

# Mineral Industry Surveys

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## TUNGSTEN IN JANUARY THROUGH JUNE 2014

U.S. net production of intermediate tungsten products, including metal powder and tungsten carbide powder, was slightly less during January through June 2014 than net production during the same period in 2013.

### Prices

Prices were sourced from Platts Metals Daily. The prices listed below in dollars per metric ton unit were converted from short-ton-unit prices and rounded to the nearest dollar.

#### January:

Ammonium paratungstate, U.S. free market:

Low—\$358/metric ton unit WO<sub>3</sub> (\$325/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

#### February:

Ammonium paratungstate, U.S. free market:

Low—\$358/metric ton unit WO<sub>3</sub> (\$325/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

#### March:

Ammonium paratungstate, U.S. free market:

Low—\$358/metric ton unit WO<sub>3</sub> (\$325/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

#### April:

Ammonium paratungstate, U.S. free market:

Low—\$358/metric ton unit WO<sub>3</sub> (\$325/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

#### May:

Ammonium paratungstate, U.S. free market:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$331/metric ton unit WO<sub>3</sub> (\$300/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

#### June:

Ammonium paratungstate, U.S. free market:

Low—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

High—\$364/metric ton unit WO<sub>3</sub> (\$330/short ton unit WO<sub>3</sub>)

Concentrates:

Low—\$331/metric ton unit WO<sub>3</sub> (\$300/short ton unit WO<sub>3</sub>)

High—\$353/metric ton unit WO<sub>3</sub> (\$320/short ton unit WO<sub>3</sub>)

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TABLE 1  
U.S. SALIENT TUNGSTEN STATISTICS<sup>1</sup>

(Metric tons, tungsten content)

Period	Concentrate				Intermediate products		
	Reported consumption <sup>p</sup>	Imports for consumption	Stocks, end of period		Net production <sup>p,4</sup>	Stocks, end of period	
			Industry <sup>p,2</sup>	U.S. Government <sup>3</sup>		Industry Producer <sup>p,5</sup>	U.S. Government <sup>3</sup>
2013:							
January	W	487	W	13,900	568 <sup>r</sup>	615	125
February	W	439	W	13,900	553 <sup>r</sup>	660	125
March	W	265	W	13,800	517 <sup>r</sup>	651	125
April	W	410	W	13,800	W	692	125
May	W	253	W	13,700	457 <sup>r</sup>	787	125
June	W	368	W	13,000	640 <sup>r</sup>	755	125
July	W	249	W	12,300	517 <sup>r</sup>	732	125
August	W	262	W	12,100	W	720 <sup>r</sup>	125
September	W	273	W	12,100	472 <sup>r</sup>	714 <sup>r</sup>	125
October	W	222	W	12,100	523 <sup>r</sup>	801 <sup>r</sup>	125
November	W	176	W	12,000	W	801	125
December	W	286	W	11,900	W	769	125
January–December	W	3,690	W	11,900	6,150	769	125
2014:							
January	W	269	W	11,900	521	776	125
February	W	530	W	11,900	561	858	125
March	W	436	W	11,800	W	832	125
April	W	364	W	11,700	W	812	125
May	W	274	W	11,700	508	762	125
June	W	303	W	11,600	546	752	125
January–June	W	2,180	W	11,600	3,200	752	125

<sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Reported by consumers.

<sup>3</sup>Data from the Defense Logistics Agency, DLA Strategic Materials. Data are uncommitted material only.

<sup>4</sup>Net production of tungsten metal powder and tungsten carbide powder.

<sup>5</sup>Data for tungsten metal powder and tungsten carbide powder reported by producers. Includes estimates.

