

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 FEBRUARY 2021

Domestic production of molybdenum in concentrate in February 2021 was 10% less than the output of the previous month and 6% less than that of February 2020 (fig. 1, table 1).

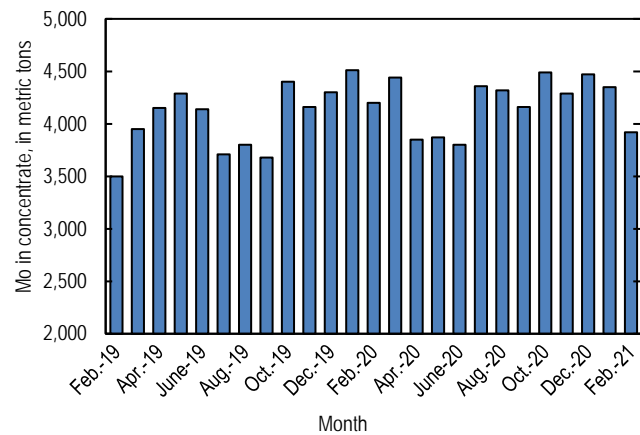


Figure 1. Monthly domestic production of molybdenum (Mo) in concentrate from February 2019 through February 2021 (may include revisions to previously published data).

According to CRU Group (2021), the February 2021 monthly average price range for U.S. ferromolybdenum (FeMo) was \$12.144 to \$12.719 per pound of molybdenum content, compared with \$11.106 to \$11.656 per pound in January 2021. FeMo monthly average prices in Europe ranged from \$27.425 to \$28.150 per kilogram (\$12.440 to \$12.769 per pound) of molybdenum content in February 2021 compared with \$24.250 to \$24.825 per kilogram (\$11.000 to \$11.260 per pound) in January 2021. U.S. molybdic oxide (MoO₃) prices ranged from

\$11.344 to \$11.950 per pound of molybdenum content in February 2021 compared with \$9.900 to \$10.150 per pound in January 2021 (fig. 2).

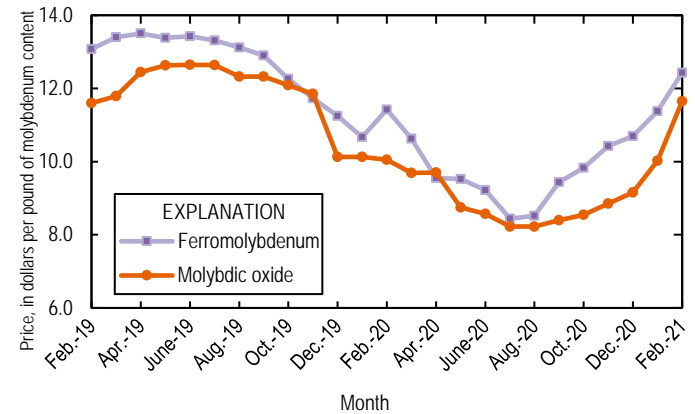


Figure 2. Average monthly prices for U.S. ferromolybdenum and molybdic oxide from February 2019 through February 2021. Source: CRU Group.

Reference Cited

CRU Group, 2021, Molybdenum prices: London, United Kingdom, CRU Group, May 3. (Accessed May 24, 2021, 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}
2020:		
January	4,510	4,480 ^r
February	4,200	4,220 ^r
March	4,440	4,440 ^r
April	3,850	3,840 ^r
May	3,870	3,880 ^r
June	3,800	3,800 ^r
July	4,360	4,360 ^r
August	4,320	4,300 ^r
September	4,160	4,190 ^r
October	4,490	4,480 ^r
November	4,290	4,300 ^r
December	4,470	4,480 ^r
January–December	50,800	50,800 ^r
2021:		
January	4,350	4,320
February	3,920	3,920
January–February	8,280	8,230

^rRevised.

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

²Includes data from Freeport-McMoRan Inc., 2020–2021. 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. CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS^{e,1}

