

Mineral Industry Surveys

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TUNGSTEN IN JUNE 2005

During the quarter ending June 30, 2005, U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was slightly lower than net production during the quarter ending March 31, 2005, according to the U.S. Geological Survey. U.S. net production of intermediate tungsten products during the first half of 2005 was 4% higher than that of the first half of 2004.

Total U.S. reported consumption of ferrotungsten, tungsten metal powder, tungsten carbide powder, tungsten scrap, and other tungsten materials during the quarter ending June 30, 2005, was 6% lower than that consumed during the quarter ending March 31, 2005. U.S. reported consumption of these materials during the first half of 2005 was 6% lower than that during the first half of 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 May 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 July 1-31, 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 consump- tion	Imports for consumption	Stocks, end of period			Net production ⁴	Reported consump- tion ⁵	Stocks, end of period	
			Industry ²	U.S. Gov- ernment ³			Industry ⁶	U.S. Gov- ernment ³	
2004:									
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	862	685
February	W	202	W	28,400	415	537	876	757	685
March	W	193	W	27,300	291	707	834	699	685
April	W	230	W	27,200	311	623	832 ^r	709	611
May	W	118	W	27,200	346	631	834	697	564
June	W	NA	W	27,200	315	649	834	685	564
Total	W	NA	XX	XX	2,090	3,870	5,170	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:			
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
June	W	876	W
Total	W	5,400	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	May	June		2004	May	June
Metal powder	3,020	245	226	1,550	438	313	315
Tungsten carbide powder	4,370	386	424	2,310	349	384	370
Total	7,400	631	650	3,870	787	697	685

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		
	May	June	Year to date
Steels	20	20	122
Superalloys	W	W	W
Other alloys (excludes steels and superalloys) ⁴	W	W	W
Cemented carbides ⁵	498	508	415
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	316	306	4,630
Total	834	834	5,170

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:						
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
February	19	W	517	W	6	876
March	20	W	511	W	6	834
April	20	W	511	W	6	832 ^r
May	20	W	505	W	6	834
June	20	W	516	W	6	834
Total	119	W	3,070	W	36	5,170
Stocks:						
2004:						
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	358 ^r	26	9	439 ^r
June	28	28	364	27	9	455

^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:								
March	193	209	15	169	175	187	948	2,510
April	230	169	36	177	120	92	823	3,340
May:								
Australia	--	--	--	--	--	--	--	(3)
Austria	--	--	--	--	--	1	1	19
Belgium	--	--	--	(3)	--	(3)	(3)	6
Bolivia	40	--	--	--	--	--	40	191
Brazil	--	--	12	--	--	--	12	27
Bulgaria	--	--	--	--	--	--	--	(3)
Canada	16	--	--	22	50	(3)	89	395
China	--	201	--	20	66	94	380	1,980
Congo (Kinshasa)	17	--	--	--	--	--	17	17
Czech Republic	--	--	--	--	--	(3)	(3)	1
France	--	--	--	--	(3)	(3)	1	6
Germany	--	17	--	51	(3)	2	70	292
Hong Kong	--	--	--	--	--	1	1	102
Hungary	--	--	--	--	--	1	1	2
India	--	--	--	--	--	(3)	(3)	3
Ireland	--	--	--	--	--	1	1	1
Israel	--	--	--	19	19	12	50	253
Italy	--	--	--	--	--	--	--	(3)
Japan	--	--	--	3	--	3	6	29
Korea, Republic of	--	--	--	16	--	(3)	16	59
Luxembourg	--	--	--	--	--	--	--	(3)
Mexico	--	--	--	--	--	--	--	(3)
Mongolia	1	--	--	--	--	--	1	1
Netherlands	--	--	--	--	--	(3)	(3)	(3)
New Zealand	--	--	--	--	--	--	--	(3)
Portugal	--	--	--	--	--	--	--	310
Russia	--	--	--	--	--	16	16	167
Rwanda	29	--	--	--	--	--	29	76
Singapore	--	--	--	--	--	2	2	9
Spain	--	--	--	--	--	(3)	(3)	(3)
Sweden	--	--	--	--	--	(3)	(3)	(3)
Switzerland	--	--	--	--	--	(3)	(3)	2
Taiwan	--	--	--	--	--	(3)	(3)	(3)
Thailand	15	--	--	--	--	--	15	114
Ukraine	--	--	--	--	--	(3)	(3)	(3)
United Kingdom	--	--	--	--	--	(3)	(3)	1
Vietnam	--	--	--	--	--	--	--	19
Total	118	218	12	131	136	134	748	4,080
Total, year to date	913	867	273	668	833	529	4,080	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 May 2005 totaled 309 metric tons, tungsten content, to give a year-to-date total of 862 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:							
March	(4)	2	82	167	282	533	1,120
April	23	26	79	181	388	696	1,810
May:							
Argentina	--	--	--	(4)	(4)	(4)	1
Australia	--	--	2	1	(4)	3	25
Austria	--	--	--	--	--	--	4
Belgium	--	--	--	(4)	(4)	(4)	2
Brazil	--	--	(4)	(4)	(4)	1	15
Canada	--	--	6	10	69	85	522
Chile	--	--	(4)	--	--	(4)	1
China	--	--	4	(4)	(4)	4	91
Colombia	--	--	--	--	1	1	3
Czech Republic	--	--	--	--	1	1	34
France	--	--	2	16	(4)	18	81
Germany	--	19	11	20	28	78	354
Hong Kong	--	--	--	--	(4)	(4)	1
Hungary	--	--	--	--	4	4	10
Iceland	--	--	(4)	--	--	(4)	7
India	--	--	(4)	2	3	5	14
Ireland	--	--	--	1	--	1	6
Israel	--	--	15	--	(4)	15	31
Italy	--	--	4	--	(4)	5	18
Japan	--	--	7	(4)	14	21	118
Korea, Republic of	--	--	(4)	2	(4)	2	23
Luxembourg	--	--	--	(4)	--	(4)	1
Malaysia	--	--	--	1	(4)	1	7
Mexico	--	2	--	(4)	6	8	43
Netherlands	--	--	(4)	--	(4)	1	27
Philippines	--	--	--	--	1	1	2
Saudi Arabia	--	--	--	--	(4)	(4)	1
Singapore	--	--	1	(4)	(4)	1	18
South Africa	--	--	(4)	--	(4)	(4)	23
Spain	--	--	1	5	3	9	31
Sweden	--	--	--	34	2	37	159
Switzerland	--	--	1	1	(4)	2	8
Taiwan	--	--	9	3	12	24	152
Turkey	--	--	(4)	(4)	--	(4)	2
United Arab Emirates	--	--	(4)	--	--	(4)	1
United Kingdom	--	--	12	40	40	92	357
Venezuela	--	--	4	--	(4)	4	17
Yemen	--	--	--	--	4	4	35
Other	--	--	(4)	(4)	(4)	1	3
Total	--	21	80	139	191	431	2,240
Total, year to date	28	49	348	742	1,080	2,240	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 May 2005 totaled 102 metric tons, tungsten content, to give a year-to-date total of 386 metric tons, tungsten content.

Source: U.S. Census Bureau.