TABLE 2a  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>p,1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>		Stocks at end of period	
	2013	2014	2013	2014
		January		January
Metal powder	W	W	W	W
Tungsten carbide powder	W	W	W	W
Total	6,150	521	769	776

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 2b  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>p, 1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>				Stocks at end of period		
	2013	2014			2013	2014	
		January	February	January–February		January	February
Metal powder	W	W	W	W	W	W	W
Tungsten carbide powder	W	W	W	W	W	W	W
Total	6,150	521	561	1,080	769	776	858

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 2c  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>p, 1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>				Stocks at end of period		
	2013	2014			2013	2014	
		February	March	January–March		February	March
Metal powder	W	W	W	W	W	W	W
Tungsten carbide powder	W	W	W	W	W	W	W
Total	6,150	561	W	W	769	858	832

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 2d  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>p, 1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>				Stocks at end of period		
	2013	2014			2013	2014	
		March	April	January–April		March	April
Metal powder	W	W	W	W	W	W	W
Tungsten carbide powder	W	W	W	W	W	W	W
Total	6,150	W	W	W	769	832	812

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 2e  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>p, 1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>				Stocks at end of period		
	2013	2014			2013	2014	
		April	May	January–May		April	May
Metal powder	W	W	W	W	W	W	W
Tungsten carbide powder	W	W	W	W	W	W	W
Total	6,150	W	508	2,650	769	812	762

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 2f  
U.S. PRODUCTION AND STOCKS OF TUNGSTEN PRODUCTS<sup>P, 1</sup>

(Metric tons, tungsten content)

Product <sup>3</sup>	Net production <sup>2</sup>				Stocks at end of period		
	2013	2014			2013	2014	
		May	June	January–June		May	June
Metal powder	W	W	W	W	W	W	W
Tungsten carbide powder	W	W	W	W	W	W	W
Total	6,150	508	546	3,200	769	762	752

<sup>P</sup>Preliminary. W Withheld to avoid disclosing company proprietary data.

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

<sup>2</sup>Receipts plus gross production less quantity used to make other products in table.

<sup>3</sup>Data for cast and crystalline tungsten carbide powder and tungsten chemicals are withheld to avoid disclosing company proprietary data; not included in "Total."

TABLE 3a  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro-tungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total
2013	3,690	2,220	470	1,410	827	2,260	10,900
2014, January:							
Australia	19	--	--	--	--	(3)	19
Austria	--	--	--	--	--	4	4
Bolivia	39	--	--	--	--	--	39
Brazil	11	--	--	--	--	--	11
Canada	56	--	--	8	11	--	75
China	--	226	39	55	26	242	589
Germany	--	--	--	1	20	2	23
India	--	--	--	--	12	(3)	12
Israel	--	--	--	7	3	--	10
Korea, Republic of	--	--	--	13	3	(3)	16
Luxembourg	--	--	--	--	6	--	6
Portugal	60	--	--	--	--	--	60
Spain	72	--	--	--	--	--	72
Thailand	13	--	--	--	--	(3)	13
Vietnam	--	--	8	--	--	139	147
Other	--	--	--	2	2	4	9
Total	269	226	47	86	83	392	1,100

-- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in January 2014 totaled 156 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 3b  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro-tungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total	Total, year to date
2013	3,690	2,220	470	1,410	827	2,260	10,900	XX
2014:								
January	269	226	47	86	83	392	1,100	1,100
February:								
Australia	37	--	--	--	--	--	37	56
Austria	--	--	--	--	23	4	27	31
Bolivia	218	--	--	--	--	--	218	257
Brazil	--	--	--	--	--	--	--	11
Canada	138	--	--	14	11	--	163	238
China	--	146	22	36	61	190	456	1,040
Czech Republic	--	--	--	9	--	(3)	9	9
Germany	--	--	--	7	2	2	11	34
India	--	--	--	--	--	2	2	14
Israel	--	--	--	6	4	--	9	20
Japan	--	--	--	(3)	--	16	16	18
Korea, Republic of	--	--	--	17	3	(3)	20	36
Luxembourg	--	--	--	--	2	--	2	8
Mexico	8	--	--	--	--	--	8	8
Portugal	46	--	--	--	--	--	46	106
Russia	31	--	--	--	--	1	32	33
Spain	52	--	--	--	--	--	52	124
Thailand	--	--	--	--	--	--	--	13
Vietnam	--	--	26	--	--	--	26	173
Other	--	--	--	--	2	3	5	11
Total	530	146	49	90	108	218	1,140	2,240
January–February	799	372	96	176	191	609	2,240	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in February 2014 totaled 171 metric tons, tungsten content, to give a January–February total of 327 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 3c  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferrotungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total	Total, year to date
2013	3,690	2,220	470	1,410	827	2,260	10,900	XX
2014:								
January	269	226	47	86	83	392	1,100	1,100
February	530	146	49	90	108	218	1,140	2,240
March:								
Australia	28	--	--	--	--	--	28	84
Austria	--	--	--	1	6	6	13	44
Belgium	--	--	--	--	4	(3)	4	6
Bolivia	115	--	--	--	--	--	115	373
Brazil	--	--	--	--	--	--	--	11
Canada	123	--	--	14	9	(3)	146	384
China	--	91	36	29	12	129	297	1,340
Czech Republic	--	--	--	1	--	(3)	1	10
France	--	--	--	--	1	(3)	1	3
Germany	--	--	--	18	19	11	48	82
India	--	--	--	--	--	(3)	(3)	14
Israel	--	--	--	8	10	(3)	19	38
Japan	--	--	--	1	1	1	3	21
Korea, Republic of	--	--	--	9	1	(3)	10	46
Luxembourg	--	--	--	--	5	--	5	13
Mexico	--	--	--	--	--	(3)	(3)	8
Portugal	59	--	--	--	--	--	59	165
Russia	26	--	--	--	--	1	27	60
Singapore	--	--	--	--	--	2	2	4
Spain	72	--	--	--	--	(3)	72	196
Thailand	13	--	--	--	--	(3)	13	25
United Kingdom	--	--	--	(3)	--	1	1	3
Vietnam	--	--	--	--	--	--	--	173
Other	--	--	--	--	--	1	1	4
Total	436	91	36	81	68	153	865	3,110
January–March	1,240	464	131	257	259	762	3,110	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in March 2014 totaled 39 metric tons, tungsten content, to give a January–March total of 365 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 3d  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferrotungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total	Total, year to date
2013	3,690	2,220	470	1,410	827	2,260	10,900	XX
2014:								
February	530	146	49	90	108	218	1,140	2,240
March	436	91	36	81	68	153	865	3,110
April:								
Australia	46	--	--	--	--	--	46	130
Austria	--	--	--	--	14	7	21	66
Belgium	--	--	--	--	1	(3)	1	7
Bolivia	89	--	--	--	--	--	89	461
Brazil	6	--	--	--	--	--	6	16
Canada	102	--	--	19	8	(3)	130	513
China	13	96	50	31	51	167	408	1,750
Czech Republic	--	--	--	--	--	(3)	(3)	10
France	--	--	--	--	2	(3)	3	6
Germany	--	1	--	12	1	2	16	98
India	--	--	--	--	(3)	4	4	18
Israel	--	--	--	16	4	(3)	19	58
Japan	--	--	--	1	1	1	3	24
Korea, Republic of	--	--	--	15	3	(3)	18	64
Luxembourg	--	--	--	--	(3)	--	(3)	13
Mexico	--	--	--	--	--	--	--	8
Portugal	48	--	--	--	--	--	48	213
Russia	--	--	--	--	--	1	1	61
Singapore	--	--	--	--	--	(3)	(3)	4
Spain	61	--	--	--	--	(3)	61	257
Thailand	--	--	--	--	--	(3)	(3)	25
United Kingdom	--	--	--	1	--	(3)	1	4
Vietnam	--	--	64	--	--	45	109	282
Other	--	--	--	--	--	3	3	7
Total	364	97	114	95	86	232	987	4,100
January–April	1,600	560	245	351	344	994	4,100	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in April 2014 totaled 142 metric tons, tungsten content, to give a January–April total of 507 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 3e  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro-tungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total	Total, year to date
2013	3,690	2,220	470	1,410	827	2,260	10,900	XX
2014:								
March	436	91	36	81	68	153	865	3,110
April	364	97	114	95	86	232	987	4,100
May:								
Australia	9	--	--	--	--	--	9	139
Austria	--	--	--	--	1	4	5	71
Belgium	--	--	--	--	3	(3)	3	10
Bolivia	10	--	--	--	--	--	10	472
Brazil	--	--	--	--	--	--	--	16
Canada	112	--	--	18	6	(3)	136	649
China	--	132	--	22	52	180	386	2,130
Colombia	8	--	--	--	--	--	8	8
Czech Republic	--	--	--	--	--	(3)	(3)	11
France	--	--	--	--	2	(3)	2	8
Germany	--	36	--	7	16	4	63	161
India	--	--	--	(3)	--	(3)	(3)	18
Ireland	--	--	--	--	--	4	4	4
Israel	--	--	--	14	4	(3)	17	75
Japan	--	--	--	3	--	16	18	42
Korea, Republic of	--	--	--	30	--	(3)	30	94
Luxembourg	--	--	--	--	--	--	--	13
Mexico	--	--	--	--	--	--	--	8
Peru	10	--	--	--	--	--	10	10
Portugal	36	--	--	--	--	--	36	248
Russia	24	--	--	--	--	(3)	24	85
Singapore	--	--	--	--	--	2	2	6
Spain	52	--	--	--	--	--	52	309
Taiwan	--	--	16	--	--	(3)	16	17
Thailand	13	--	--	--	--	--	13	38
United Kingdom	--	--	--	--	--	(3)	(3)	4
Vietnam	--	--	--	10	--	16	26	308
Other	--	--	--	3	--	1	4	9
Total	274	167	16	107	83	227	873	4,970
January–May	1,870	727	261	458	427	1,220	4,970	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in May 2014 totaled 77 metric tons, tungsten content, to give a January–May total of 584 metric tons, tungsten content.

