

Mineral Industry Surveys

For information, contact:

Michael J. Magyar, Molybdenum Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4964, Fax: (703) 648-7757
E-mail: mmagyar@usgs.gov

Lisa Mersdorf (Data)
Telephone: (703) 648-7941
Fax: (703) 648-7975
E-mail: lmersdorf@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

MOLYBDENUM IN AUGUST 2007

Domestic production of molybdenum (Mo) in concentrate in August 2007 was about 3% less than the output of the previous month and about 15% less than that of August 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 6,190 t at the end of August.

According to Ryan's Notes (2007b), the August monthly average price range for U.S. ferromolybdenum (FeMo) was \$34.567 to \$35.500 per pound of molybdenum content, compared with \$34.833 to \$35.833 in July. European FeMo monthly averages ranged from \$72.967 to \$74.244 per kilogram (kg) of molybdenum content in August compared with \$72.444 to \$73.167 per kg in July. In August, worldwide molybdenum oxide (MoO₃) prices ranged from \$31.422 to \$32.178 per pound versus \$31.633 to \$32.089 per pound in July.

Japan planned to eliminate the duty on FeMo imported from Chile, effective September 3, 2007, after ratification of the Economic Partnership Agreement between Chile and Japan.

Previously, Chile had been granted a preferred duty rate of 2.64% under Japan's Generalized System of Preferences. The move was expected to benefit Japanese FeMo consumers as Chinese FeMo exports were expected to decrease after imposition of export quotas and duties. Japanese FeMo imports from Chile rose to 570 t from 300 t while imports from China dropped to 680 t from 1,741 t in the first half of 2007 (Ryan's Notes, 2007a).

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 July and August 2007. Export data for June and July 2007 and import data for July 2007 are also included.

References Cited

Ryan's Notes, 2007a, Ferroalloy notes: Ryan's Notes, v. 13, no. 32, August 13, p. 6.
Ryan's Notes, 2007b, [untitled]: Ryan's Notes, v. 13, no. 35, September 3, p. 10.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS¹

(Metric tons, contained molybdenum)

	2006 ^p		2007		
	January- December	January- August	July	August	January- August
Production	59,800	41,000	4,850	4,690	39,600
Shipments: ²					
Domestic	38,600	27,200 ^r	3,160	3,200	27,100
Export	21,300	14,100 ^r	1,220	1,760	12,000

^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- August ^r	July ^r	August	January- August
Gross production	78,000	53,500	3,570	2,950	40,400
Internal consumption ²	47,400	33,400	932	935	20,500
Gross shipments	51,000	33,700	3,720	3,830	32,100

^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, July:						
Steel:						
Carbon	14,500	W	--	--	W	14,500
High-strength low-alloy	37,900	12,000	--	--	11,300	61,300
Stainless and heat-resisting	165,000	64,200	--	W	6,510	236,000
Full alloy	153,000	296,000 ^r	--	--	1,510	451,000
Tool	57,900	W	--	--	--	57,900
Total	429,000	372,000 ^r	--	W	19,400	821,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	47,500	W	--	W	71,200	119,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	--	2,380	--	--	--	2,380
Mill products made from metal powder ³	--	--	--	--	180,000 ^r	180,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	472	472
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	44,900	72,600	68,700	33,400	221,000
Grand total	555,000	426,000 ^r	72,600	68,700	316,000 ^r	1,440,000
Stocks, July 31, 2007	582,000	313,000 ^r	4,160	16,400	856,000	1,770,000
2007, August:						
Steel:						
Carbon	23,900	W	--	--	W	23,900
High-strength low-alloy	37,900	10,200	--	--	11,300	59,400
Stainless and heat-resisting	176,000	64,800	--	W	6,510	248,000
Full alloy	156,000	311,000	--	--	1,510	468,000
Tool	59,700	W	--	--	--	59,700
Total	453,000	386,000	--	W	19,400	859,000
Cast irons (gray, malleable, and ductile iron)	W	6,860	--	--	763	7,620
Superalloys	55,000	W	--	W	76,000	131,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	119	4,670	--	--	--	4,790
Mill products made from metal powder ³	--	--	--	--	180,000	180,000
Cemented carbides and related products ⁴	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	472	472
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	38,600	72,900	109,000	34,700	257,000
Grand total	587,000	436,000	72,900	109,000	322,000	1,530,000
Stocks, August 31, 2007	555,000	311,000	3,910	19,100	859,000	1,750,000

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

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes calcium molybdate.

