

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

Jason Collins (Data)
Telephone: (703) 648-7978
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999
Internet: <http://minerals.usgs.gov/minerals>

TUNGSTEN IN AUGUST 2000

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder produced from hydrogen-reduced metal powder, was 22% higher during January through August 2000 than net production during the same period in 1999, 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 in January through August 2000 was 8% higher than that during the same period in 1999. These materials were used to make alloys, cemented carbides, mill products, catalysts, and pigments.

Data for U.S. imports and exports for August 2000 will be published in a subsequent issue.

Note

All data in this report have been rounded to no more than three

significant digits. Totals and percentages were calculated by using unrounded data.

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 (WO_3) content of 65%. The prices for September 1 to 30, 2000, are as follows:

Low—\$36/metric ton unit WO_3 (\$33/short ton unit WO_3)
High—\$50/metric ton unit WO_3 (\$45/short ton unit WO_3)

TABLE 1
U.S. SALIENT TUNGSTEN STATISTICS 1/

(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/
1999:									
August	323	145	513	34,600	450	728	707	1,070	2,700
September	395	94	W	34,600	411	836	747	1,080	2,700
October	W	133	W	34,600	490	854	741	1,190	2,700
November	W	71	W	34,600	398	600	661	1,070	2,700
December	W	66	W	34,600	316	720	722	1,070	2,700
January-December 7/	2,100	2,870	XX	XX	5,220	8,500	8,320	XX	XX
2000:									
January	W	267	W	34,600	480	765	747	1,040	2,700
February	W	56	W	34,600	442	775	688	1,100	2,650
March	W	209	W	34,600	459	905	751	1,140	2,600
April	W	277	W	34,600	394	848	744	1,250	2,480
May	W	336	W	33,900	398	863	762	1,240	2,320
June	W	169	W	33,900	391	863	757	1,260	2,320
July	W	196	W	33,900	388 r/	850	730 r/	1,270	2,290
August	W	NA	W	33,900	406	844	733	1,230	2,280
Total	W	NA	XX	XX	3,360	6,720	5,910	XX	XX

r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; not included in total. XX Not applicable.

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

2/ Reported by consumers.

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

4/ Net production of tungsten metal powder, tungsten carbide powder, chemicals, and other products.

5/ Includes estimates and scrap.

6/ Reported by producers.

7/ Does not include withheld data.

TABLE 2
U.S. PRODUCTION, CONSUMPTION, AND STOCKS OF
AMMONIUM PARATUNGSTATE, BY MONTH 1/

(Metric tons, tungsten content)

Period	Production	Consumption	Stocks, end of period 2/
1999:			
August	647	584	449
September	554	570	389
October	670	717	432
November	499	604	363
December	500	490	376
January-December	7,330	7,490	XX
2000:			
January	552	641	402
February	575	695	237
March	740	729	W
April	W	726	123
May	W	727	108
June	W	W	112
July	W	W	108
August	W	745	150
Total 3/	1,870	4,260	XX

W Withheld to avoid disclosing company proprietary data; not included in "Total."

XX Not applicable.

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

2/ Producers and consumers.

3/ Does not include withheld data.

TABLE 3
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS 1/

(Metric tons, tungsten content)

Product	Net production 2/				Stocks at end of period		
	2000				2000		
	1999	July	August	Year to date	1999	July	August
Metal powder	4,540	494	493	3,880	626	631 r/	606
Tungsten carbide powder (made from metal powder)	3,960	356	351	2,840	441	511	505
Cast and crystalline carbide powder; other	W	W	W	W	W	W	W
Chemicals	W	W	W	W	W	132	114
Total 3/	8,500	850	844	6,720	1,070	1,270	1,230

r/ Revised. W Withheld to avoid disclosing company proprietary data; not included in "Total."

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

2/ Gross production less quantity used to make other products in table.

3/ Does not include withheld data.

