

Mineral Industry Surveys

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VANADIUM IN AUGUST 2012

Reported domestic consumption of vanadium in August 2012 was slightly less than that of the previous month and was slightly more than that of August 2011. Consumer stocks of vanadium, in all forms, were 185 metric tons (t) at the beginning of 2012 and 234 t at the end of August.

According to Ryan's Notes, U.S. ferrovanadium (FeV) prices ranged from \$13.567 to \$16.144 per pound of vanadium content in August, as compared with \$14.539 to \$17.000 in July. European FeV prices ranged from \$23.400 to \$23.822 per kilogram in August, as compared with \$25.500 to \$26.000 in July. Vanadium pentoxide (V₂O₅) prices ranged from \$6.500 to \$7.000 per pound in both July and August.

The U.S. Department of Commerce revoked a 108% antidumping duty order on FeV and nitrided vanadium from Russia following a U.S. International Trade Commission (ITC)

ruling. The antidumping duty order on imports was first imposed in July 1995, and many U.S. producers were confident that the 5-year sunset review would result in the ITC agreeing that terminating the duty would likely lead to recurrence of material injury. Instead, the ITC determined that revoking the duty would not likely result in injury in any reasonably foreseeable time. The ITC decision can be appealed to the U.S. Court of International Trade. (Ryan's Notes, 2012).

Reference Cited

Ryan's Notes, 2012, US ITC shocks industry by revoking antidumping duty on Russian FeV imports: Ryan's Notes, v. 18, no. 32, August 13, p. 1-2.

TABLE 1
U.S. CONSUMPTION AND CONSUMER STOCKS OF VANADIUM, BY FORM¹

(Kilograms, contained vanadium)

	2011		2012					
	Consumption	Stocks	July ^r		August		January–August	
			Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovandium ²	4,240,000	122,000	333,000	177,000	330,000	174,000	2,680,000	174,000
Vanadium-aluminum alloy and other forms ³	882,000	63,300	68,000	71,800	69,500	60,900	564,000	60,900
Total	5,120,000	185,000	401,000	248,000	400,000	234,000	3,250,000	234,000

^rRevised.

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

²Includes other vanadium-iron-carbon alloys as well as vanadium oxides added directly to steel.

³Includes vanadium-aluminum alloy, other vanadium alloys, vanadium metal, vanadium pentoxide, vanadates, chlorides, and other specialty chemicals.

TABLE 2
U.S. CONSUMPTION OF VANADIUM, BY END USE¹

(Kilograms, contained vanadium)

	2011	2012		
		July	August	January–August
Steel:				
Carbon	677,000	51,800	54,500	467,000
Full alloy	2,120,000	177,000	172,000	1,380,000
High-strength low-alloy	W	W	W	W
Stainless and heat resisting	61,500	5,220 ^r	5,120	41,100
Tool	W	W	W	W
Total steel	2,860,000	234,000 ^r	231,000	1,890,000
Superalloys	15,300	522 ^r	520	3,960
Miscellaneous and unspecified ²	W	W	W	W
Total	5,120,000	401,000 ^r	400,000	3,250,000

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

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

²Includes cast irons, alloys excluding steel and superalloys, chemical and ceramic uses, and other miscellaneous and unspecified uses.

TABLE 3
U.S. IMPORTS AND EXPORTS OF ALUMINUM-VANADIUM MASTER ALLOY AND VANADIUM
METAL, INCLUDING WASTE AND SCRAP¹

(Kilograms, gross weight)

