

Mineral Industry Surveys

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TUNGSTEN IN NOVEMBER 2022

U.S. reported consumption of tungsten concentrate, net production of intermediate tungsten products, including metal powder and tungsten carbide powder, and industry stocks of tungsten materials were withheld to avoid disclosing company proprietary data.

On November 30, 2022, the U.S. Government stockpile inventory of tungsten concentrates held by DLA Strategic Materials was unchanged from that on October 31, 2022 (table 1).

The amount of tungsten contained in U.S. imports of selected materials in January through November 2022 was 17% more than that imported during the same period in 2021 (table 2). The amount of tungsten contained in U.S. exports of selected materials in January through November 2022 was essentially unchanged from that exported during the same period in 2021 (table 3).

Prices

The following tungsten price comparisons are U.S. Geological Survey calculations based on Argus Metals

International prices. The November 2022 monthly average price for tungsten concentrate, ex works China, decreased slightly from that in October 2022 and was 11% lower than that in November 2021. The November 2022 monthly average price for ammonium paratungstate, European Union market, was unchanged from that in October 2022 and was 5% higher than that in November 2021 (fig. 1).

Industry News

EQ Resources Ltd. (Australia) announced the results of an updated bankable feasibility study on its Mt. Carbine expansion project in Far North Queensland, Australia. The company reported a 29% increase in open pit ore reserves, which when combined with reserves of low-grade stockpiled ore, resulted in a total probable reserve of 15,200 metric tons (t) of tungsten. Based on this new reserve estimate, the project life was increased from 12 years to 14 years and the production forecast was increased by 16% to 31,000 t gross weight of concentrate. The concentrates would have a minimum of 50% tungsten trioxide, which would indicate a minimum production of 12,300

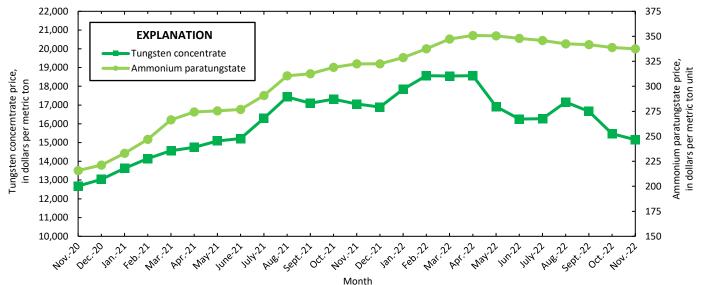


Figure 1. Monthly average prices for tungsten concentrate and ammonium paratungstate for November 2020 through November 2022. Source: Argus Metals International.

t of tungsten in concentrate during the life of the operation. EQ Resources has been producing tungsten concentrates from tailings and low-grade ore stockpiles generated during previous operations at the site since late 2019. In 2023, the company expected to begin production from freshly mined ore, supplemented by low-grade stockpiled ore. In 2026, production was expected to reach a maximum of 5,740 t of concentrate (containing a minimum of 2,300 t of tungsten, based on a minimum 50% tungsten trioxide content), after which EQ Resources would process only low-grade stockpiled ore for the remaining 10 years of the operation (EQ Resources Ltd., 2022, p. 10, 13–14, 21, 36–37, 83).

Reference Cited

EQ Resources Ltd., 2022, Mt Carbine bankable feasibility study—2022 economic update: Bowen Hills, Queensland, Australia, EQ Resources Ltd., November 2022, 89 p. (Accessed January 12, 2023, at https://www.eqresources.com.au/site/pdf/250ad375-c292-43d0-ae38b8d474e69569/Strong-BFS-Update-Delivers-59-Increase-in-NPV.pdf.)

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TABLE 1 U.S. SALIENT TUNGSTEN STATISTICS¹

		Conce	ntrate	Intermediate products			
	Reported	Imports	Stocks, e	end of period		Stocks, end of period	
	consump-	for		U.S.	Net		U.S.
Period	tion	consumption	Industry ²	Government ³	production ⁴	Industry ⁵	Government ³
2021:					•		
November	W	176	W	6,660	W	W	-
December	W	252	W	6,570	W	W	-
January-December	W	1,590	W	6,570	W	W	-
2022:							
January	W	125	W	6,570	W	W	-
February	W	82	W	6,390	W	W	-
March	W	96	W	6,300	W	W	-
April	W	181	W	6,170	W	W	-
May	W	256	W	6,080	W	W	-
June	W	156	W	6,080	W	W	-
July	W	224	W	6,080	W	W	-
August	W	134	W	6,000	W	W	-
September	W	245	W	6,000	W	W	-
October	W	202	W	6,000	W	W	-
November	W	197	W	5,970	W	W	-
January-November	W	1,900	W	5,970	W	W	-

(Metric tons, tungsten content)

W Withheld to avoid disclosing company proprietary data. --Zero.

