

Mineral Industry Surveys

For information, contact:

Désirée E. Polyak, Molybdenum Commodity Specialist
 National Minerals Information Center
 U.S. Geological Survey
 989 National Center
 Reston, VA 20192
 Telephone: (703) 648-4909, Fax: (703) 648-7757
 Email: dpolyak@usgs.gov

Raymond I. Eldridge III (Data)
 Telephone: (703) 648-7982
 Fax: (703) 648-7975
 Email: reldridge@usgs.gov

Internet: <https://www.usgs.gov/centers/nmic>

MOLYBDENUM IN JUNE 2019

Domestic production of molybdenum in concentrate in June 2019 was 4% less than the output of the previous month and 7% more than that of June 2018 (fig. 1, table 1).

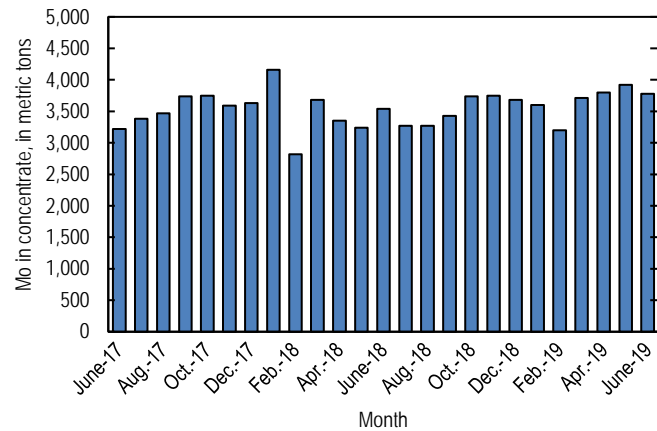


Figure 1. Monthly domestic production of molybdenum (Mo) in concentrate from June 2017 through June 2019 (may include revisions to previously published data).

According to CRU Group (2019), the June 2019 monthly average price range for U.S. ferromolybdenum (FeMo) was \$13.244 to \$13.613 per pound of molybdenum content, compared with \$13.200 to \$13.567 per pound in May 2019. FeMo monthly averages in Europe ranged from \$28.288 to \$28.788 per kilogram of molybdenum content in June 2019 compared with \$28.456 to \$28.956 per kilogram in May 2019. U.S. molybdenum oxide (MoO₃) prices ranged from \$12.438 to

\$12.850 per pound in June 2019 compared with \$12.400 to \$12.850 per pound in May 2019 (fig. 2).

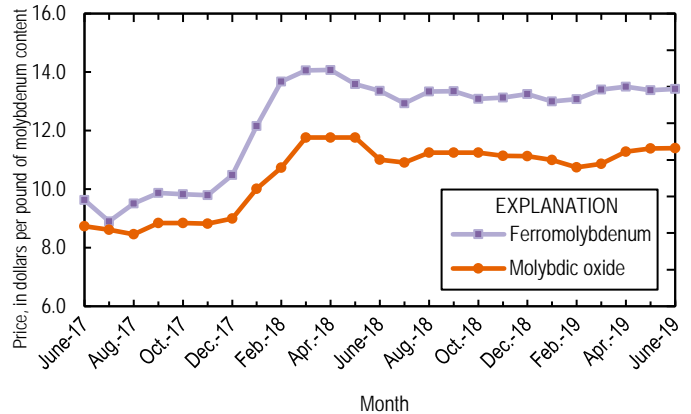


Figure 2. Average monthly prices for U.S. ferromolybdenum and molybdenic oxide from June 2017 through June 2019. Source: CRU Group.

Reference Cited

CRU Group, 2019, Molybdenum prices: CRU Group, June 28. (Accessed September 18, 2019, via <http://www.crugroup.com/>.)

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/nmic/minerals-information-publication-list-services>.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE
STATISTICS^{1,2}

(Metric tons, contained molybdenum)

Period	Production	Shipments ^{3,4}
2018:		
January	4,160	4,180
February	2,820	2,800
March	3,680	3,690
April	3,350	3,310
May	3,240	3,240
June	3,540	3,630
July	3,270	3,280
August	3,270	3,220
September	3,430	3,310
October	3,740	3,730
November	3,750	3,730
December	3,680	3,720
January–December	41,900	41,800
2019:		
January	3,600 ^r	3,590 ^r
February	3,200 ^r	3,170 ^r
March	3,710 ^r	3,750 ^r
April	3,800 ^r	3,800 ^r
May	3,920 ^r	3,930 ^r
June	3,780	3,790
January–June	22,000	22,000

^rRevised.

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

²Includes data from Freeport-McMoRan Copper & Gold Inc., 2018–2019. Adjusted by USGS to reflect estimated monthly data.

³As reported by producers.

⁴Shipments include sales to domestic customers, sales for export, and transfers to other company plants.

