

Mineral Industry Surveys

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TUNGSTEN IN FEBRUARY 2012

The following comparisons are based on preliminary data. U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was 23% less during January through February 2012 than net production during the same period in 2011.

Total U.S. reported consumption of ferrotungsten, tungsten metal powder, tungsten carbide powder, tungsten scrap, and other tungsten materials in January through February 2012 was 5% less than that consumed during the same period in 2011. These materials were used to make alloys, cemented carbides, mill products, and other products, such as catalysts and pigments.

Data for U.S. imports and exports of tungsten for February 2012 are published in this issue.

Prices

Selected prices from Metal Bulletin for February 2012 are listed below. U.S. ammonium paratungstate prices in dollars per

metric ton unit were converted from short-ton-unit prices and rounded to the nearest dollar. Prices for tungsten ore concentrates represent combined prices for wolframite and scheelite concentrates with a minimum tungsten trioxide (WO₃) content of 65%. Concentrate prices in dollars per short ton unit were converted from metric-ton-unit prices and rounded to the nearest dollar.

Ammonium paratungstate, U.S. free market:

Low—\$430/metric ton unit WO₃ (\$390/short ton unit WO₃)
High—\$441/metric ton unit WO₃ (\$400/short ton unit WO₃)

Concentrates:

Low—\$140/metric ton unit WO₃ (\$127/short ton unit WO₃)
High—\$160/metric ton unit WO₃ (\$145/short ton unit WO₃)

TABLE 1
U.S. SALIENT TUNGSTEN STATISTICS¹

(Metric tons, tungsten content)

Period	Concentrate				Reported scrap consumption ^p	Intermediate products			
	Reported consumption ^p	Imports for consumption	Stocks, end of period Industry ^{p,2}	U.S. Government ³		Net production ^{p,4}	Reported consumption ^{p,5}	Stocks, end of period Industry ^{p,6}	U.S. Government ³
2011:									
February	W	276	W	17,000	(7)	784 ^r	992	819 ^r	171
March	W	388	W	17,000	(7)	775 ^r	998	693 ^r	171
April	W	283	W	17,000	(7)	736 ^r	1,080	612 ^r	171
May	W	469	W	15,900	684 ^r	717 ^r	1,050	605 ^r	171
June	W	259	W	15,900	1,140 ^r	745 ^r	1,280	653 ^r	171
July	W	432	W	15,900	629	578 ^r	966	686 ^r	171
August	W	277	W	15,800	575 ^r	469 ^r	950	686 ^r	160
September	W	181	W	15,800	(7)	602 ^r	945	653 ^r	160
October	W	283	W	15,800	(7)	611	944	728	125
November	W	304	W	15,800	(7)	537	940	641	125
December	W	158	W	15,800	(7)	563	929	651	125
January–December	W	3,640	W	15,800	9,490 ^r	7,760 ^r	12,100	651	125
2012:									
January	W	340	W	15,800	583	494 ^r	943	623 ^r	125
February	W	224	W	15,800	622	606	947	598	125
Total	W	564	W	15,800	1,210	1,100	1,890	598	125

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data.

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

²Reported by consumers.

³Data from the Defense Logistics Agency, DLA Strategic Materials. Data are uncommitted material only.

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

⁵Includes estimates and scrap.

⁶Data for tungsten metal powder and tungsten carbide powder reported by producers.

⁷Withheld to avoid disclosing company proprietary data; included in "January–December."

TABLE 2
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS^{p,1}

(Metric tons, tungsten content)

Product ³	Net production ²				Stocks at end of period		
	2011	2012			2011	2012	
		January	February	January–February ⁴		January	February
Metal powder	3,330 ^r	210 ^r	194	404	273	320 ^r	296
Tungsten carbide powder	4,430	284	412	696	378	303	302
Total	7,760 ^r	494 ^r	606	1,100	651	623 ^r	598

^pPreliminary. ^rRevised.

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

²Receipts plus gross production less quantity used to make other products in table.

³Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

⁴May include revisions to previously published data.

TABLE 3
U.S. REPORTED CONSUMPTION OF TUNGSTEN, BY END USE^{p, 1, 2, 3}

(Metric tons, tungsten content)

End use	2012		
	January	February	January-February ⁴
Steels	6	6	12
Superalloys	W	W	W
Other alloys (excludes steels and superalloys) ⁵	W	W	W
Cemented carbides ⁶	573	572	1,150
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	364	369	734
Total	943	947	1,890

^pPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

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

²Does not include materials used in making primary tungsten products.

³Includes estimates.

⁴May include revisions to previously published data.

⁵Includes welding and hard-facing rods and materials, wear- and corrosion-resistant alloys, and nonferrous alloys.