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

²Consumer stocks.

³Data from the Defense Logistics Agency Strategic Materials.

⁴Net production of tungsten metal powder and tungsten carbide powder.

⁵Producer stocks of tungsten metal powder and tungsten carbide powder.

TABLE 2 U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY OR LOCALITY $^{\rm 1}$

(Metric tons, tungsten content)

	Ores and				Tungsten			Total,
Period and country or locality	concen-	Ammonium	Ferro-	Metal	carbide			year to
of origin	trates	tungstates	tungsten	powder	powder	Other ²	Total	date
2021:				-				
January-November	1,340	950	26	1,220	1,740	3,080	8,350 ^r	XX
January-December	1,590	1,040	26	1,290	1,900	3,360	9,200	XX
2022:	-							
September	245	38	15	237	134	286	956	7,710
October	202	207		195	136	373	1,110	8,830
November:								
Australia						(3)	(3)	23
Austria				2	74	2	77	941
Bolivia	57						57	1,060
Canada				47	20	1	68	714
China	(3)	76		65	100	110	351	2,910
Czechia				12		(3)	12	114
Estonia								-
France					(3)	1	1	22
Germany		46		(3)		27	73	731
India						22	22	118
Israel				8	5	(3)	12	105
Japan	(3)			3		8	11	169
Korea, Republic of				7		3	10	266
Mongolia	23						23	34
Philippines						15	15	71
Portugal	42						42	287
Russia	33						33	272
Spain	32					(3)	32	99
Taiwan						52	52	499
Thailand	10						10	114
United Kingdom						(3)	(3)	35
Vietnam			5			51	55	1,180
Other						2	2	20
Total	197	122	5	144	199	293	959	9,780
January-November	1,900	1,020	49	1,770	1,860	3,180	9,780	XX

^rRevised. XX Not applicable. -- Zero.

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

²Includes other unwrought tungsten, wrought tungsten, calcium and other tungstates, tungsten oxides, tungsten chlorides, other tungsten compounds, ash and residues containing mainly tungsten, and other mixtures of inorganic compounds containing tungsten. Tungsten content ³Less than ½ unit.

Note: Imports of waste and scrap in November 2022 totaled 271 metric tons, tungsten content, to give a January-November total of 3,220 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 3 U.S. EXPORTS OF TUNGSTEN, BY COUNTRY OR LOCALITY¹

(Metric tons,	tungsten	content)
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	Ores and			Tungsten		Total,	
Period and country or locality	concen-	Ammonium	Metal	carbide			year to
of destination	trates ²	Tungstates	powder ²	powder	Other ³	Total	date
2021:	_						
January–November	397	101	478	391 ^r	819 ^r	2,190 r	XX
January–December	441	116	550	422	892	2,420	XX
2022:	_						
September			54	37	29	120	1,840
October	25	1	57	35	30	148	1,980
November:							
Australia			1	(4)	(4)	1	37
Austria			(4)		11	11	55
Belgium			(4)	3		3	15
Brazil			1	(4)	(4)	2	11
Canada			67	17	2	87	794
Chile			(4)			(4)	5
China			2		(4)	2	115
Costa Rica				(4)	5	5	31
Czechia				1	(4)	1	11
Denmark				1	(4)	1	5
France			2		(4)	2	14
Germany			(4)	4	1	5	152
India					1	1	23
Indonesia				1		1	8
Israel				3	1	4	27
Japan			(4)	3	(4)	3	46
Korea, Republic of			(4)		(4)	(4)	17
Malaysia					(4)	(4)	8
Mexico			1	1	9	11	125
Netherlands	-		(4)		(4)	(4)	89
Philippines					(4)	(4)	10
Saudi Arabia	-			3	1	4	7
Singapore				(4)	(4)	(4)	7
Spain	- 						6
United Kingdom			(4)	2	(4)	2	30
Vietnam	38					38	477
Other			1	1	1	3	45
Total	38		78	39	32	187	2,170
January–November	537	8	729	465	433	2,170	2,170 XX

^rRevised. XX Not applicable. -- Zero.

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

²Tungsten content estimated from reported gross weight.

³Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

⁴Less than ¹/₂ unit.

Note: Exports of waste and scrap in November 2022 totaled 14 metric tons, tungsten content, to give a January–November total of 1,870 metric tons, tungsten content.

Source: U.S. Census Bureau.