Source: U.S. Census Bureau.



TABLE 3f  
U.S. IMPORTS FOR CONSUMPTION OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of origin	Ores and concentrates	Ammonium tungstates	Ferro-tungsten	Metal powder	Tungsten carbide powder	Other <sup>2</sup>	Total	Total, year to date
2013	3,690	2,220	470	1,410	827	2,260	10,900	XX
2014:								
April	364	97	114	95	86	232	987	4,100
May	274	167	16	107	83	227	873	4,970
June:								
Australia	9	--	--	--	--	--	9	148
Austria	--	--	--	(3)	--	4	4	74
Belgium	--	--	--	--	1	--	1	11
Bolivia	90	--	--	--	--	--	90	561
Brazil	--	--	--	--	--	--	--	16
Canada	76	--	--	9	8	--	93	742
China	--	74	8	36	39	210	367	2,500
Colombia	8	--	--	--	--	--	8	16
Czech Republic	--	--	--	--	--	(3)	(3)	11
France	--	--	--	--	2	(3)	3	11
Germany	--	52	--	17	17	11	97	258
India	--	--	--	--	--	4	4	22
Ireland	--	--	--	--	--	--	--	4
Israel	--	--	--	2	4	--	5	80
Japan	--	--	--	(3)	--	2	2	45
Korea, Republic of	--	--	--	27	4	(3)	30	125
Luxembourg	--	--	--	--	--	--	--	13
Mexico	--	--	--	--	--	--	--	8
Peru	--	--	--	--	--	--	--	10
Portugal	58	--	--	--	--	--	58	306
Russia	--	--	--	--	--	(3)	(3)	86
Singapore	--	--	--	--	--	1	1	7
Spain	62	--	--	1	--	(3)	63	371
Taiwan	--	--	--	(3)	--	--	(3)	17
Thailand	--	--	--	--	--	--	--	38
United Kingdom	--	--	--	1	(3)	(3)	1	5
Vietnam	--	--	--	10	--	83	93	401
Other	--	--	--	--	2	1	3	12
Total	303	126	8	102	78	315	931	5,900
January–June	2,180	853	268	560	505	1,540	5,900	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>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.

