

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

MOLYBDENUM IN NOVEMBER 2018

Domestic production of molybdenum in concentrate in November 2018 was slightly less than the output of the previous month and 4% more than that of November 2017 (fig. 1, table 1).

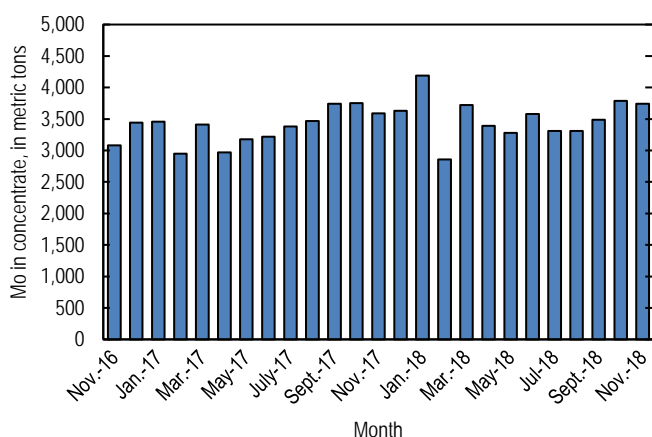


Figure 1. Monthly domestic production of molybdenum (Mo) in concentrate from November 2016 through November 2018 (may include revisions to previously published data).

According to CRU Group (2019), the November 2018 monthly average price range for U.S. ferromolybdenum (FeMo) was \$12.950 to \$13.300 per pound of molybdenum content, compared with \$12.983 to \$13.189 per pound in October 2018. FeMo monthly averages in Europe ranged from \$28.667 to \$29.278 per kilogram of molybdenum content in November 2018 compared with \$28.800 to \$29.500 per kilogram in October 2018. U.S. molybdenum oxide (MoO_3) prices ranged

from \$12.128 to \$12.328 per pound in November 2018 compared with \$12.150 to \$12.650 per pound in October 2018 (fig. 2).

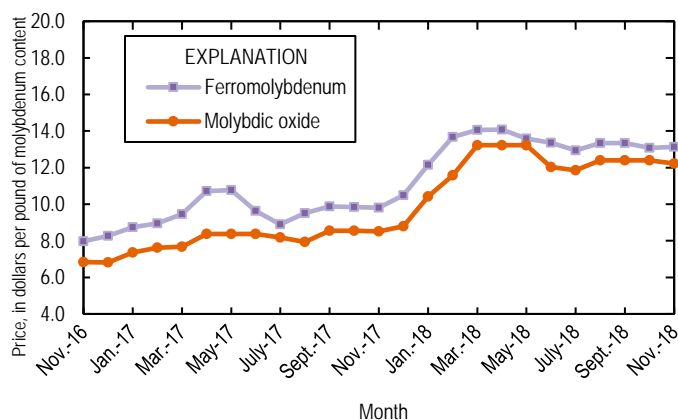


Figure 2. Average monthly prices for U.S. ferromolybdenum and molybdenic oxide from November 2016 through November 2018. Source: CRU Group.

Reference Cited

CRU Group, 2019, Molybdenum prices: CRU Group, February 1. (Accessed February 19, 2018, 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 <http://minerals.usgs.gov/minerals/>.

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

(Metric tons, contained molybdenum)

Period	Production	Shipments ^{3,4}
2017:		
January	3,460	3,410
February	2,950	2,920
March	3,410	3,450
April	2,970	2,930
May	3,180	3,250
June	3,220	3,220
July	3,380	3,320
August	3,470	3,490
September	3,740	3,780
October	3,750	3,710
November	3,590	3,620
December	3,630	3,620
January–December	40,700	40,700
2018:		
January	4,190	4,220
February	2,860	2,840
March	3,720	3,730
April	3,390	3,350
May	3,280	3,280
June	3,580	3,670
July	3,310	3,320
August	3,310	3,250
September	3,490	3,380
October	3,790 ^r	3,780 ^r
November	3,740	3,710
January–November	38,600	38,500

