

Mineral Industry Surveys

For information, contact:

Kim B. Shedd, Tungsten Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4974, Fax: (703) 648-7757
E-mail: kshedd@usgs.gov

Amy C. Tolcin (Data)
Telephone: (703) 648-7978
Fax: (703) 648-7975
E-mail: atolcin@usgs.gov

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

TUNGSTEN IN MAY 2005

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was 5% higher during January through May 2005 than net production during the same period in 2004, 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 January through May 2005, was 4% lower than that consumed during the same period in 2004. These materials were used to make alloys, cemented carbides, mill products, catalysts, and pigments.

Data for U.S. imports and exports for January through April 2005 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 June 1-30, 2005, are as follows:

Low—\$130/metric ton unit WO₃ (\$118/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	Intermediate products			
	Reported consumption	Imports for consumption	Stocks, end of period			Net production ⁴	Reported consumption ⁵	Stocks, end of period	
			Industry ²	U.S. Government ³			Industry ⁶	U.S. Government ³	
2004:									
May	W	68	W	28,400	370	569	911	820	729
June	W	190	W	28,400	327	656	1,020	851	729
July	W	78	W	28,400	279	592	916	825	724
August	W	326	W	28,400	(7)	810	944	1,060	724
September	W	255	W	28,400	(7)	598	930	997	724
October	W	218	W	28,400	325	613	948	835	724
November	W	227	W	28,400	275	525	865	794	685
December	W	166	W	28,400	346	534	878	787	685
January-December	W	2,310	XX	XX	3,890	7,400	11,000	XX	XX
2005:									
January	W	171	W	28,400	416	717	961 ^r	862	685
February	W	202	W	28,400	415	537	876 ^r	757	685
March	W	193	W	27,300	291	707	834 ^r	699	685
April	W	230	W	27,200	311	623	833 ^r	709	611
May	W	NA	W	27,200	346	631	834	697	564
Total	W	NA	XX	XX	1,780	3,220	4,340	XX	XX

^rRevised. NA Not available. 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 "January-December."

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
2004:			
May	W	769	126
June	W	827	W
July	W	651	147
August	W	774	84
September	W	697	49
October	W	786	35
November	W	658	37
December	W	587	W
January-December	W	8,790	XX
2005:			
January	W	953	W
February	W	929	W
March	W	979	W
April	W	810	W
May	W	852	141
Total	W	4,520	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		
	2005			Year to date	2005		
	2004	April	May		2004	April	May
Metal powder	3,020	244	245	1,320	438	317	313
Tungsten carbide powder	4,370	379	386	1,890	349	392	384
Total	7,400	623	631	3,220	787	709	697

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	2005		
	April	May	Year to date
Steels	20	20	101
Superalloys	W	W	W
Other alloys (excludes steels and superalloys) ⁴	W	W	W
Cemented carbides ⁵	500	498	2,510
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	313 ^r	316	1,730
Total	833 ^r	834	4,340

^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:						
2004:						
May	19	W	510	W	6	911
June	19	W	510	W	6	1,020
July	19	W	W	W	6	916
August	19	W	508	W	6	944
September	20	W	513	W	6	930
October	20	W	505	W	6	948
November	20	W	506	W	6	865
December	19	W	508	W	6	878
January-December	232	W	6,110	W	73	11,000
2005:						
January	20	W	507	W	6	961 ^r
February	19	W	517	W	6	876 ^r
March	20	W	511	W	6	834 ^r
April	20	W	511	W	6	833 ^r
May	20	W	505	W	6	834
Total	99	W	2,550	W	30	4,340
Stocks:						
2004:						
May	20	33	400	20	9	482
June	29	31	356	14	9	438
July	27	28	394	23	9	481
August	26	26	396	22	9	480
September	25	28	330	23	9	414
October	23	30	374	25	9	460
November	21	28	324	30	9	412
December	20	27	308	19	9	382
2005:						
January	27	28	346	20	9	430
February	26	27	347	16	9	424
March	44	25	348	20	9	446
April	22	28	349	24	9	431
May	20	27	350	26	9	432

