

Mineral Industry Surveys

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MOLYBDENUM IN AUGUST 2023

Domestic production of molybdenum in concentrate in August 2023 was 3% less than the output in the previous month and 9% more than the output in August 2022 (fig. 1, table 1).

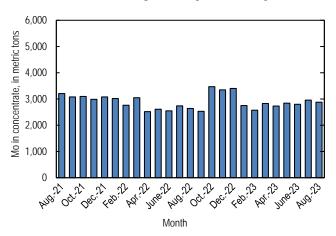


Figure 1. Monthly domestic production of molybdenum (Mo) in concentrate from August 2021 through August 2023 (may include revisions to previously published data).

Prices

According to CRU Group, the monthly average price range for U.S. ferromolybdenum (FeMo) was \$25.400 to \$26.400 per pound of molybdenum content in August 2023 compared with \$24.000 to \$25.000 per pound in July 2023. FeMo monthly average prices in Europe ranged from \$54.000 to \$55.200 per kilogram (\$24.494 to \$25.038 per pound) of molybdenum content in August 2023 compared with \$50.000 to \$52.000 per kilogram (\$22.680 to \$23.587 per pound) in July 2023. U.S. molybdic oxide (MoO₃) prices ranged from \$22.425 to \$23.425 per pound of molybdenum content in August 2023 compared with \$21.625 to \$22.625 per pound of molybdenum content in July 2023 (fig. 2).

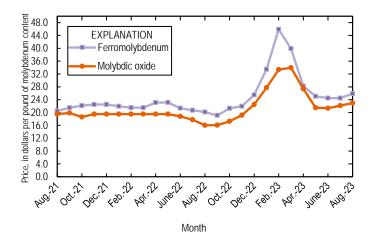


Figure 2. Average monthly prices for U.S. ferromolybdenum and molybdic oxide from August 2021 through August 2023. Source: CRU Group.

Industry News

China's molybdenum concentrate imports increased by 44% to 18,500 metric tons (t) in the first six months of 2023 compared with 12,900 t during the same period in 2022. China imported 3,530 t of roasted molybdenum concentrate and 15,000 t of unroasted molybdenum concentrates in the first six months of 2023 (Argus Media group—Metal Pages, 2023).

Reference Cited

Argus Media group—Metal Pages, 2023, China's January-June Mo concentrate imports rise: Argus Media group—Metal Pages, August 11, 1 p. (Accessed October 10, 2023, via www.argustmedia.com/.)

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

(Metric tons, molybdenum content)

Period	Production	Shipments ^{3, 4}	
2022:			
January	3,020	3,100	
February	2,760	2,760	
March	3,050	3,080	
April	2,520	2,540	
May	2,610	2,620	
June	2,550	2,530	
July	2,740	2,700	
August	2,640	2,680	
September	2,530	2,550	
October	3,470	3,390	
November	3,350	3,360	
December	3,400	3,350	
January-December	34,600	34,700	
2023:			
January	2,750	2,610	
February	2,570	2,570	
March	2,830	2,900	
April	2,730	2,720	
May	2,840	2,860	
June	2,800	2,790	
July	2,960	2,930	
August	2,880	2,910	
January-August	22,400	22,300	

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

 $^{^2 \}rm Includes$ annual or quarterly published data from Freeport-McMoran Inc. (2022–2023) that has been adjusted by USGS to reflect estimated

³As reported by producers.