	Aluminum-vanadium master alloy		Vanadium metal, including waste and scrap	
	Quantity	Value	Quantity	Value
Imports for consumption:				
2011	278,000	\$1,210,000	43,900	\$1,930,000
2012:				
July	--	--	18,900	580,000
August, Germany	--	--	9,120	255,000
January–August	90,300	611,000	91,100	2,850,000
Exports:				
2011	920,000	6,930,000	102,000	3,340,000
2012:				
July	2,340,000	6,040,000	10,200	276,000
August:				
Australia	--	--	76	2,940
Belgium	691	8,980	--	--
Canada	231,000	592,000	--	--
Korea, Republic of	1,220	15,900	--	--
Mexico	1,640,000	4,130,000	--	--
Peru	141	2,840	--	--
Poland	368	4,790	--	--
Total	1,880,000	4,750,000	76	2,940
January–August	15,500,000	42,900,000	10,900	307,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS AND EXPORTS OF FERROVANADIUM, VANADIUM PENTOXIDE (ANHYDRIDE) AND
OTHER OXIDES AND HYDROXIDES OF VANADIUM¹

(Kilograms, contained vanadium)

	Ferrovanadium		Vanadium pentoxide (anhydride) ²		Other oxides and hydroxides of vanadium	
	Quantity	Value	Quantity	Value	Quantity	Value
Imports for consumption:						
2011	2,220,000	\$64,600,000	2,800,000	\$45,800,000	886,000	\$17,400,000
2012:						
July	396,000	10,400,000	87,100	1,620,000	247,000	3,430,000
August:						
Austria	--	--	--	--	8,340	194,000
Canada	89,600	2,100,000	--	--	--	--
China	--	--	71,000	937,000	--	--
Czech Republic	147,000	3,720,000	--	--	--	--
Germany	421	28,400	--	--	--	--
India	8,540	188,000	--	--	--	--
Korea, Republic of	89,800	2,520,000	--	--	--	--
South Africa	--	--	121,000	2,210,000	19,900	276,000
Taiwan	--	--	10,000	230,000	--	--
Total	335,000	8,560,000	202,000	3,370,000	28,300	470,000
January–August	2,900,000	75,700,000	1,070,000	18,900,000	879,000	12,200,000
Exports:						
2011	314,000	9,970,000	88,700	1,410,000	254,000	2,390,000
2012:						
July	42,700	1,300,000	2,020	44,500	11,500	165,000
August:						
Canada	5,690	145,000	--	--	--	--
Germany	--	--	--	--	11,200	155,000
Korea, Republic of	2,850	119,000	--	--	--	--
Mexico	--	--	--	--	49,800	463,000
Netherlands	--	--	--	--	20,400	181,000
United Kingdom	--	--	--	--	483	4,300
Total	8,550	264,000	--	--	81,800	804,000
January–August	316,000	7,870,000	22,200	448,000	188,000	2,230,000

-- Zero.

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

²May include catalysts containing vanadium pentoxide.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF VANADIUM-BEARING ASH, SLAG¹

(Kilograms, contained vanadium pentoxide, unless otherwise specified)

	Ash and residues		Ash and residues (not from the manufacture of iron and steel)		Slag, from the manufacture of iron and steel	
	Quantity	Value	Quantity	Value	Quantity (gross weight)	Value
	2011	1,420,000	\$1,570,000	89,600	\$479,000	189,000,000
2012:						
July	195,000	860,000	--	--	26,500,000	2,430,000
August:						
Austria	--	--	--	--	7,440	107,000
Canada	127,000	248,000	--	--	24,400,000	2,110,000
Germany	--	--	--	--	16,000	3,170
Qatar	55,100	443,000	--	--	--	--
United Kingdom	--	--	--	--	19,200	127,000
Total	182,000	691,000	--	--	24,400,000	2,350,000
January–August	1,130,000	3,370,000	49,600	126,000	107,000,000	11,800,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MISCELLANEOUS VANADIUM CHEMICALS¹

(Kilograms, contained vanadium)

	Sulfates		Vanadates	
	Quantity	Value	Quantity	Value
2011	42,200	\$738,000	303,000	\$7,400,000
2012:				
July	156	13,600	34,000	732,000
August, South Africa	--	--	1,160	189,000
January–August	19,200	245,000	217,000	4,920,000

-- Zero.

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

Source: U.S. Census Bureau.