

Mineral Industry Surveys

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TUNGSTEN IN JUNE 2002

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder produced from metal powder, was 12% lower during January through June 2002 than net production during the same period in 2001, 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 June 2002 was basically the same as that consumed during the first six months of 2001. These materials were used to make alloys, cemented carbides, mill products, catalysts, and pigments.

Data for U.S. imports and exports for June 2002 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 (WO₃) content of 65%. The prices for July 1-31, 2002, are as follows:

Low—\$32/metric ton unit WO₃ (\$29/short ton unit WO₃)
High—\$45/metric ton unit WO₃ (\$41/short ton unit WO₃)

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/
2001: p/									
June	W	288	W	32,300	488	904	691	1,040	1,540
July	W	275	W	32,300	544	735	759	909	1,490
August	W	247	W	32,100	510	781	712	851	1,440
September	W	246	W	32,100	402	788	732	813	1,410
October	W	389	W	NA	449	584	769	693	NA
November	W	149	W	NA	372	696	742	676	NA
December	W	253	W	31,100 e/	350	573	672	699	1,120 e/
January-December	W	2,680	XX	XX	5,660	9,520	8,960	XX	XX
2002:									
January	W	207	W	NA	342 r/	759	781 r/	686	NA
February	W	79	W	NA	341 r/	811	788 r/	693	NA
March	W	212	W	NA	270 r/	750	772 r/	640	NA
April	W	292	W	NA	413 r/	822	776 r/	667	NA
May	W	292	W	NA	422 r/	768	760 r/	679	NA
June	W	NA	W	NA	408	792	753	664	NA
Total	W	NA	XX	XX	2,200	4,700	4,630	XX	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. 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 and tungsten carbide powder.

5/ Includes estimates and scrap.

6/ Data for tungsten metal powder and tungsten carbide powder reported by producers.

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/
2001: p/			
June	W	913	88
July	W	726	100
August	W	835	140
September	W	W	97
October	W	721	179
November	W	619	W
December	W	481	W
January-December 3/	W	7,020	XX
2002:			
January	W	621	W
February	W	814	118
March	W	653	W
April	W	750	W
May	W	651	103
June	W	673	103
Total	W	4,160	XX

p/ Preliminary. W Withheld to avoid disclosing company proprietary data. 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 3/	Net production 2/				Stocks at end of period		
	2001 p/	2002		Year to date	2002		
		May	June		May	June	
Metal powder	5,190	439	441	2,710	367	356	350
Tungsten carbide powder (made from metal powder)	4,330	329	351	1,990	332	323	314
Total	9,520	768	792	4,700	699	679	664

p/ Preliminary.

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/ Data 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	May	June	Year to date
Steels	35 r/	34	226
Superalloys	40 r/	28	227
Other alloys (excludes steels and superalloys) 4/	W	W	W
Cemented carbides 5/	459 r/	466	2,800
Mill products made from metal powder	W	W	W
Chemical uses	W	W	W
Miscellaneous and unspecified	226	225	1,380
Total	760 r/	753	4,630

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 tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

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

(Metric tons, tungsten content)

Period	Ferro- tungsten	Tungsten metal powder	Tungsten carbide powder	Tungsten scrap	Other tungsten materials 2/	Total
Consumption:						
2001: p/						
June	29	157	476	35	6	704
July	30	215	471	50	6	772
August	36	154	474	39	6	710
September	28	196	474	40	6	745
October	22	218	471	50	6	767
November	23	204	474	48	6	755
December	22	145	473	39	6	684
January-December	334	2,350	5,680	524	73	8,960
2002:						
January	37 r/	222	466	50 r/	6 r/	781 r/
February	38 r/	230	473	37 r/	9 r/	788 r/
March	38 r/	223	465 r/	40 r/	6 r/	772 r/
April	34 r/	220	479	36 r/	6 r/	776 r/
May	33 r/	217	465 r/	40 r/	6 r/	760 r/
June	33	213	471	30	6	753
Total	214	1,330	2,820	232	39	4,630
Stocks:						
2001: p/						
June	14	30	588	45	9	685
July	36	30	573	38	9	687
August	29	29	509	45	9	621
September	36	30	536	38	9	648
October	41	33	553	40	9	677
November	40	32	539	45	9	665
December	37	33	596	43	9	717
2002:						
January	42	32 r/	548 r/	36 r/	9 r/	666 r/
February	36	29 r/	540 r/	41 r/	9 r/	655 r/
March	33	32 r/	547 r/	40 r/	9 r/	661 r/
April	32	36 r/	540 r/	45 r/	9 r/	663 r/
May	28	34 r/	544 r/	43 r/	9 r/	657 r/
June	34	40	552	42	9	678

p/ Preliminary. r/ Revised.

1/ Includes estimates.