TABLE 4
U.S. REPORTED CONSUMPTION OF TUNGSTEN, BY END USE IN 2000 1/ 2/ 3/

(Metric tons, tungsten content)

End use	July	August	Year to date
Steels	39	38	342
Superalloys	28	25	227
Other alloys (excludes steels and superalloys) 4/	W	W	W
Cemented carbides 5/	478 r/	483	3,910
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	185 r/	186	1,440
Total	730 r/	733	5,910

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

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

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

3/ Includes estimates.

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

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

TABLE 5
U.S. REPORTED CONSUMPTION AND CONSUMER STOCKS OF TUNGSTEN MATERIALS 1/ 2/ 3/

(Metric tons, tungsten content)

Period	Ferro- tungsten	Tungsten metal powder	Tungsten carbide powder	Tungsten scrap	Other tungsten materials 4/	Total
Consumption:						
1999:						
August	36	144	498	21	8	707
September	51	169	498	21	8	747
October	41	172	498	21	8	741
November	39	87	499	26	11	661
December	43	146	495	28	10	722
January-December	473	1,500	5,930	317	103	8,320
2000:						
January	41	182	486	28	8	747
February	42	120	489	29	9	688
March	52	152	507	32	8	751
April	41	178	481	34	11	744
May	41	180	495	37	9	762
June	38	182	496	31	10	757
July	37	174 r/	483	27 r/	8	730 r/
August	37	175	485	28	8	733
January-August	330	1,340	3,920	246	72	5,910
Stocks:						
1999:						
August	36	15	485	28	11	575
September	22	12	491	28	11	564
October	27	15	498	32	11	582
November	25	17	494	26	13	575
December	33	15	475	22	12	557
2000:						
January	33	18	413	22	12	498
February	27	14	415	27	11	495
March	38	16	413	29	14	510
April	37	16	418	33	11	515
May	29	17	418	31	13	508
June	52	17	415	27	16	526
July	48	13	409 r/	26 r/	11	507 r/
August	41	14	420	29	11	516

r/ Revised.

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

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

3/ Includes estimates.

4/ Includes tungsten chemicals.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY 1/

(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
1999	2,870	1,920	669	310	790	3,100	9,670	XX
2000:								
May	336	90	89	66	80	106	766	4,090
June	169	177	29	52	96	159	682	4,770
July:								
Australia	--	--	--	--	--	--	--	(3/)
Austria	--	--	--	--	--	5	5	31
Belgium	--	--	--	(3/)	--	(3/)	(3/)	3
Bolivia	57	--	--	--	--	--	57	256
Canada	--	--	--	--	34	--	34	309
China	92	119	86	(3/)	11	121	429	2,990
Estonia	--	--	--	--	--	--	--	8
France	--	--	--	--	(3/)	1	1	5
Germany	--	1	--	7	15	10	31	227
Hong Kong	--	--	--	--	--	(3/)	(3/)	9
Hungary	--	--	--	--	--	(3/)	(3/)	6
India	--	--	--	--	--	--	--	(3/)
Ireland	--	--	--	--	--	--	--	(3/)
Israel	--	--	--	2	19	1	22	106
Italy	--	--	--	--	--	--	--	1
Japan	--	--	--	1	2	2	5	26
Kazakhstan	22	--	--	--	--	--	22	22
Korea, Republic of	--	--	--	1	1	(3/)	2	6
Luxembourg	--	--	--	--	(3/)	--	(3/)	12
Mexico	--	--	--	--	--	--	--	(3/)
Mongolia	--	--	--	--	--	--	--	14
Netherlands	--	--	--	--	--	(3/)	(3/)	10
Netherlands Antilles	--	--	--	--	--	--	--	(3/)
Peru	--	--	--	--	--	--	--	89
Portugal	11	--	--	--	--	--	11	188
Russia	--	--	--	--	--	55	55	930
Rwanda	14	--	--	--	--	--	14	59
Singapore	--	--	--	--	--	(3/)	(3/)	1
South Africa	--	--	--	--	--	--	--	1
Spain	--	--	--	--	--	--	--	(3/)
Sweden	--	--	--	--	--	(3/)	(3/)	(3/)
Switzerland	--	--	--	--	--	1	1	3
Taiwan	--	--	--	--	--	--	--	(3/)
Thailand	--	--	--	--	--	(3/)	(3/)	(3/)
United Kingdom	--	--	--	--	(3/)	1	1	147
Total	196	119	86	11	82	196	691	5,460
Total, year to date	1,510	1,090	384	323	584	1,570	5,460	XX

XX Not applicable. -- Zero.

