

Mineral Industry Surveys

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MOLYBDENUM IN MARCH 2007

Domestic production of molybdenum in concentrate in March 2007 was about 16% more than the output of the previous month and about 2% less than that of March 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 5,340 t at the end of March.

According to Ryan's Notes (2007), the March monthly average price range for U.S. ferromolybdenum (FeMo) was from \$29.611 to \$30.500 per pound of molybdenum content, compared with \$28.313 to \$28.781 in February. European FeMo monthly averages ranged from \$75.667 to \$77.000 per kilogram (kg) of molybdenum content in March compared with \$62.463 to \$63.775 per kg in February. In March, worldwide molybdenum oxide (MoO₃) prices ranged from \$27.778 to \$28.522 per pound versus \$25.400 to \$25.875 per pound in February.

A senior representative from China's leading molybdenum producer, Jinduicheng Molybdenum Group, expected that only about one-half of the 54 molybdenum exporters currently

listed with China's Ministry of Commerce would be selected as potential exporters of molybdenum products. Producers would be required to have had a combined production of at least 3,000 t of integrated molybdenum oxide and FeMo products over the past 3 years, and exports of greater than 300 metric tons per year (t/yr). Traders who wished to be selected must demonstrate total exports of molybdenum oxide and FeMo greater than 600 t/yr (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 February and March 2007. Export data for January and February 2007 and import data for February 2007 are also included.

References Cited

Platts Metals Week, 2007, China's moly quotas system unlikely to affect prices—JDC: Platts Metals Week, v. 78, no. 14, April 2, p. 14-15.
Ryan's Notes, 2007, [untitled]: Ryan's Notes, v. 13, no. 14, April 2, p. 10.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2006 ^p		2007		
	January- December ^r	January- March ^r	February	March	January- March
Production	59,800	15,300	4,530	5,240	15,300
Shipments: ²					
Domestic	38,600	9,830	3,220	3,630	10,500
Export	21,300	5,540	1,290	1,320	4,720

^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- March	February	March	January- March
Gross production	78,000	20,800	6,640	6,400	19,300
Internal consumption ²	47,400	12,600	3,970	3,620	11,600
Gross shipments	51,000	13,700	3,720 ^r	4,080	12,600

^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	Molybdc oxides	Ferro molyb- denum ²	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2007, February:						
Steel:						
Carbon	14,000	W	--	--	W	14,000
High-strength low-alloy	33,400	7,520	--	--	11,300	52,300
Stainless and heat-resisting	162,000	63,100	--	W	6,510	232,000
Full alloy	156,000	270,000	--	--	1,510	427,000
Tool	62,200	W	--	--	--	62,200
Total	428,000	340,000	--	W	19,400	787,000
Cast irons (gray, malleable, and ductile iron)	W	7,770	--	--	763	8,530
Superalloys	83,200	W	--	W	90,400	174,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	235	4,710	--	--	--	4,950
Mill products made from metal powder ³	--	--	--	--	199,000	199,000
Cemented carbides and related products ⁴	--	--	--	--	6	6
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	613	613
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	34,200	72,700	58,600	16,800	183,000
Grand total	589,000	387,000	72,700	58,600	338,000	1,450,000
Stocks, February 28, 2007	553,000	315,000	2,720	22,000	848,000	1,740,000
2007, March:						
Steel:						
Carbon	14,300	W	--	--	W	14,300
High-strength low-alloy	39,800	8,950	--	--	11,300	60,000
Stainless and heat-resisting	171,000	63,800	--	W	6,510	242,000
Full alloy	158,000	293,000	--	--	1,510	453,000
Tool	82,500	W	--	--	--	82,500
Total	466,000	365,000	--	W	19,400	851,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	59,700	W	--	W	77,000	137,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	88	5,180	--	--	--	5,270
Mill products made from metal powder ³	--	--	--	--	207,000	207,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	820	820
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	11,300	11,300
Other	1,090	35,000	72,700	46,000	16,800	172,000
Grand total	605,000	413,000	72,700	46,000	333,000	1,470,000
Stocks, March 31, 2007	559,000	305,000	2,680	34,400	845,000	1,750,000

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- February	January	February	January- February
Australia	88,800	7,350	--	--	--
Belgium	7,490,000	1,140,000	380,000	351,000	732,000
Brazil	113,000	--	599	36,300	36,900
Canada	2,680,000	499,000	278,000	177,000	455,000
Chile	259,000	23,100	--	--	--
China	405,000	308,000	36,000	--	36,000
India	82,800	2,170	--	11,800	11,800
Japan	2,260,000	296,000	85,700	188,000	274,000
Korea, Republic of	45,000	--	1,090	23,600	24,700
Mexico	6,070,000	685,000	642,000	192,000	834,000
Netherlands	10,300,000	1,970,000	1,890,000	1,240,000	3,130,000
Pakistan	--	--	--	38,800	38,800
Sweden	20,000	--	--	--	--
Switzerland	25,200	--	--	--	--
Taiwan	53,400	--	--	413	413
Thailand	9,740	--	9,620	--	9,620
United Kingdom	7,280,000	1,100,000	439,000	513,000	953,000
Vietnam	14,100	9,140	2,140	--	2,140
Other	9,420 ^r	--	1,450 ^r	--	1,450
Total	37,200,000	6,040,000	3,770,000	2,780,000	6,540,000

^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- February	January	February	January- February
Argentina	14,500	--	--	--	--
Australia	24,500	--	--	--	--
Brazil	37,700	--	--	--	--
Canada	1,760,000	164,000	49,900	73,900	124,000
Denmark	57	--	--	--	--
India	667	166	--	--	--
Japan	60	--	--	--	--
Mexico	143,000	34,900	762	--	762
Netherlands	14,000	--	--	--	--
Singapore	1,630	--	--	--	--
Switzerland	12,000	12,000	--	--	--
Total	2,010,000	211,000	50,600	73,900	125,000

-- 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			February 2007			January-February 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	661,000	419,000	\$8,860	1,250,000	795,000	\$22,800
Ore and concentrates other	10,900,000	5,000,000	227,000	2,410,000	1,130,000	54,300	4,390,000	2,120,000	101,000
Molybdenum chemicals:									
Oxides and hydroxides	629,000	NA	24,300	21,700	NA	813	40,600	NA	1,570
Molybdates of ammonium	1,430,000	844,000	34,100	77,400	43,700	2,680	138,000	78,000	4,770
Molybdates (all others)	241,000	72,700	2,810	10,300	3,520	123	23,700	4,360	396
Molybdenum orange	822,000	NA	5,110	54,900	NA	309	100,000	NA	550
Ferromolybdenum	4,810,000	3,060,000	165,000	485,000	314,000	17,700	1,050,000	658,000	38,100
Molybdenum powders	367,000	270,000	17,600	2,330	2,330	249	18,700	18,700	1,520
Molybdenum unwrought	191,000	191,000	10,800	200	200	21	16,800	16,700	1,040
Molybdenum waste and scrap	452,000	445,000	27,800	17,900	17,700	1,130	75,300	73,200	4,320
Molybdenum wire	18,600	NA	2,550	1,430	NA	207	2,880	NA	425
Molybdenum other	130,000	NA	17,000	7,900	NA	938	26,800	NA	2,660
Total	29,600,000	15,800,000	701,000	3,750,000	1,930,000	87,400	7,140,000	3,760,000	179,000

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.