

Mineral Industry Surveys

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MOLYBDENUM IN MAY 2007

Domestic production of molybdenum (Mo) in concentrate in May 2007 was about 9% more than the output of the previous month and about 4% less than that of May 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 5,310 t at the end of May.

According to Ryan's Notes (2007), the May monthly average price range for U.S. ferromolybdenum (FeMo) was from \$34.556 to \$35.278 per pound of molybdenum content, compared with \$31.188 to \$32.500 in April. European FeMo monthly averages ranged from \$73.111 to \$74.389 per kilogram (kg) of molybdenum content in May compared with \$70.625 to \$71.938 per kg in April. In May, worldwide molybdenum oxide (MoO₃) prices ranged from \$30.522 to \$31.411 per pound versus \$28.006 to \$28.500 per pound in April.

Adanac Molybdenum Corp. (Surrey, British Columbia, Canada), awarded contracts for secondary cone crushers and high-pressure grinding mills to complete equipment purchases

for the crushing and grinding circuit at its Ruby Creek Mine. Delivery times are 9 months and 1.5 years, respectively. Adanac has committed more than \$35 million to date for long lead-time items. Ruby Creek, a proposed open pit molybdenum mine in British Columbia, is projected to mine about 20,000 metric tons per day of ore for more than 20 years. The project was proceeding on schedule and was slated for commissioning by the end of 2008 (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 stocks of molybdenum material in April and May 2007. Export data for March and April 2007 and import data for April 2007 are also included.

References Cited

Platts Metals Week, 2007, Ruby Creek moly project gets crushers: Platts Metals Week, v. 78, no. 21, May 21, p. 17.
Ryan's Notes, 2007, [untitled]: Ryan's Notes, v. 13, no. 23, June 4, p. 10.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2006 ^P		2007		
	January- December	January- May ^r	April	May	January- May
Production	59,800	25,300	4,620	5,050	25,000
Shipments: ²					
Domestic	38,600	16,800	3,570	3,510	17,500
Export	21,300	8,700	1,290	1,290	7,300

^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- May	April ^r	May	January- May
Gross production	78,000	34,200	6,280	4,530	30,100
Internal consumption ²	47,400	21,300	3,390	1,810	16,800
Gross shipments	51,000	22,200	4,540	3,760	20,900

^PPreliminary. ^rRevised.

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

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
2007, April:						
Steel:						
Carbon	13,700	W	--	--	W	13,700
High-strength low-alloy	28,900	8,060	--	--	11,300	48,300
Stainless and heat-resisting	175,000	66,100	--	W	6,510	247,000
Full alloy	160,000	310,000	--	--	1,510	471,000
Tool	79,400	W	--	--	--	79,400
Total	457,000	384,000	--	W	19,400	860,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	67,600	W	--	W	75,300	143,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	222	4,440	--	--	--	4,660
Mill products made from metal powder ³	--	--	--	--	194,000	194,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	621	621
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	11,400	11,400
Other	1,090	30,700	72,700	79,600	16,800	201,000
Grand total	603,000	426,000	72,700	79,600	318,000	1,500,000
Stocks, April 30, 2007	539,000	305,000	2,680	26,500	847,000	1,720,000
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	307,000	2,890	34,800	847,000	1,760,000

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

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- April	March	April	January- April
Australia	88,800	7,350	--	--	--
Belgium	7,490,000	3,190,000	505,000	602,000	1,840,000
Brazil	113,000	16,900	53,900	--	90,800
Canada	2,680,000	1,060,000	361,000	386,000	1,200,000
Chile	259,000	68,800	522,000	479,000	1,000,000
China	405,000	389,000	11,800	--	47,800
India	82,800	2,170	--	35,200	46,900
Japan	2,260,000	695,000	131,000	163,000	568,000
Korea, Republic of	45,000	11,000	--	--	24,700
Mexico	6,070,000	1,700,000	373,000	349,000	1,560,000
Netherlands	10,300,000	3,550,000	571,000	803,000	4,510,000
Pakistan	--	--	--	--	38,800
Sweden	20,000	--	--	--	--
Switzerland	25,200	25,200	--	--	--
Taiwan	53,400	608	--	--	413
Thailand	9,740	--	--	--	9,620
United Kingdom	7,280,000	2,730,000	272,000	598,000	1,820,000
Vietnam	14,100	9,140	1,510	476	4,130
Other	9,420	3,980	1,090	50	2,590
Total	37,200,000	13,500,000	2,800,000	3,410,000	12,800,000

-- 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	2006		2007		
	January- December	January- April	March	April	January- April
Argentina	14,500	14,500	--	--	--
Australia	24,500	--	--	--	--
Brazil	37,700	37,300	--	--	--
Canada	1,760,000	504,000	67,500	70,800	262,000
Denmark	57	57	--	394	394
India	667	166	--	210	210
Japan	60	60	--	--	--
Mexico	143,000	67,100	--	9,800	10,600
Netherlands	14,000	--	97,500	36,100	134,000
Saudi Arabia	--	--	30,200	--	30,200
Singapore	1,630	--	--	--	--
Switzerland	12,000	12,000	--	--	--
United Kingdom	--	--	24,900	--	24,900
Total	2,010,000	636,000	220,000	117,000	462,000

-- 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			April 2007			January-April 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	613,000	384,000	\$12,700	2,560,000	1,620,000	\$46,100
Ore and concentrates other	10,900,000	5,000,000	227,000	1,920,000	893,000	47,000	8,560,000	4,030,000	204,000
Molybdenum chemicals:									
Oxides and hydroxides	629,000	NA	24,300	20,400	NA	876	87,300	NA	3,330
Molybdates of ammonium	1,430,000	844,000	34,100	119,000	67,200	3,620	337,000	190,000	10,500
Molybdates (all others)	241,000	72,700	2,810	26,700	10,300	319	76,300	24,900	1,010
Molybdenum orange	822,000	NA	5,110	52,300	NA	361	204,000	NA	1,220
Ferromolybdenum	4,810,000	3,060,000	165,000	475,000	308,000	20,100	1,790,000	1,140,000	67,200
Molybdenum powders	367,000	270,000	17,600	4,150	3,680	359	31,800	30,600	2,390
Molybdenum unwrought	191,000	191,000	10,800	10,100	10,000	695	27,500	27,400	1,810
Molybdenum waste and scrap	452,000	445,000	27,800	39,500	38,600	2,390	163,000	159,000	9,620
Molybdenum wire	18,600	NA	2,550	1,790	NA	249	6,030	NA	898
Molybdenum other	130,000	NA	17,000	12,400	NA	1,250	50,400	NA	5,310
Total	29,600,000	15,800,000	701,000	3,290,000	1,710,000	89,900	13,900,000	7,220,000	353,000

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.