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

 $TABLE\ 2$ U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES (including roasted concentrate), BY COUNTRY OR LOCALITY 1

(Kilograms, molybdenum content)

	2022			2023			
	January-		January-			January– August	
Country or locality	December	August	August	July	August		
Argentina	87,000		87,000				
Belgium	2,130,000	117,000	1,440,000 ^r	72,000	75,800	372,000	
Brazil	229,000	12,400	101,000	12,800	33,900	210,000	
Cambodia	5,000		5,000				
Canada	408,000	56,500	286,000	62,900	70,000	642,000	
Chile	98,400		98,400	190,000	85,700	914,000	
China	402,000		19,100	195,000	600,000	1,060,000	
France					3,640	3,640	
Germany	5,700		5,700				
Hong Kong	1,680		1,680				
India	499,000	55,400	316,000 ^r	23,100	11,900	227,000	
Italy	114						
Japan	3,460,000	323,000 ^r	2,450,000 ^r	266,000	237,000	2,260,000	
Korea, Republic of	681,000	55,300	469,000	118,000		509,000	
Latvia	1,140		1,140				
Mexico	1,970,000	204,000	1,270,000			92,900	
Netherlands	28,300,000	1,380,000	19,600,000 ^r	2,070,000	1,490,000	19,000,000	
Singapore				11,000		55,000	
South Africa	11,800					330	
Taiwan	3,400	851	3,400				
Thailand	12,400		7,060			14,900	
United Kingdom	6,740,000	962,000	5,260,000	254,000	1,090,000	5,210,000	
Vietnam	1,130,000	71,700	553,000 ^r	56,900	10,900	649,000	
Total	46,200,000	3,230,000 ^r	31,900,000 ^r	3,330,000	3,710,000	31,200,000	

Revised -- Zero

Source: U.S. Census Bureau.

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

 $\label{eq:table 3} \textbf{U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY OR LOCALITY}^1$

(Kilograms, molybdenum content)

		2022		2023			
	January– January–		January-		January-		
Country or locality	December	August	August	July	August	August	
Argentina	547		462				
Australia	2,560	852	2,560		111	1,170	
Canada	93,400	2,650 ^r	87,300 ^r	27,200	4,270	138,000	
Denmark	880		880			1,060	
India						17,700	
Mexico	92,600	40,000	71,500		226	104,000	
Total	190,000	43,500 ^r	163,000 ^r	27,200	4,600	261,000	

^rRevised. -- Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $\label{eq:table 4} \textbf{U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS}^1$

(Kilograms, unless otherwise specified)

	2022 January–December			2023					
				August			January–August		
	Gross	Molybdenum	Value ²	Gross	Molybdenum	Value ²	Gross	Molybdenum	Value ²
Material	weight	content	(thousands)	weight	content	(thousands)	weight	content	(thousands)
Ore and concentrates, roasted	3,240,000	2,000,000	\$74,600	235,000	149,000	\$8,020	1,530,000	960,000	\$55,700
Ore and concentrates, other	28,800,000	13,700,000	511,000	2,620,000	1,310,000	56,500	20,700,000	10,200,000	534,000
Molybdenum chemicals:	_								
Oxides and hydroxides	3,660,000	NA	106,000	274,000	NA	9,820	3,510,000	NA	142,000
Molybdates of ammonium	1,360,000	773,000	33,700	69,100	38,900	2,110	1,110,000	624,000	37,500
Molybdates (all others)	360,000	144,000	5,980	20,100	7,960	424	164,000	64,900	3,270
Molybdenum orange	174,000	NA	1,260	3,970	NA	36	200,000	NA	1,150
Ferromolybdenum	10,600,000	7,260,000	311,000	759,000	514,000	26,300	7,460,000	5,120,000	272,000
Molybdenum powders	238,000	232,000	13,400	8,100	8,020	519	44,900	41,200	3,480
Molybdenum unwrought	318,000	317,000	14,300	96,800	96,700	5,930	426,000	424,000	26,400
Molybdenum waste and scrap	1,910,000	1,540,000	68,000	204,000	190,000	12,300	1,290,000	1,160,000	72,600
Molybdenum wire	15,800	NA	1,950	459	NA	97	13,200	NA	1,930
Molybdenum other	192,000	NA	24,700	24,900	NA	3,960	178,000	NA	26,500
Total	50,900,000	XX	1,160,000	4,320,000	XX	126,000	36,600,000	XX	1,180,000

NA Not available. XX Not applicable.

Source: U.S. Census Bureau.

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

²Customs value.