^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., 2017–2018. 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	Molybdic oxides	Ferro molybdenum ²	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
October:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	14,400	--	--	--	14,400
Stainless and heat-resisting	173,000	48,800	--	(3)	W	222,000
Full alloy	246,000	77,200 ^r	--	--	W	323,000 ^r
Tool	W	W	--	--	--	W
Total	419,000	140,000 ^r	--	(3)	W	560,000 ^r
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	--	W
Superalloys	W	W	--	(3)	68,900	68,900
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	194	W	--	--	--	194
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	204,000	56,800	425	(3)	335,000	596,000
Grand total	623,000	197,000 ^r	425	(3)	413,000	1,230,000
Stocks, October 31, 2018	573,000	272,000 ^r	3,340	(6)	(6)	1,730,000 ^r
November:						
Steel:						
Carbon	W	W	--	--	--	W
High-strength low-alloy	W	14,400	--	--	--	14,400
Stainless and heat-resisting	188,000	47,800	--	(3)	W	236,000
Full alloy	246,000	76,900	--	--	W	323,000
Tool	W	W	--	--	--	W
Total	434,000	139,000	--	(3)	W	573,000
Cast irons (gray, malleable, and ductile iron)	W	W	--	--	--	W
Superalloys	W	W	--	(3)	72,300	72,300
Alloys: (other than steels, cast irons, and superalloys)						
Other alloys	285	W	--	--	--	285
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	214,000	58,500	425	(3)	343,000	616,000
Grand total	648,000	198,000	425	(3)	424,000	1,270,000
Stocks, November 30, 2018	556,000	294,000	3,430	(6)	(6)	1,740,000

^rRevised.

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	2017			2018		
	January– December	November	January– November	October	November	January– November
Belgium	5,350,000	680,000	4,970,000	757,000	305,000	4,580,000
Brazil	39,400	--	31,800	792	--	27,400
Canada	1,570,000	86,000	1,480,000	127,000	92,400	1,270,000
Chile	1,550,000	129,000	1,360,000	68,300	221,000	1,150,000
China	4,950,000	616,000	4,750,000	45,500	18,000	1,010,000
Estonia	19,500	--	--	--	--	--
Germany	166	166	166	--	--	--
India	199,000	22,800	130,000	74,200	45,100	510,000
Israel	--	--	--	--	--	262
Japan	2,860,000	153,000	2,560,000	369,000	312,000	3,600,000
Korea, Republic of	876,000	58,900	842,000	70,400	34,100	474,000
Malaysia	--	--	--	--	--	227
Mexico	704,000	8,150	576,000	255,000	339,000	1,800,000
Netherlands	14,000,000	1,050,000	13,300,000	2,300,000	1,990,000	18,400,000
Russia	--	--	--	--	--	98,100
Sweden	1,720	--	1,720	63,300	60,000	123,000
Taiwan	10,300	--	10,300	--	--	--
Thailand	74,500	25,200	74,500	--	--	37,100
Turkey	1,060	--	1,060	--	--	--
United Kingdom	7,220,000	506,000	6,530,000	513,000	414,000	6,260,000
Vietnam	393,000	35,800	309,000	65,200	8,520	779,000
Total	39,800,000	3,370,000	36,900,000	4,710,000	3,840,000	40,100,000

-- 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	2017			2018		
	January– December	November	January– November	October	November	January– November
Australia	1,320	--	1,320 ^r	--	--	2,530
Canada	586,000	55,800 ^r	562,000 ^r	27,800	3,480	367,000
Colombia	200	--	200 ^r	--	--	225
Denmark	710	--	465 ^r	--	--	837
Israel	--	--	--	249	--	249
Mexico	39,500	--	24,500 ^r	--	2,000	513,000
Total	628,000	55,800 ^r	588,000 ^r	28,000	5,480	884,000

^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. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS¹

(Kilograms, unless otherwise specified)

Material	2017			2018					
	January–December			November			January - November		
	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	11,100,000	6,630,000	\$116,000	462,000	286,000	\$6,290	6,620,000	4,080,000	\$95,500
Ore and concentrates other	36,000,000	17,600,000	297,000	3,230,000	1,560,000	42,700	34,100,000	16,600,000	428,000
Molybdenum chemicals:									
Oxides and hydroxides	2,920,000	NA	42,700	198,000	NA	4,030	3,150,000	NA	63,000
Molybdates of ammonium	2,530,000	1,430,000	32,700	164,000	92,000	2,920	1,600,000	902,000	27,500
Molybdates (all others)	302,000	119,000	2,980	20,100	7,960	253	353,000	141,000	4,630
Molybdenum orange	840,000	NA	3,370	31,600	NA	181	672,000	NA	2,540
Ferromolybdenum	7,590,000	5,130,000	112,000	1,120,000	757,000	21,600	10,900,000	7,360,000	204,000
Molybdenum powders	368,000	350,000	10,400	24,700	23,100	997	376,000	357,000	13,700
Molybdenum unwrought	987,000	985,000	20,700	12,900	12,900	437	627,000	625,000	17,900
Molybdenum waste and scrap	1,150,000	1,120,000	23,700	124,000	101,000	3,500	1,620,000	1,520,000	47,000
Molybdenum wire	25,600 ^r	NA	2,600 ^r	4,100	NA	408	28,400	NA	2,700
Molybdenum other	233,000	NA	15,300	20,000	NA	2,050	164,000	NA	17,200
Total	64,000,000	XX	680,000	5,410,000	XX	85,400	60,300,000	XX	924,000

^rRevised. 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.