^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	Ferrotungsten	Metal powder	Tungsten carbide powder	Other ²	Total	Total, year to date
2004	2,310	2,090	392	1,490	1,750	1,360	9,400	XX
2005:								
February	202	173	146	112	213	25	871	1,560
March	193	209	15	169	175	187	948	2,510
April:								
Australia	--	--	--	--	--	--	--	(3)
Austria	--	--	--	--	--	2	2	18
Belgium	--	--	--	(3)	--	(3)	1	5
Bolivia	13	--	--	--	--	--	13	152
Brazil	--	--	--	--	--	--	--	15
Bulgaria	--	--	--	--	--	(3)	(3)	(3)
Canada	18	--	--	15	36	--	69	306
China	--	169	36	50	62	52	369	1,600
Czech Republic	--	--	--	--	--	(3)	(3)	1
France	--	--	--	--	1	1	2	5
Germany	--	--	--	79	(3)	2	82	222
Hong Kong	--	--	--	--	--	(3)	(3)	101
Hungary	--	--	--	--	--	1	1	2
India	--	--	--	--	--	1	1	3
Israel	--	--	--	26	20	1	47	203
Italy	--	--	--	--	--	--	--	(3)
Japan	--	--	--	1	(3)	7	7	23
Korea, Republic of	--	--	--	5	1	(3)	6	42
Luxembourg	--	--	--	--	--	--	--	(3)
Mexico	--	--	--	--	--	(3)	(3)	(3)
Netherlands	--	--	--	--	--	(3)	(3)	(3)
New Zealand	--	--	--	--	--	--	--	(3)
Portugal	93	--	--	--	--	--	93	310
Russia	31	--	--	--	--	20	51	151
Rwanda	20	--	--	--	--	--	20	47
Singapore	--	--	--	--	--	4	4	7
Spain	--	--	--	--	--	(3)	(3)	(3)
Sweden	--	--	--	--	--	(3)	(3)	(3)
Switzerland	--	--	--	--	--	1	1	2
Taiwan	--	--	--	--	(3)	(3)	(3)	(3)
Thailand	55	--	--	--	--	--	55	99
United Kingdom	--	--	--	(3)	(3)	(3)	(3)	1
Vietnam	--	--	--	--	--	--	--	19
Total	230	169	36	177	120	92	823	3,340
Total, year to date	796	649	261	537	697	396	3,340	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 1/2 unit.

Note: Imports of waste and scrap in April 2005 totaled 132 metric tons, tungsten content, to give a year-to-date total of 552 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
2004	43	125	433	1,440	1,210	3,240	XX
2005:							
February	4	--	68	133	116	322	584
March	(4)	2	82	167	282	533	1,120
April:							
Argentina	--	--	--	--	(4)	(4)	1
Australia	--	--	1	--	1	3	22
Austria	--	--	(4)	--	--	(4)	4
Belgium	--	--	--	(4)	(4)	(4)	1
Brazil	--	--	(4)	--	3	3	14
Canada	--	--	8	12	218	238	437
Chile	--	--	--	--	--	--	1
China	22	--	1	(4)	4	28	87
Colombia	--	--	--	--	(4)	(4)	2
Czech Republic	--	--	--	(4)	2	2	33
France	(4)	--	1	11	(4)	12	62
Germany	--	19	43	37	12	111	276
Hong Kong	--	--	--	--	(4)	(4)	1
Hungary	--	--	--	--	1	1	6
Iceland	--	--	--	--	--	--	7
India	--	--	--	4	1	4	9
Ireland	(4)	--	--	1	--	1	5
Israel	--	--	(4)	--	(4)	(4)	15
Italy	--	--	4	(4)	(4)	4	13
Japan	--	--	2	1	12	16	96
Korea, Republic of	--	--	--	(4)	4	5	21
Malaysia	--	--	--	--	(4)	(4)	6
Mexico	--	--	1	(4)	14	16	35
Netherlands	--	--	--	--	22	22	26
Philippines	--	--	--	--	--	--	1
Singapore	--	--	1	1	6	8	16
South Africa	--	--	--	11	--	11	23
Spain	--	6	(4)	--	3	10	22
Sweden	--	--	--	40	1	41	123
Switzerland	--	--	1	--	(4)	1	6
Taiwan	--	--	8	(4)	47	55	128
Turkey	--	--	(4)	--	--	(4)	2
United Arab Emirates	--	--	(4)	--	(4)	1	1
United Kingdom	--	--	3	59	4	66	265
Venezuela	--	--	3	3	(4)	5	13
Yemen	--	--	--	--	31	31	31
Other	--	--	--	(4)	(4)	1	3
Total	23	26	79	181	388	696	1,810
Total, year to date	28	28	268	603	886	1,810	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 1/2 unit.

Note: Estimated exports of waste and scrap in April 2005 totaled 91 metric tons, tungsten content, to give a year-to-date total of 284 metric tons, tungsten content.

Source: U.S. Census Bureau.