<sup>3</sup>Less than ½ unit.

Note: Imports of waste and scrap in June 2014 totaled 109 metric tons, tungsten content, to give a January–June total of 693 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4a  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total
2013	1,060	1,600	455	901	1,460	5,470
2014, January:						
Austria	--	--	--	3	1	4
Brazil	(4)	--	(4)	1	19	20
Canada	--	--	5	9	44	58
China	--	--	--	5	(4)	5
Czech Republic	30	--	--	13	--	43
Germany	--	48	1	20	22	91
Hong Kong	24	--	(4)	(4)	(4)	24
Hungary	--	12	--	--	(4)	12
India	--	6	2	3	7	18
Japan	--	--	3	1	1	5
Luxembourg	--	--	--	34	--	34
Mexico	--	--	1	(4)	6	7
Netherlands	99	--	(4)	--	19	118
Panama	--	--	--	--	95	95
Singapore	--	--	4	(4)	7	11
Switzerland	--	7	(4)	(4)	--	7
Taiwan	--	--	--	8	(4)	8
United Kingdom	--	(4)	9	1	6	16
Other	--	--	4	6	5	16
Total	153	73	29	104	231	592

-- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in January 2014 totaled 259 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4b  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total	Total, year to date
2013	1,060	1,600	455	901	1,460	5,470	XX
2014:							
January	153	73	29	104	231	592	592
February:							
Austria	--	--	--	9	5	14	18
Brazil	(4)	--	1	(4)	(4)	2	21
Canada	--	--	6	13	47	66	124
China	--	--	(4)	3	(4)	3	8
Czech Republic	--	--	--	--	(4)	(4)	43
France	--	--	--	1	1	2	4
Germany	--	29	2	26	1	58	149
Hong Kong	--	--	--	(4)	--	(4)	24
Hungary	--	--	--	--	2	2	14
India	--	10	(4)	1	16	27	45
Israel	--	--	(4)	--	13	13	13
Japan	--	--	6	4	1	11	16
Korea, Republic of	--	--	(4)	2	1	3	4
Luxembourg	--	--	--	--	--	--	34
Mexico	--	--	1	(4)	5	6	12
Netherlands	--	--	1	--	(4)	1	118
Panama	--	--	--	--	--	--	95
Saudi Arabia	--	--	17	(4)	(4)	17	18
Singapore	--	--	5	1	(4)	6	17
Switzerland	--	--	--	--	(4)	(4)	8
Taiwan	--	--	(4)	2	2	5	12
Turkey	--	--	3	(4)	(4)	4	4
United Arab Emirates	--	--	1	1	3	4	5
United Kingdom	--	--	1	1	2	4	19
Other	(4)	--	2	4	2	7	18
Total	(4)	39	45	68	101	253	845
January–February	153	112	75	172	332	845	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in February 2014 totaled 93 metric tons, tungsten content, to give a January–February total of 352 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4c  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total	Total, year to date
2013	1,060	1,600	455	901	1,460	5,470	XX
2014:							
January	153	73	29	104	231	592	592
February	(4)	39	45	68	101	253	845
March:							
Australia	--	--	(4)	3	--	4	6
Austria	--	--	--	14	(4)	14	32
Brazil	(4)	--	1	2	9	12	33
Canada	--	--	5	9	61	75	200
China	--	--	1	10	(4)	11	19
Costa Rica	--	--	--	--	1	1	3
Czech Republic	--	--	--	--	--	--	43
France	--	--	(4)	--	(4)	(4)	4
Germany	--	28	4	29	4	66	214
Hong Kong	--	--	--	(4)	--	(4)	25
Hungary	--	49	--	--	2	51	65
India	--	8	3	3	31	45	90
Israel	--	--	--	--	4	4	17
Italy	--	2	--	1	1	4	6
Japan	--	--	4	1	8	13	29
Korea, Republic of	--	--	(4)	2	(4)	2	6
Luxembourg	--	--	--	--	--	--	34
Mexico	--	--	1	1	8	11	23
Netherlands	--	--	1	--	(4)	1	119
Panama	--	--	--	--	--	--	95
Russia	121	--	--	--	(4)	121	121
Saudi Arabia	--	--	--	(4)	--	(4)	18
Singapore	--	--	4	1	11	16	33
South Africa	--	--	1	2	(4)	3	4
Switzerland	--	--	--	--	--	--	8
Taiwan	--	--	--	2	2	5	17
