



Mineral Industry Surveys

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TUNGSTEN IN MARCH 2007

During the quarter ending March 31, 2007, total U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was 11% higher than production during the quarter ending December 31, 2006, and 7% higher than that produced during the quarter ending March 31, 2006, according to the U.S. Geological Survey.

Total U.S. reported consumption of ferrotungsten, tungsten metal powder, tungsten carbide powder, tungsten scrap, and other tungsten materials during the quarter ending March 31, 2007, was 4% higher than consumption during the quarter ending December 31, 2006, and slightly higher than that consumed during the quarter ending March 31, 2006. These materials were used to make alloys, cemented carbides, mill products, catalysts, and pigments.

U.S. trade data for February 2007 are published in this issue.

Update

Prices for tungsten ore concentrates, in dollars per metric ton unit from Metal Bulletin, are listed below. Prices in dollars per short ton unit were converted from metric-ton-unit prices and rounded to the nearest dollar. These prices represent combined prices for wolframite and scheelite ore concentrates with a minimum tungsten trioxide (WO₃) content of 65%. The prices for April 1-30, 2007, are as follows:

Low—\$160/metric ton unit WO₃ (\$145/short ton unit WO₃)
High—\$170/metric ton unit WO₃ (\$154/short ton unit WO₃)

TABLE 1
U.S. SALIENT TUNGSTEN STATISTICS¹

(Metric tons, tungsten content)

Period	Concentrate				Reported scrap consumption	Intermediate products			
	Reported consumption	Imports for consumption	Stocks, end of period Industry ²	U.S. Government ³		Net production ⁴	Reported consumption ⁵	Stocks, end of period Industry ⁶	U.S. Government ³
2006:									
March	W	173	W	25,700	400	766	1,020 ^r	720	266
April	W	133	W	25,000	405	719	1,050 ^r	739	266
May	W	161	W	24,500	493	687	1,070 ^r	792	266
June	W	185	W	24,100	338	716	991 ^r	770	266
July	W	230	W	24,100	248	556	871 ^r	758	266
August	W	91	W	24,100	(7)	673	1,030 ^r	768	266
September	W	180	W	23,300	(7)	720	1,000 ^r	773	266
October	W	212	W	23,100	266	668	1,020 ^r	766	266
November	W	256	W	22,900	343	650	958 ^r	761	266
December	W	289	W	22,900	353	646	960 ^r	827	266
January-December	W	2,290	XX	XX	4,370	8,060	12,000 ^r	XX	XX
2007:									
January	W	266	W	22,900	439	659	1,020 ^r	872	266
February	W	322	W	22,400	317	649	1,020 ^r	844	266
March	W	420	W	22,200	433	862	1,030	809	266
Total	W	1,010	XX	XX	1,190	2,170	3,070	XX	XX

^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

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

²Reported by consumers.

³Data from Defense National Stockpile Center. Includes material committed for sale pending shipment.

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 "Total."

TABLE 2
U.S. PRODUCTION, CONSUMPTION, AND STOCKS OF
AMMONIUM PARATUNGSTATE, BY MONTH¹

(Metric tons, tungsten content)

Period	Production	Consumption	Stocks, end of period ²
2006:			
March	W	1,000	W
April	W	930	177
May	W	1,190	114
June	W	1,010	60
July	W	753	56
August	W	830	78
September	W	992	36
October	W	1,010	67
November	W	900	67
December	W	866	W
January-December	W	11,300	XX
2007:			
January	W	941	98
February	W	886	83
March	W	1,140	37
Total	W	2,970	XX

W Withheld to avoid disclosing company proprietary data. XX Not applicable.

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

²Producers and consumers.

TABLE 3
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS¹

(Metric tons, tungsten content)

Product ³	Net production ²				Stocks at end of period		
	2007				2007		
	2006	February	March	Year to date	2006	February	March
Metal powder	3,260	309	382	956	411	459	421
Tungsten carbide powder	4,800	340	480	1,210	415	386	388
Total	8,060	649	862	2,170	827	844	809

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."

TABLE 4
U.S. REPORTED CONSUMPTION OF TUNGSTEN, BY END USE^{1, 2, 3}

(Metric tons, tungsten content)

End use	2007		
	February	March	Year to date
Steels	22	21	65
Superalloys	W	W	W
Other alloys (excludes steels and superalloys) ⁴	W	W	W
Cemented carbides ⁵	540 ^r	546	1,630
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	455 ^r	464	1,380
Total	1,020 ^r	1,030	3,070

^rRevised. 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.

⁴Includes welding and hard-facing rods and materials, wear- and corrosion-resistant alloys, and nonferrous alloys.

