850,000	1,780,000

¹Revised. W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. --

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

²Includes calcium molybdate.

³Includes ingot, wire, rod, and sheet.

⁴Includes construction, mining, oil and gas, metalworking machinery.

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

(Kilograms, contained molybdenum)

Country	2006		2007		
	January- December	January- May	April	May	January- May
Australia	88,800	7,350	--	800	800
Belgium	7,490,000	3,680,000	602,000	740,000	2,580,000
Brazil	113,000	16,900	--	--	90,800
Canada	2,680,000	1,300,000	386,000	188,000	1,390,000
Chile	259,000	91,800	479,000	--	1,000,000
China	405,000	398,000	--	23,600	71,400
India	82,800	2,170	35,200	23,300	70,300
Japan	2,260,000	945,000	163,000	120,000	687,000
Korea, Republic of	45,000	11,000	--	--	24,700
Mexico	6,070,000	2,220,000	349,000	541,000	2,100,000
Netherlands	10,300,000	4,410,000	803,000	677,000	5,180,000
Pakistan	--	--	--	36,800	75,600
Sweden	20,000	--	--	--	--
Switzerland	25,200	25,200	--	1,630	1,630
Taiwan	53,400	608	--	--	413
Thailand	9,740	--	--	--	9,620
United Kingdom	7,280,000	3,420,000	598,000	376,000	2,200,000
Vietnam	14,100	9,140	476	--	4,130
Other	9,420	3,980 ^r	50	698	3,290
Total	37,200,000	16,500,000	3,410,000	2,730,000	15,500,000

^rRevised. -- 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	2006		2007		
	January- December	January- May	April	May	January- May
Argentina	14,500	14,500	--	--	--
Australia	24,500	--	--	11,200	11,200
Brazil	37,700	37,300	--	--	--
Canada	1,760,000	996,000	70,800	47,700	310,000
Denmark	57	57	394	--	394
India	667	166	210	--	210
Japan	60	60	--	--	--
Mexico	143,000	106,000	9,800	8,560	19,100
Netherlands	14,000	--	36,100	11,100	145,000
Saudi Arabia	--	--	--	15,200	45,500
Singapore	1,630	--	--	--	--
South Africa	--	--	--	13,500	13,500
Switzerland	12,000	12,000	--	--	--
United Kingdom	--	--	--	--	24,900
Total	2,010,000	1,170,000	117,000	107,000	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 6
U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	January-December 2006			May 2007			January-May 2007		
	Gross weight	Contained molybdenum	Value ² (thousands)	Gross weight	Contained molybdenum	Value ² (thousands)	Gross weight	Contained molybdenum	Value ² (thousands)
Ore and concentrates roasted	9,570,000	5,900,000	\$167,000	927,000	582,000	\$17,100	3,490,000	2,200,000	\$63,200
Ore and concentrates other	10,900,000	5,000,000	227,000	1,320,000	677,000	41,200	9,880,000	4,710,000	245,000
Molybdenum chemicals:									
Oxides and hydroxides	629,000	NA	24,300	4,400	NA	48	91,700	NA	3,380
Molybdates of ammonium	1,430,000	844,000	34,100	40,900	23,000	1,150	377,000	213,000	11,700
Molybdates (all others)	241,000	72,700	2,810	2,770	1,150	51	79,100	26,100	1,060
Molybdenum orange	822,000	NA	5,110	56,500	NA	375	260,000	NA	1,600
Ferromolybdenum	4,810,000	3,060,000	165,000	312,000	202,000	12,700	2,100,000	1,340,000	79,900
Molybdenum powders	367,000	270,000	17,600	95	95	10	31,900	30,700	2,400
Molybdenum unwrought	191,000	191,000	10,800	15,200	15,200	928	42,700	42,600	2,740
Molybdenum waste and scrap	452,000	445,000	27,800	55,500	50,000	3,100	218,000	209,000	12,700
Molybdenum wire	18,600	NA	2,550	1,720	NA	243	7,750	NA	1,140
Molybdenum other	130,000	NA	17,000	8,980	NA	1,260	59,400	NA	6,570
Total	29,600,000	15,800,000	701,000	2,750,000	1,550,000	78,100	16,600,000	8,770,000	431,000

NA Not available.

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

²Customs value.

Source: U.S. Census Bureau.