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molybdenum ²	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
2021:						
January:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	9,000	--	--	--	9,000
Stainless and heat-resisting	151,000	48,000	--	(3)	W	199,000
Full alloy	246,000	77,000	--	--	W	323,000
Tool	W	W	--	--	--	W
Total	397,000	134,000	--	(3)	W	531,000
Cast irons (gray, malleable, and ductile iron)	--	W	--	--	--	W
Superalloys	--	--	--	(3)	63,000	63,000
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	200	W	--	--	--	200
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	--	--	--	--	9,000	9,000
Other	180,000	60,000	400	(3)	290,000	530,000
Grand total	577,000	194,000	400	(3)	362,000	1,130,000
Stocks, January 31, 2021	491,000	650,000	3,000	(6)	(6)	1,900,000
February:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	9,000	--	--	--	9,000
Stainless and heat-resisting	150,000	46,000	--	(3)	W	196,000
Full alloy	245,000	76,000	--	--	W	321,000
Tool	W	W	--	--	--	W
Total	395,000	131,000	--	(3)	W	526,000
Cast irons (gray, malleable, and ductile iron)	--	W	--	--	--	W
Superalloys	--	--	--	(3)	62,000	62,000
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	200	W	--	--	--	200
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	--	--	--	--	8,200	8,200
Other	190,000	58,000	400	(3)	290,000	538,000
Grand total	585,000	189,000	400	(3)	360,000	1,130,000
Stocks, February 28, 2021	492,000	580,000	2,900	(6)	(6)	1,800,000

^eEstimated. 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, and 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	2020			2021		
	January– December	February	January– February	January	February	January– February
Belgium	9,540,000	1,020,000	1,940,000	578,000	1,210,000	1,780,000
Brazil	25,600	1,420	1,420	--	--	--
Cambodia	1,440	1,440	1,440	--	--	--
Canada	1,130,000	152,000	325,000	67,000	55,800	123,000
Chile	2,080,000	--	--	267,000	--	267,000
China	3,520,000	--	1,700	114,000	495,000	610,000
Estonia	305,000	147,000	147,000	--	--	--
Germany	285	--	--	--	--	--
India	915,000	22,100	73,500	85,000	93,200	178,000
Japan	3,030,000	247,000	563,000	234,000	345,000	579,000
Korea, Republic of	4,880,000	286,000	797,000	239,000	212,000	451,000
Mexico	4,250,000	463,000	1,080,000	460,000	861,000	1,320,000
Netherlands	24,600,000	1,610,000	2,830,000	4,070,000	1,700,000	5,780,000
South Africa	300	--	--	--	1,110	1,110
Thailand	714,000	250,000	323,000	--	--	--
Turkey	1,400	--	363	--	--	--
United Kingdom	5,100,000	684,000	1,010,000	181,000	489,000	670,000
Vietnam	381,000	10,100	36,100	12,900	9,250	22,200
Total	60,400,000	4,890,000	9,120,000	6,310,000	5,470,000	11,800,000

-- Zero.

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

Source: U.S. Census Bureau.

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

(Kilograms, contained molybdenum)

Country or locality	2020			2021		
	January– December	February	January– February	January	February	January– February
Australia	1,070	--	697	--	620	620
Canada	381,000	32,200	65,400	21,400	11,500	32,900
Denmark	948	--	474	474	--	474
Mexico	170,000	--	22,000	226	20,200	20,500
Total	554,000	32,200	88,600	22,100	32,300	54,400

-- 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. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	January–December 2020			2021					
	Gross weight	Contained molybdenum	Value ² (thousands)	February			January–February		
				Gross weight	Contained molybdenum	Value ² (thousands)	Gross weight	Contained molybdenum	Value ² (thousands)
Ore and concentrates, roasted	7,310,000	4,490,000	\$81,900	665,000	418,000	\$8,650	1,150,000	731,000	\$14,600
Ore and concentrates, other	22,300,000	10,600,000	210,000	180,000	79,800	1,890	2,530,000	1,250,000	22,700
Molybdenum chemicals:									
Oxides and hydroxides	3,450,000	NA	54,100	338,000	NA	5,820	637,000	NA	10,600
Molybdates of ammonium	947,000	533,000	12,900	178,000	100,000	2,580	301,000	170,000	4,330
Molybdates (all others)	109,000	44,500	1,120	12,200	4,850	137	34,400	13,600	353
Molybdenum orange	138,000	NA	1,270	5,200	NA	32	9,620	NA	61
Ferromolybdenum	6,820,000	4,630,000	99,400	1,160,000	802,000	19,000	2,140,000	1,490,000	34,400
Molybdenum powders	201,000	184,000	6,830	14,700	14,700	525	24,400	24,300	670
Molybdenum unwrought	415,000	413,000	11,900	3,260	3,230	77	34,400	34,000	842
Molybdenum waste and scrap	1,130,000	1,100,000	31,000	78,300	77,900	2,010	158,000	157,000	3,730
Molybdenum wire	16,500	NA	1,620	1,380	NA	245	3,150	NA	393
Molybdenum other	174,000	NA	14,900	10,900	NA	964	24,300	NA	2,190
Total	43,000,000	XX	527,000	2,650,000	XX	41,900	7,050,000	XX	94,900

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.