

Mineral Industry Surveys

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TUNGSTEN IN JULY 2000

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder produced from hydrogen-reduced metal powder, was 23% higher during January through July 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 July 2000 was 9% 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 July 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.

New publication

The 1999 Tungsten Annual Review is now available. To retrieve this report from MINES FaxBack, call (703) 648-4999 from the phone attached to your fax machine and request document number 680499.

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 August 1 to 31, 2000, are as follows:

Low—\$34/metric ton unit WO_3 (\$31/short ton unit WO_3)
High—\$48/metric ton unit WO_3 (\$44/short ton unit WO_3)

TABLE 1
U.S. SALIENT TUNGSTEN STATISTICS 1/

(Metric tons, tungsten content)

Period	Concentrate				Intermediate products				
	Reported consumption	Imports for consumption	Stocks, end of period		Reported scrap consumption	Net production 4/	Reported consumption 5/	Stocks, end of period	
			Industry 2/	U.S. Government 3/				Industry 6/	U.S. Government 3/
1999:									
July	333	232	531	34,600	383	621	671	1,160	2,700
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 r/	848 r/	744	1,250	2,480
May	W	336	W	33,900	398 r/	863 r/	762	1,240	2,320
June	W	169	W	33,900	391 r/	863 r/	757 r/	1,260 r/	2,320
July	W	NA	W	33,900	394	850	738	1,270	2,290
Total	W	NA	XX	XX	2,960	5,870	5,190	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:			
July	611	681	451
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
Total 3/	1,870	3,520	XX

r/ Revised. 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		
	1999	2000		Year to date	1999	2000	
		June	July			June	July
Metal powder	4,540	508 r/	494	3,380	626	633 r/	629
Tungsten carbide powder (made from metal powder)	3,960	355 r/	356	2,490	441	490	511
Cast and crystalline carbide powder; other	W	W	W	W	W	W	W
Chemicals	W	W	W	W	W	135 r/	132
Total 3/	8,500	863 r/	850	5,870	1,070	1,260 r/	1,270

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	June	July	Year to date
Steels	40	39	304
Superalloys	29	28	202
Other alloys (excludes steels and superalloys) 4/	W	W	W
Cemented carbides 5/	497 r/	483	3,430
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	191 r/	187	1,250
Total	757 r/	737	5,190

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:						
July	36	104	495	28	8	671
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 r/	31	10	757 r/
July	37	176	483	33	8	738
January-July	293	1,170	3,440	224	64	5,190
Stocks:						
1999:						
July	31	13	495	24	11	575
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 r/	27	16	526 r/
July	48	13	412	24	11	509

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:								
April	277	156	60	69	86	456	1,100	3,320
May	336	90	89	66	80	106	766	4,090
June:								
Australia	--	--	--	--	--	--	--	(3/)
Austria	--	--	--	--	--	4	4	26
Belgium	--	--	--	1	--	(3/)	1	3
Bolivia	23	--	--	--	--	--	23	199
Canada	--	--	--	--	52	--	52	275
China	92	158	29	25	15	47	367	2,560
Estonia	--	--	--	--	--	--	--	8
France	--	--	--	--	(3/)	(3/)	(3/)	4
Germany	--	19	--	5	7	5	35	195
Hong Kong	--	--	--	--	--	1	1	9
Hungary	--	--	--	--	--	1	1	6
India	--	--	--	--	--	--	--	(3/)
Ireland	--	--	--	--	(3/)	--	(3/)	(3/)
Israel	--	--	--	(3/)	6	1	7	84
Italy	--	--	--	--	(3/)	(3/)	(3/)	1
Japan	--	--	--	1	--	2	3	21
Korea, Republic of	--	--	--	--	2	(3/)	2	4
Luxembourg	--	--	--	--	10	--	10	12
Mexico	--	--	--	--	--	(3/)	(3/)	(3/)
Mongolia	--	--	--	--	--	--	--	14
Netherlands	--	--	--	--	--	(3/)	(3/)	10
Netherlands Antilles	--	--	--	--	--	--	--	(3/)
Peru	14	--	--	--	--	--	14	89
Portugal	20	--	--	--	--	--	20	177
Russia	--	--	--	--	3	95	98	875
Rwanda	19	--	--	--	--	--	19	45
Singapore	--	--	--	--	--	(3/)	(3/)	1
South Africa	--	--	--	--	1	--	1	1
Spain	--	--	--	--	--	(3/)	(3/)	(3/)
Sweden	--	--	--	--	--	(3/)	(3/)	(3/)
Switzerland	--	--	--	--	--	1	1	2
Taiwan	--	--	--	--	--	--	--	(3/)
Thailand	--	--	--	--	--	(3/)	(3/)	(3/)
United Kingdom	--	--	--	20	(3/)	1	21	146
Total	169	177	29	52	96	159	682	4,770
Total, year to date	1,310	967	298	312	502	1,370	4,770	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 June 2000 totaled 66 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:							
April	4	16	34	71	46	171	502
May	3	--	38	86	42	169	672
June:							
Australia	--	--	(4/)	(4/)	(4/)	1	5
Austria	--	--	--	--	(4/)	(4/)	(4/)
Barbados	--	--	--	--	(4/)	(4/)	(4/)
Belgium	--	--	--	(4/)	1	1	5
Bolivia	--	--	--	(4/)	--	(4/)	(4/)
Brazil	--	--	1	(4/)	2	3	13
Canada	--	--	6	13	5	24	160
Chile	--	--	(4/)	--	--	(4/)	(4/)
China	--	--	--	--	(4/)	(4/)	1
Denmark	--	--	--	--	--	--	14
Egypt	--	--	6	--	--	6	6
France	(4/)	--	1	2	4	8	18
Germany	--	--	22	14	3	40	240
Hong Kong	--	--	--	(4/)	(4/)	(4/)	2
Hungary	--	--	--	--	4	4	16
India	--	--	(4/)	--	1	1	9
Indonesia	--	--	--	--	1	1	4
Ireland	--	--	--	(4/)	(4/)	(4/)	2
Israel	--	--	--	--	(4/)	(4/)	1
Italy	--	--	2	1	2	5	45
Japan	1	--	(4/)	(4/)	2	4	25
Korea, Republic of	--	--	(4/)	--	(4/)	(4/)	3
Luxembourg	--	--	--	--	--	--	1
Malaysia	--	--	--	--	(4/)	(4/)	3
Mexico	--	--	(4/)	2	3	5	32
Netherlands	--	--	--	(4/)	(4/)	(4/)	32
New Zealand	--	--	--	--	(4/)	(4/)	(4/)
Philippines	--	--	--	--	(4/)	(4/)	(4/)
Saudi Arabia	--	--	--	--	--	--	5
Singapore	--	--	(4/)	(4/)	(4/)	1	4
South Africa	--	--	(4/)	10	--	10	15
Spain	--	--	(4/)	(4/)	1	2	3
Sri Lanka	--	--	--	--	(4/)	(4/)	(4/)
Sweden	--	--	(4/)	30	(4/)	30	83
Switzerland	--	--	--	--	(4/)	(4/)	1
Taiwan	--	--	2	2	(4/)	3	10
Turkey	--	--	(4/)	--	--	(4/)	3
United Arab Emirates	--	--	(4/)	--	--	(4/)	1
United Kingdom	(4/)	--	1	5	1	8	70
Venezuela	--	--	--	--	(4/)	(4/)	2
Other	--	--	--	--	--	--	1
Total	2	--	45	80	33	161	833
Total, year to date	35	23	203	352	219	833	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 June 2000 totaled 58 metric tons, tungsten content.

Source: U.S. Census Bureau.