⁴Includes ingot, wire, rod, and sheet.

⁵Includes 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- July	June	July	January- July
Australia	88,800	7,350	--	--	800
Belgium	7,490,000	4,480,000	495,000	654,000	3,730,000
Brazil	113,000	56,000	--	9,530	100,000
Canada	2,680,000	1,710,000	181,000	141,000	1,710,000
Chile	259,000	140,000	270,000	--	1,270,000
China	405,000	398,000	--	--	71,400
India	82,800	2,170	23,700	11,600	106,000
Japan	2,260,000	1,390,000	94,700	243,000	1,020,000
Korea, Republic of	45,000	11,000	--	--	24,700
Mexico	6,070,000	3,240,000	510,000	357,000	2,960,000
Netherlands	10,300,000	5,930,000	563,000	548,000	6,290,000
Pakistan	--	--	--	--	75,600
Sweden	20,000	--	--	--	--
Switzerland	25,200	25,200	--	--	1,630
Taiwan	53,400	608	--	--	413
Thailand	9,740	9,740	--	--	9,620
United Kingdom	7,280,000	4,600,000	406,000	324,000	2,930,000
Vietnam	14,100	11,400	--	--	4,130
Other	9,420	3,980	539	2,880	6,710
Total	37,200,000	22,000,000	2,540,000	2,290,000	20,300,000

-- 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- July	June	July	January- July
Argentina	14,500	14,500	--	--	--
Australia	24,500	24,100	--	--	11,200
Brazil	37,700	37,700	--	--	--
Canada	1,760,000	1,500,000	120,000	65,700	495,000
Denmark	57	57	--	--	394
India	667	367	207	--	417
Japan	60	60	--	--	--
Mexico	143,000	136,000	--	877	20,000
Netherlands	14,000	--	--	--	145,000
Saudi Arabia	--	--	--	--	45,500
Singapore	1,630	1,630	--	--	--
South Africa	--	--	--	--	13,500
Switzerland	12,000	12,000	--	--	--
United Kingdom	--	--	--	--	24,900
Total	2,010,000	1,730,000	120,000	66,600	756,000

-- 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			July 2007			January-July 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	729,000	459,000	\$13,200	4,960,000	3,120,000	\$88,500
Ore and concentrates other	10,900,000	5,000,000	227,000	770,000	338,000	18,900	11,200,000	5,320,000	277,000
Molybdenum chemicals:									
Oxides and hydroxides	629,000	NA	24,300	NA	NA	NA	118,000	NA	4,410
Molybdates of ammonium	1,430,000	844,000	34,100	136,000	76,800	4,840	614,000	346,000	19,800
Molybdates (all others)	241,000	72,700	2,810	3,930	1,380	55	121,000	42,600	1,520
Molybdenum orange	822,000	NA	5,110	46,400	NA	369	359,000	NA	2,260
Ferromolybdenum	4,810,000	3,060,000	165,000	888,000	571,000	39,900	3,690,000	2,360,000	151,000
Molybdenum powders	367,000	270,000	17,600	9,490	8,250	638	41,500	39,000	3,050
Molybdenum unwrought	191,000	191,000	10,800	25,100	25,100	1,680	90,900	90,700	5,830
Molybdenum waste and scrap	452,000	445,000	27,800	61,500	61,000	4,140	345,000	331,000	20,600
Molybdenum wire	18,600	NA	2,550	1,950	NA	263	11,200	NA	1,640
Molybdenum other	130,000	NA	17,000	10,900	NA	1,600	83,000	NA	10,300
Total	29,600,000	15,800,000	701,000	2,680,000	1,540,000	85,600	21,700,000	11,600,000	586,000

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.