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

2/ Includes other unwrought tungsten, wrought tungsten, calcium and other tungstates, tungsten oxides, tungsten chlorides, other tungsten compounds, ash and compounds, ash and residues containing mainly tungsten, and other mixtures of inorganic compounds containing tungsten. Tungsten content estimated in part.

3/ Less than 1/2 unit.

Note: Imports of waste and scrap in July 2000 totaled 58 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY 1/

(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
1999	26	103	711	701	498	2,040	XX
2000:							
May	3	--	38	86	42	169	672
June	2	--	45	80	33	161	833
July:							
Australia	--	--	(4/)	--	(4/)	(4/)	5
Austria	--	--	--	--	1	1	1
Barbados	--	--	--	--	--	--	(4/)
Belgium	--	--	--	--	1	1	5
Bolivia	--	--	--	--	--	--	(4/)
Brazil	--	--	1	(4/)	(4/)	1	14
Canada	--	--	5	18	3	26	185
Chile	--	--	--	--	(4/)	(4/)	(4/)
China	2	--	--	(4/)	(4/)	3	4
Denmark	--	--	--	--	--	--	14
Egypt	--	--	--	--	--	--	6
France	--	--	(4/)	(4/)	2	2	20
Germany	--	1	30	15	(4/)	46	285
Hong Kong	--	--	(4/)	--	(4/)	(4/)	3
Hungary	(4/)	--	(4/)	--	1	1	18
India	--	--	--	--	2	2	11
Indonesia	--	--	(4/)	--	2	2	6
Ireland	--	--	--	(4/)	--	(4/)	2
Israel	--	--	--	(4/)	(4/)	1	2
Italy	--	--	1	8	3	12	57
Japan	--	--	1	(4/)	6	7	32
Korea, Republic of	--	--	(4/)	--	(4/)	(4/)	3
Luxembourg	--	--	--	--	--	--	1
Malaysia	--	--	--	--	--	--	3
Mexico	--	--	1	(4/)	5	6	38
Netherlands	--	--	--	--	(4/)	(4/)	32
New Zealand	--	--	--	--	(4/)	(4/)	(4/)
Philippines	--	--	--	--	--	--	(4/)
Saudi Arabia	--	--	--	--	(4/)	(4/)	5
Singapore	--	--	(4/)	(4/)	(4/)	1	5
South Africa	(4/)	--	1	--	--	1	16
Spain	--	(4/)	--	(4/)	4	4	7
Sri Lanka	--	--	--	--	--	--	(4/)
Sweden	--	--	(4/)	7	1	8	90
Switzerland	--	--	(4/)	--	(4/)	(4/)	1
Taiwan	--	--	1	3	(4/)	4	15
Turkey	--	--	--	--	--	--	3
United Arab Emirates	--	--	(4/)	--	--	(4/)	1
United Kingdom	3	--	13	10	3	29	98
Venezuela	--	--	--	--	--	--	2
Other	--	--	--	--	(4/)	(4/)	1
Total	6	1	54	62	35	158	991
Total, year to date	41	24	258	414	254	991	XX

XX Not applicable. -- Zero.

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

2/ Tungsten content estimated from reported gross weight.

3/ Includes wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

4/ Less than 1/2 unit.

Note: Estimated exports of waste and scrap in July 2000 totaled 46 metric tons, tungsten content.

Source: U.S. Census Bureau.