2/ 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
2001 p/	2,680	2,720	352	947	932	2,120	9,750	XX
2002:								
March	212	119	128	77	57	65	657	1,800
April	292	313	15	42	92	35	789	2,590
May:								
Australia	--	--	--	--	--	--	--	(3/)
Austria	--	--	--	--	--	2	2	19
Belgium	--	--	--	(3/)	--	(3/)	(3/)	1
Bolivia	36	--	--	--	--	--	36	219
Canada	182	--	--	(3/)	35	--	217	673
China	--	382	45	16	10	3	458	1,830
Czech Republic	--	--	--	--	--	--	--	(3/)
France	--	--	--	--	--	1	1	7
Germany	--	18	--	7	6	2	33	151
Hong Kong	30	--	--	--	--	(3/)	30	50
Hungary	--	--	--	--	--	(3/)	(3/)	1
India	--	--	--	--	--	(3/)	(3/)	23
Israel	4	--	--	8	10	1	23	92
Italy	--	--	--	--	--	--	--	1
Japan	--	--	--	(3/)	--	5	5	18
Korea, Republic of	--	--	--	3	3	(3/)	7	40
Luxembourg	--	--	--	--	1	--	1	1
Malaysia	--	--	--	--	--	(3/)	(3/)	(3/)
Netherlands	--	--	--	(3/)	--	(3/)	(3/)	(3/)
Pakistan	--	--	--	10	--	--	10	10
Peru	--	--	--	--	--	--	--	9
Portugal	39	--	--	--	--	--	39	213
Russia	--	--	--	--	--	(3/)	(3/)	42
Singapore	--	--	--	--	--	5	5	7
Spain	--	--	--	--	--	(3/)	(3/)	(3/)
Sweden	--	--	--	--	--	(3/)	(3/)	6
Switzerland	--	--	--	--	--	(3/)	(3/)	(3/)
Taiwan	--	--	--	--	--	(3/)	(3/)	(3/)
Uganda	--	--	--	--	--	--	--	7
United Kingdom	--	--	--	--	--	(3/)	(3/)	40
Total	292	400	45	46	65	20	870	3,460
Total, year to date	1,080	1,190	273	280	348	282	3,460	XX

p/ Preliminary. -- 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 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 May 2002 totaled 107 metric tons, tungsten content, to give a year-to-date total of 385 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
2001 p/	220	257	569	1,950	1,120	4,110	XX
2002:							
March	9	23	35	192	59	318	856
April	8	--	38	100	107	252	1,110
May:							
Australia	--	--	1	(4/)	1	2	8
Austria	--	--	--	--	(4/)	(4/)	3
Belgium	--	--	--	12	--	12	24
Brazil	--	--	1	1	(4/)	2	11
Canada	--	--	3	13	14	30	144
China 5/	--	--	--	--	1	1	4
Colombia	--	--	--	(4/)	(4/)	(4/)	4
Czech Republic	--	--	--	--	--	--	11
France	(4/)	--	(4/)	5	1	6	37
Germany	--	--	11	22	1	34	355
Hong Kong	--	--	(4/)	--	3	3	6
Hungary	--	--	--	--	(4/)	(4/)	5
India	--	--	(4/)	--	2	2	9
Indonesia	--	--	--	(4/)	(4/)	(4/)	2
Ireland	--	--	--	1	(4/)	2	5
Israel	--	--	--	--	(4/)	(4/)	6
Italy	--	--	(4/)	5	(4/)	5	14
Japan	--	--	(4/)	2	12	14	55
Korea, Republic of	--	--	(4/)	(4/)	(4/)	(4/)	20
Luxembourg	--	--	--	--	--	--	1
Malaysia	--	--	--	--	--	--	(4/)
Mexico	(4/)	--	--	--	15	15	113
Netherlands	--	--	--	--	(4/)	(4/)	83
New Zealand	--	--	--	--	1	1	3
Peru	--	--	--	(4/)	--	(4/)	(4/)
Philippines	--	--	--	--	--	--	8
Singapore	--	--	1	(4/)	(4/)	1	7
South Africa	--	--	--	--	--	--	2
Spain	--	--	(4/)	(4/)	(4/)	(4/)	3
Sweden	--	--	(4/)	19	(4/)	20	96
Switzerland	--	--	1	--	--	1	3
Taiwan	--	--	4	1	8	13	46
Thailand	--	--	--	--	--	--	2
Turkey	--	--	--	--	(4/)	(4/)	1
United Kingdom	11	--	2	27	2	41	222
Other	--	--	(4/)	(4/)	(4/)	(4/)	(4/)
Total	11	--	26	110	62	208	1,320
Total, year to date	48	44	183	558	483	1,320	XX

p/ Preliminary. 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 unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

4/ Less than 1/2 unit.

5/ Includes Macau.

Note: Estimated exports of waste and scrap in May 2002 totaled 29 metric tons, tungsten content, to give a year-to-date total of 132 metric tons, tungsten content.

Source: U.S. Census Bureau.