⁶Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

TABLE 4
 U.S. REPORTED CONSUMPTION AND CONSUMER STOCKS OF TUNGSTEN MATERIALS^{P,1}

(Metric tons, tungsten content)

Period	Ferro-tungsten	Tungsten metal powder	Tungsten carbide powder	Tungsten scrap	Other tungsten materials ²	Total
Consumption:						
2011:						
February	10	W	567	W	6	992
March	10	W	570	W	6	998
April	10	W	565	W	6	1,080
May	10	W	571	W	6	1,050
June	10	W	567	W	6	1,280
July	10	W	568	W	6	966
August	10	W	570	W	6	950
September	10	W	567	W	6	945
October	10	W	567	W	6	944
November	10	W	564	W	6	940
December	10	W	563	W	6	929
January–December	118	W	6,810	W	74	12,100
2012:						
January	10	W	565	W	6	943
February	10	W	564	W	6	947
January–February	20	W	1,130	W	12	1,890
Stocks:						
2011:						
February	22	52	413	61	10	558
March	22	50	414	52	10	547
April	22	46	413	59	10	550
May	22	43	413	62	10	551
June	22	41	413	68	10	554
July	21	40	413	65	10	549
August	22	37	413	61	10	544
September	23	36	413	60	10	541
October	22	34	413	54	10	534
November	21	34	413	53	10	532
December	21	35	413	59	10	538
2012:						
January	21	35	413	58	10	537
February	21	35	413	58	10	537

^PPreliminary. W Withheld to avoid disclosing company proprietary data; included in "Total."

¹Includes estimates.

²Includes tungsten chemicals.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY¹

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro-tungsten	Metal powder	Tungsten carbide powder	Other ²	Total	Total, year to date
2011	3,640	2,020	206	1,370	1,690	2,950	11,900	XX
2012:								
January	340	240	4	113	107	185	989	989
February:								
Austria	--	--	--	--	2	6	8	18
Bolivia	94	--	--	--	--	--	94	186
Brazil	17	--	--	--	--	--	17	32
Canada	43	--	--	14	9	--	66	88
China	--	89	4	23	84	91	291	818
Colombia	--	--	--	--	--	--	--	9
Germany	1	(3)	8	20	17	3	48	70
Israel	--	--	--	27	3	(3)	30	40
Japan	--	--	--	2	--	4	6	7
Korea, Republic of	--	--	--	22	2	(3)	24	65
Luxembourg	--	--	--	--	--	--	--	4
Peru	10	--	--	--	--	--	10	41
Portugal	47	--	--	--	--	--	47	141
Russia	--	--	--	--	--	3	3	6
Singapore	--	--	--	5	--	1	6	12
Spain	--	--	--	--	--	--	--	66
Thailand	11	--	--	--	--	--	11	22
United Kingdom	--	--	--	3	--	(3)	3	3
Vietnam	--	--	31	--	16	16	62	85
Other	2	--	--	(3)	3	2	7	10
Total	224	89	42	116	135	128	735	1,720
January-February	564	328	46	229	242	313	1,720	XX

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 estimated in part.

³Less than ½ unit.

Note: Imports of waste and scrap in February 2012 totaled 124 metric tons, tungsten content, to give a year-to-date total of 219 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY¹

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates ²	Ammonium tungstates	Metal powder ²	Tungsten carbide powder	Other ³	Total	Total, year to date
2011	169	977	686	1,250	1,390	4,470	XX
2012:							
January	1	38	50	87	120	296	296
February:							
Austria	--	--	(4)	27	--	28	44
Brazil	--	--	5	--	13	18	21
Canada	1	--	13	6	65	86	175
China	--	--	1	12	1	15	25
France	--	--	1	(4)	20	20	21
Germany	--	36	13	2	11	62	122
Hong Kong	--	--	(4)	(4)	11	12	12
India	--	2	3	1	2	8	12
Indonesia	--	--	--	(4)	2	2	11
Israel	--	--	1	7	1	9	10
Japan	--	--	(4)	2	5	7	18
Mexico	--	--	(4)	2	3	6	8
Saudi Arabia	--	--	28	(4)	--	28	46
Singapore	--	--	2	(4)	7	9	11
Sweden	--	--	--	6	--	6	7
Taiwan	--	--	2	5	3	10	18
Thailand	--	--	--	(4)	4	4	6
United Kingdom	--	--	2	28	(4)	30	61
Venezuela	--	--	(4)	4	(4)	4	6
Other	--	1	5	5	7	17	44
Total	1	39	75	109	155	380	676
January-February	2	77	126	196	275	676	XX

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 ½ unit.

Note: Estimated exports of waste and scrap in February 2012 totaled 134 metric tons, tungsten content, to give a year-to-date total of 357 metric tons, tungsten content.

Source: U.S. Census Bureau.