

Mineral Industry Surveys

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TUNGSTEN IN AUGUST 2005

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was 4% higher during January through August 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 August 2005 was nearly equal in amount to 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 July 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 September 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 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:									
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	312 ^r	637 ^r	907 ^r	715 ^r	611
May	W	118	W	27,200	433 ^r	727 ^r	1,030 ^r	774 ^r	564
June	W	140	W	27,200	376 ^r	742 ^r	925 ^r	770 ^r	564
July	W	122	W	27,100	313 ^r	542 ^r	828 ^r	747 ^r	564
August	W	NA	W	26,700	503	746	1,040	834	546
Total	W	NA	XX	XX	3,060	5,360	7,400	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:			
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	828 ^r	59
May	W	814 ^r	110 ^r
June	W	864 ^r	W
July	W	652 ^r	103 ^r
August	W	810	118
Total	W	6,830	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.

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			2005			
	2004	July ^r	August	Year to date	2004	July ^r	August
Metal powder	3,020	210	355	2,240	438	311	377
Tungsten carbide powder	4,370	332	392	3,110	349	436	457
Total	7,400	542	746	5,360	787	747	834

^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."

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

(Metric tons, tungsten content)

End use	2005		
	July	August	Year to date
Steels	20	20	161
Superalloys	W	W	W
Other alloys (excludes steels and superalloys) ⁴	W	W	W
Cemented carbides ⁵	496	507	4,020
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	312 ^r	514	3,220
Total	828 ^r	1,040	7,400

^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:						
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	907 ^r
May	20	W	505	W	6	1,030 ^r
June	20	W	516	W	6	925 ^r
July	19	W	505	W	6	828 ^r
August	19	W	515	W	6	1,040
Total	157	W	4,090	W	48	7,400
Stocks:						
2004:						
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	26	9	439
June	27 ^r	28	364	27	9	455
July	26	28	360	19	9	441 ^r
August	25	32	359	17	9	442

^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:								
May	118	218	12	131	136	134	748	4,080
June	140	176	8	155	127	162	767	4,850
July:								
Australia	--	--	--	--	--	--	--	(3)
Austria	--	--	--	--	--	2	2	22
Belgium	--	--	--	(3)	--	3	3	10
Bolivia	26	--	--	--	--	--	26	259
Brazil	--	--	--	--	--	(3)	(3)	27
Bulgaria	--	--	--	--	--	--	--	(3)
Canada	--	--	--	1	35	--	36	487
China	1	81	--	98	36	151	367	2,790
Congo (Kinshasa)	--	--	--	--	--	--	--	17
Czech Republic	--	--	--	--	--	(3)	(3)	1
France	--	--	--	--	(3)	1	1	8
Germany	--	17	--	48	(3)	2	67	412
Hong Kong	--	--	--	--	--	1	1	103
Hungary	--	--	--	--	--	(3)	(3)	3
India	--	--	--	--	4	(3)	4	9
Ireland	--	--	--	--	--	--	--	2
Israel	--	--	--	14	14	(3)	28	332
Italy	--	--	--	--	--	(3)	(3)	(3)
Japan	--	--	--	(3)	(3)	5	5	42
Korea, Republic of	--	--	--	16	--	(3)	16	80
Luxembourg	--	--	--	--	--	--	--	(3)
Malaysia	--	--	--	--	--	(3)	(3)	(3)
Mexico	15	--	--	--	--	--	15	16
Mongolia	--	--	--	--	--	--	--	1
Netherlands	--	--	--	--	--	(3)	(3)	(3)
New Zealand	--	--	--	--	--	--	--	(3)
Portugal	72	--	--	--	--	--	72	444
Russia	--	--	--	--	--	89	89	265
Rwanda	8	--	--	--	--	--	8	104
Singapore	--	--	--	--	--	(3)	(3)	12
South Africa	--	--	--	--	--	--	--	9
Spain	--	--	--	--	--	(3)	(3)	1
Sweden	--	--	--	--	--	(3)	(3)	(3)
Switzerland	--	--	--	--	--	(3)	(3)	2
Taiwan	--	--	--	--	--	(3)	(3)	(3)
Thailand	--	--	--	--	--	--	--	114
Ukraine	--	--	--	--	--	--	--	(3)
United Kingdom	--	--	--	--	(3)	(3)	(3)	5
Vietnam	--	--	--	--	--	--	--	19
Total	122	98	--	177	89	254	742	5,590
Total, year to date	1,180	1,140	281	1,000	1,050	946	5,590	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 July 2005 totaled 135 metric tons, tungsten content, to give a year-to-date total of 1,240 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:							
May	--	21	80	139	191	431	2,240
June	1	81	67	115	117	381	2,620
July:							
Argentina	--	--	--	(4)	(4)	(4)	1
Australia	--	--	1	2	--	2	28
Austria	--	--	--	--	--	--	5
Belgium	--	--	(4)	--	--	(4)	2
Brazil	--	--	2	1	1	4	22
Canada	--	--	7	9	37	53	601
Chile	--	--	--	--	--	--	1
China	--	--	1	1	(4)	2	99
Colombia	--	--	--	--	(4)	(4)	4
Czech Republic	--	--	--	--	1	1	36
Denmark	--	--	--	--	5	5	5
France	--	--	2	4	(4)	6	88
Germany	--	82	22	20	39	162	631
Hong Kong	--	--	--	--	(4)	(4)	1
Hungary	--	--	--	--	1	1	11
Iceland	--	--	--	--	--	--	7
India	--	--	(4)	2	1	4	20
Ireland	--	--	--	1	--	1	9
Israel	--	--	--	--	1	1	32
Italy	--	--	2	2	1	5	27
Japan	--	--	2	(4)	7	9	150
Korea, Republic of	--	--	(4)	--	(4)	1	24
Luxembourg	--	--	(4)	--	--	(4)	1
Malaysia	--	--	--	--	--	--	12
Martinique	--	--	--	--	--	--	4
Mexico	--	2	--	(4)	20	22	70
Netherlands	--	--	--	--	(4)	(4)	27
Norway	--	--	--	--	(4)	(4)	2
Peru	--	--	--	(4)	3	3	4
Philippines	--	--	--	--	1	1	3
Russia	--	--	--	--	--	--	3
Singapore	--	--	1	(4)	(4)	2	24
South Africa	--	--	--	17	(4)	17	52
Spain	--	--	(4)	(4)	2	3	46
Sweden	--	--	--	14	1	15	181
Switzerland	--	--	2	--	--	2	10
Taiwan	--	--	6	11	36	52	251
Thailand	--	--	--	(4)	--	(4)	2
Turkey	--	--	(4)	--	--	(4)	3
United Arab Emirates	--	--	--	--	(4)	(4)	1
United Kingdom	--	--	1	42	19	62	491
Venezuela	--	--	7	--	(4)	7	28
Yemen	--	--	--	--	--	--	41
Yugoslavia	--	--	--	--	--	--	4
Other	--	--	(4)	--	(4)	(4)	3
Total	--	84	56	127	178	444	3,070
Total, year to date	28	215	470	984	1,370	3,070	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 July 2005 totaled 57 metric tons, tungsten content, to give a year-to-date total of 498 metric tons, tungsten content.

Source: U.S. Census Bureau.