Turkey	--	--	1	(4)	--	1	4
United Arab Emirates	--	--	--	(4)	3	3	8
United Kingdom	--	--	(4)	5	5	10	30
Vietnam	117	--	--	--	--	117	117
Other	(4)	--	3	1	1	6	16
Total	238	88	29	87	152	593	1,440
January–March	391	200	103	259	484	1,440	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in March 2014 totaled 207 metric tons tungsten content, to give a January–March total of 559 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4d  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total	Total, year to date
2013	1,060	1,600	455	901	1,460	5,470	XX
2014:							
February	(4)	39	45	68	101	253	845
March	238	88	29	87	152	593	1,440
April:							
Australia	--	--	--	1	(4)	1	7
Austria	--	--	--	9	25	35	66
Brazil	--	--	1	12	1	13	46
Canada	--	--	6	11	50	67	267
China	18	--	(4)	9	2	30	49
Costa Rica	--	--	--	--	1	1	4
Czech Republic	--	--	--	10	--	10	53
France	--	--	--	1	(4)	1	5
Germany	--	28	7	36	3	74	288
Hong Kong	--	--	--	(4)	--	(4)	25
Hungary	--	--	--	--	1	1	65
India	--	3	1	2	30	35	125
Israel	--	--	(4)	--	2	2	19
Italy	--	--	4	1	1	6	12
Japan	--	--	1	5	3	10	39
Korea, Republic of	--	--	(4)	2	(4)	2	8
Luxembourg	--	--	--	9	--	9	43
Mexico	--	--	1	1	4	6	29
Netherlands	--	--	(4)	--	36	37	156
Panama	--	--	--	--	--	--	95
Russia	67	--	--	1	(4)	67	188
Saudi Arabia	--	--	13	1	--	14	32
Singapore	(4)	--	6	1	11	19	51
South Africa	--	--	1	2	--	3	7
Switzerland	(4)	--	--	(4)	--	(4)	8
Taiwan	--	--	(4)	5	2	7	24
Turkey	--	--	3	--	(4)	3	8
United Arab Emirates	--	--	--	(4)	(4)	(4)	8
United Kingdom	--	--	2	1	1	4	34
Vietnam	51	--	--	--	--	51	168
Other	--	--	2	2	1	4	20
Total	136	31	50	123	173	512	1,950
January–April	527	231	153	382	657	1,950	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in April 2014 totaled 195 metric tons tungsten content, to give a January–April total of 754 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4e  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total	Total, year to date
2013	1,060	1,600	455	901	1,460	5,470	XX
2014:							
March	238	88	29	87	152	593	1,440
April	136	31	50	123	173	512	1,950
May:							
Australia	(4)	--	(4)	7	--	7	14
Austria	--	--	--	16	6	22	88
Brazil	--	--	(4)	2	1	3	49
Canada	--	--	6	12	41	59	326
China	41	--	(4)	6	3	51	100
Costa Rica	--	--	--	--	2	2	6
Czech Republic	1	--	--	(4)	--	1	54
France	--	--	--	--	--	--	5
Germany	--	5	3	13	16	38	326
Hong Kong	--	--	1	(4)	--	2	27
Hungary	--	--	--	(4)	1	1	66
India	--	11	4	1	28	44	169
Israel	--	--	1	--	2	3	21
Italy	--	--	--	(4)	--	(4)	12
Japan	--	--	4	1	8	14	53
Korea, Republic of	--	--	--	1	--	1	9
Luxembourg	--	--	--	12	--	12	56
Mexico	--	--	2	2	7	11	41
Netherlands	--	--	1	--	(4)	1	157
Panama	--	--	(4)	--	28	28	123
Peru	(4)	--	(4)	--	--	(4)	3
Russia	49	--	--	--	(4)	49	237
Saudi Arabia	--	--	11	(4)	(4)	11	43
Singapore	--	--	3	2	27	32	83
South Africa	--	--	1	1	(4)	2	9
Switzerland	--	--	(4)	1	(4)	1	9
Taiwan	--	--	(4)	3	(4)	3	28
Thailand	--	--	(4)	(4)	2	2	5
Turkey	--	--	--	--	--	--	8
United Arab Emirates	--	--	--	(4)	(4)	(4)	8
United Kingdom	--	3	(4)	(4)	3	6	40
Vietnam	72	--	--	--	--	72	241
Other	(4)	--	2	2	(4)	4	19
Total	164	19	41	84	177	485	2,430
January–May	690	250	194	466	834	2,430	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates.

Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in May 2014 totaled 149 metric tons tungsten content, to give a January–May total of 903 metric tons, tungsten content.

Source: U.S. Census Bureau.

TABLE 4f  
U.S. EXPORTS OF TUNGSTEN, BY COUNTRY<sup>1</sup>

(Metric tons, tungsten content)

Period and country of destination	Ores and concentrates <sup>2</sup>	Ammonium tungstates	Metal powder <sup>2</sup>	Tungsten carbide powder	Other <sup>3</sup>	Total	Total, year to date
2013	1,060	1,600	455	901	1,460	5,470	XX
2014:							
April	136	31	50	123	173	512	1,950
May	164	19	41	84	177	485	2,430
June:							
Australia	--	--	(4)	3	(4)	3	17
Austria	--	--	--	27	1	29	117
Brazil	--	--	1	1	9	12	61
Canada	--	--	8	8	39	55	381
Chile	--	--	--	2	--	2	4
China	--	--	2	3	(4)	5	106
Costa Rica	--	--	--	--	2	2	7
Czech Republic	--	--	--	--	--	--	54
France	--	--	--	--	(4)	(4)	5
Germany	--	51	5	12	(4)	68	394
Hong Kong	--	--	7	(4)	(4)	7	34
Hungary	--	--	--	--	(4)	(4)	67
India	--	--	2	1	19	22	191
Ireland	--	--	1	--	--	1	3
Israel	--	--	--	(4)	--	(4)	22
Italy	--	--	--	(4)	(4)	(4)	13
Japan	--	--	2	1	1	4	56
Korea, Republic of	--	--	1	1	(4)	2	10
Luxembourg	--	--	--	--	--	--	56
Mexico	--	--	1	1	3	4	45
Netherlands	--	--	1	--	(4)	1	157
Panama	--	--	(4)	--	3	3	126
Peru	--	--	1	(4)	--	1	4
Russia	--	--	--	--	(4)	(4)	237
Saudi Arabia	--	--	--	(4)	--	(4)	43
Singapore	--	--	1	3	8	13	96
South Africa	--	--	(4)	1	(4)	1	10
Switzerland	--	--	--	--	--	--	9
Taiwan	--	--	1	4	(4)	5	33
Thailand	--	--	--	(4)	(4)	(4)	5
Turkey	--	--	2	--	--	2	9
United Arab Emirates	--	--	(4)	--	--	(4)	8
United Kingdom	--	--	(4)	1	1	2	42
Vietnam	--	--	--	--	--	--	241
Other	--	--	(4)	2	1	3	17
Total	--	51	36	70	89	246	2,680
January–June	690	301	230	536	922	2,680	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Tungsten content estimated from reported gross weight.

<sup>3</sup>Includes unwrought tungsten, including bars and rods obtained simply by sintering, wrought tungsten, ferrotungsten, and other tungstates. Tungsten content estimated in part.

<sup>4</sup>Less than ½ unit.

Note: Estimated exports of waste and scrap in June 2014 totaled 50 metric tons tungsten content, to give a January–June total of 953 metric tons, tungsten content.

Source: U.S. Census Bureau.