TABLE 2
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
2019:						
May:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	14,400	--	--	--	14,400
Stainless and heat-resisting	179,000	51,400	--	(3)	W	231,000
Full alloy	246,000	81,200	--	--	W	327,000
Tool	W	W	--	--	--	W
Total	425,000	147,000	--	(3)	W	572,000
Cast irons (gray, malleable, and ductile iron)	--	W	--	--	--	W
Superalloys	--	W	--	(3)	63,800	63,800
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	--	W	--	--	--	W
Mill products made from metal powder ⁴	--	--	--	--	W	W
Cemented carbides and related products ⁵	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	(3)	--	--	(3)
Catalysts	W	--	(3)	--	W	W
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	9,440	9,440
Other	189,000	53,200	425	(3)	334,000	577,000
Grand total	615,000	200,000	425	(3)	407,000	1,220,000
Stocks, May 31, 2019	529,000	317,000	2,720	(6)	(6)	1,730,000
June:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	14,400	--	--	--	14,400
Stainless and heat-resisting	183,000	47,900	--	(3)	W	231,000
Full alloy	246,000	81,200	--	--	W	327,000
Tool	W	W	--	--	--	W
Total	429,000	143,000	--	(3)	W	572,000
Cast irons (gray, malleable, and ductile iron)	--	W	--	--	--	W
Superalloys	--	W	--	(3)	62,600	62,600
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	--	W	--	--	--	W
Mill products made from metal powder ⁴	--	--	--	--	W	W
Cemented carbides and related products ⁵	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	(3)	--	--	(3)
Catalysts	W	--	(3)	--	W	W
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	9,440	9,440
Other	207,000	53,200	425	(3)	334,000	594,000
Grand total	636,000	197,000	425	(3)	406,000	1,240,000
Stocks, June 30, 2019	498,000	321,000	2,810	(6)	(6)	1,710,000

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. Includes U.S. Geological Survey estimates.

²Includes calcium molybdate.

³Withheld to avoid disclosing company proprietary data; included in "Other, Miscellaneous and unspecified uses: Other" category.

⁴Includes ingot, wire, rod, and sheet.

⁵Includes construction, mining, oil and gas, metalworking machinery.

⁶Withheld to avoid disclosing company proprietary data; included in "Total."

TABLE 3
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(including roasted concentrate), BY COUNTRY OR LOCALITY¹

(Kilograms, contained molybdenum)

Country or locality	2018			2019		
	January– December	June	January– June	May	June	January– June
Belgium	5,070,000	199,000	2,520,000	428,000	686,000	3,350,000
Brazil	27,400	2,200	2,200	1,910	1,070	14,400
Canada	1,390,000	56,300	738,000	96,400	73,800	510,000
Chile	1,410,000	74,800	427,000	--	--	218,000
China	1,030,000	35,000	625,000	18,000	3,720	222,000
Colombia	--	--	--	--	--	339
Germany	--	--	--	547	--	1,090
India	603,000	44,500	193,000	2,090	11,300	62,800
Israel	262	--	--	--	--	--
Japan	3,920,000	299,000	1,870,000 [†]	324,000	289,000	1,960,000
Korea, Republic of	538,000	--	171,000	244,000	154,000	1,210,000
Malaysia	227	--	--	--	--	--
Mexico	1,880,000	102,000 [†]	843,000	300,000	125,000	1,330,000
Netherlands	21,100,000	1,530,000 [†]	8,960,000 [†]	4,200,000	3,290,000	20,200,000
Russia	98,100	--	98,100	--	--	--
Sweden	123,000	--	--	--	--	--
Taiwan	--	--	--	--	--	23,300
Thailand	60,000	26,200	59,700 [†]	80,100	58,800	139,000
United Kingdom	6,710,000	403,000	3,180,000	648,000	162,000	3,320,000
Vietnam	848,000	98,400	553,000	31,100	39,300	162,000
Total	44,800,000	2,870,000 [†]	20,200,000	6,370,000	4,890,000	32,700,000

[†]Revised. -- Zero.

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

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY OR LOCALITY¹

(Kilograms, contained molybdenum)

Country or locality	2018			2019		
	January– December	June	January– June	May	June	January– June
Australia	2,530	--	1,650	--	--	871
Canada	426,000	56,100	230,000	7,260	11,100	50,300
China	--	--	--	--	--	1,210
Colombia	225	225	225	--	--	--
Denmark	837	--	837	472	--	903
Israel	249	--	--	--	--	--
Mexico	513,000	40,300	266,000	--	19,200	142,000
Total	943,000	96,600	499,000	7,730	30,300	196,000

-- Zero.

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

Source: U.S. Census Bureau.

U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	January–December 2018			2019					
	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	7,030,000	4,330,000	\$102,000	476,000	300,000	\$7,430	3,700,000	2,300,000	\$54,000
Ore and concentrates other	38,200,000	18,500,000	481,000	3,460,000	1,650,000	46,100	19,200,000	9,250,000	252,000
Molybdenum chemicals:									
Oxides and hydroxides	3,460,000	NA	69,500	644,000	NA	13,700	2,270,000	NA	47,700
Molybdates of ammonium	1,750,000	985,000	29,800	169,000	95,000	3,100	794,000	447,000	14,000
Molybdates (all others)	384,000	154,000	5,000	NA	NA	NA	80,000	31,700	1,130
Molybdenum orange	683,000	NA	2,630	14,900	NA	135	156,000	NA	818
Ferromolybdenum	11,900,000	8,010,000	223,000	861,000	575,000	17,000	6,280,000	4,220,000	120,000
Molybdenum powders	410,000	386,000	15,000	12,700	12,100	534	135,000	128,000	5,360
Molybdenum unwrought	722,000	721,000	21,000	39,100	38,900	1,220	272,000	271,000	8,390
Molybdenum waste and scrap	1,700,000	1,580,000	48,900	206,000	198,000	6,690	859,000	799,000	26,300
Molybdenum wire	31,100	NA	3,030	837	NA	165	9,410	NA	1,120
Molybdenum other	177,000	NA	17,500	16,800	NA	1,510	102,000	NA	9,020
Total	66,400,000	XX	1,020,000	XX	XX	XX	33,800,000	XX	540,000

NA Not available. XX Not applicable.

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

²Customs value.

Source: U.S. Census Bureau.