⁵Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

TABLE 5
U.S. REPORTED CONSUMPTION AND CONSUMER STOCKS OF TUNGSTEN MATERIALS¹

(Metric tons, tungsten content)

Period	Ferro- tungsten	Tungsten metal powder	Tungsten carbide powder	Tungsten scrap	Other tungsten materials ²	Total
Consumption:						
2006:						
March	19	W	544 ^r	W	6	1,020 ^r
April	19	W	535 ^r	W	6	1,050 ^r
May	19	W	553 ^r	W	6	1,070 ^r
June	20	W	539 ^r	W	6	991 ^r
July	21	W	537 ^r	W	6	871 ^r
August	22	W	536 ^r	W	6	1,030 ^r
September	20	W	537 ^r	W	6	1,000 ^r
October	28	W	538 ^r	W	6	1,020 ^r
November	20	W	546 ^r	W	6	958 ^r
December	20	W	534 ^r	W	6	960 ^r
January-December	245	W	6,490 ^r	W	72	12,000 ^r
2007:						
January	20	W	538 ^r	W	6	1,020 ^r
February	21	W	532 ^r	W	6	1,020 ^r
March	20	W	536 ^r	W	6	1,030 ^r
Total	60	W	1,610	W	18	3,070
Stocks:						
2006:						
March	24	26	366 ^r	38	9	462 ^r
April	23	26	366 ^r	35	9	458 ^r
May	22	25	367 ^r	43	9	466 ^r
June	24	25	372 ^r	48	9	478 ^r
July	23	29	372 ^r	41	9	473 ^r
August	21	27	351 ^r	45	9	454 ^r
September	20	25	355 ^r	40	9	449 ^r
October	19	26	357 ^r	35	9	446 ^r
November	20	26	354 ^r	32	9	440 ^r
December	18	26	355 ^r	34	9	442 ^r
2007:						
January	19	28	361 ^r	36	9	452 ^r
February	17	28	356 ^r	31	9	441 ^r
March	19	14	353	38	9	433

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

¹Includes estimates.

²Includes tungsten chemicals.

TABLE 6
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
2006	2,290	2,900	265	1,740	1,600	1,770	10,600	XX
2007:								
January	266	232	16	221	160	203	1,100	1,100
February:								
Austria	--	--	--	--	(3)	2	2	5
Belgium	--	--	--	--	--	1	1	3
Bolivia	129	--	--	--	--	--	129	313
Canada	37	--	--	18	16	(3)	70	117
China	--	71	30	--	36	39	176	775
Germany	--	12	--	16	8	11	47	122
Hong Kong	--	--	--	--	--	1	1	2
India	--	--	--	--	16	(3)	16	16
Israel	--	--	--	13	21	3	37	108
Japan	--	--	--	1	--	2	3	5
Korea, Republic of	--	--	--	12	--	(3)	13	30
Mexico	9	--	--	--	--	--	9	9
Mongolia	12	--	--	--	--	--	12	12
Netherlands	--	--	28	--	--	(3)	28	28
Peru	27	--	--	--	--	--	27	54
Portugal	62	--	--	--	--	--	62	83
Russia	--	--	--	--	--	13	13	14
Rwanda	31	--	--	--	--	--	31	52
Singapore	--	--	--	--	--	4	4	6
South Africa	--	--	--	--	--	--	--	7
Sweden	--	--	--	--	--	1	1	1
Thailand	15	--	--	--	--	--	15	30
Uzbekistan	--	--	--	--	--	29	29	29
Other	--	--	--	(3)	(3)	1	1	4
Total	322	83	58	60	97	107	726	1,820
Total, year to date	588	315	74	281	257	309	1,820	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 2007 totaled 35 metric tons, tungsten content, to give a year-to-date total of 85 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 7
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
2006	130	350	959	1,010	2,670	5,130	XX
2007:							
January	--	84	71	124	96	375	375
February:							
Australia	--	--	(4)	2	(4)	3	3
Austria	--	--	--	--	1	1	1
Brazil	--	--	1	5	1	7	11
Canada	--	--	6	5	11	22	56
China	--	--	1	(4)	3	4	7
Czech Republic	--	--	--	--	2	2	6
Denmark	--	--	--	--	2	2	2
France	--	--	1	18	1	20	31
Germany	--	55	33	37	5	130	345
India	--	--	--	2	1	3	7
Italy	--	--	1	(4)	(4)	2	3
Japan	--	--	1	(4)	5	6	10
Korea, Republic of	--	--	(4)	(4)	2	3	4
Mexico	--	--	1	--	18	19	29
Singapore	--	--	1	(4)	1	2	6
Spain	--	--	--	--	1	1	2
Sweden	9	--	19	6	4	38	39
Switzerland	--	--	--	2	(4)	2	4
Taiwan	--	--	2	--	(4)	2	11
United Kingdom	--	--	1	26	49	76	135
Venezuela	--	--	--	5	(4)	5	6
Other	--	--	1	1	2	4	10
Total	9	55	68	111	110	354	729
Total, year to date	9	139	140	235	207	729	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 2007 totaled 69 metric tons, tungsten content, to give a year-to-date total of 129 metric tons, tungsten content.

Source: U.S. Census Bureau.