

Mineral Industry Surveys

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VANADIUM IN JUNE 2010

Reported domestic consumption of vanadium in June 2010 was 3% more than that of the previous month, and was about 7% more than that of June 2009, according to the U.S. Geological Survey. Consumer stocks of vanadium, in all forms, were 278 metric tons (t) at the beginning of 2010 and 225 t at the end of June.

According to Ryan's Notes, U.S. ferrovanadium (FeV) prices ranged from \$15.278 to \$15.656 per pound of vanadium content in June, as compared with \$16.600 to \$16.913 in May. European FeV prices ranged from \$29.944 to \$31.278 per kilogram in June, as compared with \$33.281 to \$34.188 in May. Vanadium pentoxide (V_2O_5) prices ranged from \$6.283 to \$6.756 per pound in June, as compared with \$7.250 to \$7.500 in May.

Evrax Highveld Steel and Vanadium Ltd. (South Africa)

reported that its vanadium slag production increased by 57% to 28,600 t in the first half of 2010, compared with 18,300 t in the first half of 2009. Highveld's V_2O_5 production increased by 70% to 3,950 t in the first half of 2010 compared with 2,320 t in the first half of 2009 (Evrax Highveld Steel and Vanadium Ltd., 2010).

Reference Cited

Evrax Highveld Steel and Vanadium Ltd., 2010, Interim report for the six months to 30 June 2010: Mpumalanga, South Africa, Evrax Highveld Steel and Vanadium Ltd., August 26. (Accessed October 5, 2010, at http://www.evraxhighveld.co.za/intermin_reports/Highveld_Steel_and_Vanadium_Intermin_Report_June_2010.pdf.)

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

(Kilograms, contained vanadium)

	2009		2010					
	Consumption	Stocks	May		June		January-June	
			Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovandium ²	4,030,000	227,000	345,000	178,000	348,000	179,000	2,060,000	XX
Vanadium-aluminum alloy	W	W	(3)	(3)	(3)	(3)	(3)	XX
Other ⁴	694,000	51,700	(3)	(3)	(3)	(3)	(3)	XX
Total	4,720,000	278,000	405,000	220,000	418,000	225,000	2,430,000	XX

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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.

³Withheld to avoid disclosing company proprietary data; included in "Total."

⁴Includes other vanadium alloys, vanadium metal, vanadium pentoxide, vanadates, chlorides, other specialty chemicals, and items indicated by symbol W.

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

(Kilograms, contained vanadium)

	2009	2010		
		May	June	January-June
Steel:				
Carbon	610,000	52,500	57,100	327,000
High-strength low-alloy	1,540,000	W	W	W
Stainless and heat-resisting	119,000	16,900	5,140	76,100
Full alloy	1,880,000	159,000	169,000	958,000
Tool	417,000	W	W	W
Total steel	4,570,000	228,000	231,000	1,360,000
Superalloys	5,410	545	447	2,370
Miscellaneous and unspecified ²	151,000	W	W	W
Total consumption	4,720,000	405,000	418,000	2,430,000

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

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:				
2009	282,000	\$979,000	21,700	\$940,000
2010:				
April	3,600	15,800	--	--
May, Mexico	1,610,000	3,250,000	--	--
Year to date	1,830,000	3,760,000	3,910	132,000
Exports:				
2009	11,200,000	27,800,000	22,700	1,040,000
2010:				
April	970,000	2,540,000	--	--
May:				
Belgium	31,600	411,000	--	--
Canada	669,000	1,520,000	1,120	36,700
Chile	--	--	28	2,880
Hong Kong	436	12,800	--	--
Israel	2,320	35,000	--	--
Malaysia	458	5,960	--	--
Mexico	351,000	912,000	--	--
Taiwan	707	3,560	--	--
Trinidad and Tobago	--	--	572	9,880
United Kingdom	2,650	29,400	--	--
Total	1,060,000	2,930,000	1,720	49,400
Year to date	4,780,000	13,400,000	1,800	52,500

-- 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:						
2009	353,000	\$12,600,000	1,120,000	\$16,500,000	25,200	\$551,000
2010:						
April	122,000	3,820,000	333,000	4,380,000	--	--
May:						
Australia	12,200	416,000	--	--	--	--
Austria	80,400	2,730,000	--	--	--	--
Canada	51,600	1,790,000	--	--	--	--
China	--	--	8,490	239,000	--	--
Korea, Republic of	29,100	902,000	--	--	--	--
Russia	--	--	264,000	3,310,000	--	--
South Africa	--	--	120,000	1,860,000	--	--
United Kingdom	--	--	--	--	5	22,600
Total	173,000	5,830,000	392,000	5,410,000	5	22,600
Year to date	506,000	15,500,000	1,670,000	21,100,000	5	22,600
Exports:						
2009	971,000	15,000,000	401,000	4,970,000	506,000	5,270,000
2010:						
April	31,400	852,000	991	24,800	187,000	1,680,000
May:						
Argentina	--	--	--	--	1,590	14,100
Brazil	--	--	--	--	356	3,170
Canada	7,160	212,000	--	--	31,900	380,000
India	20,700	359,000	--	--	--	--
Ireland	--	--	--	--	4,470	39,800
Korea, Republic of	101,000	1,730,000	--	--	--	--
Total	129,000	2,300,000	--	--	38,300	437,000
Year to date	406,000	7,370,000	50,600	825,000	478,000	4,510,000

-- 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
2009	791,000	\$12,300,000	615,000	\$1,260,000	80,500,000	\$2,610,000
2010:						
April	77,300	1,520,000	19,500	59,300	516,000	453,000
May:						
Canada	--	--	13,000	39,500	1,770,000	177,000
Germany	--	--	--	--	32,500	9,660
Mexico	81,800	1,420,000	--	--	--	--
Total	81,800	1,420,000	13,000	39,500	1,800,000	187,000
Year to date	315,000	4,980,000	193,000	569,000	2,730,000	805,000

-- 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
2009	16,500	\$182,000	214,000	\$3,390,000
2010:				
April	6,700	122,000	13,200	427,000
May:				
China	2,000	22,800	5,440	210,000
Germany	--	--	6,540	232,000
Total	2,000	22,800	12,000	442,000
Year to date	20,200	264,000	69,900	1,750,000

-- Zero.

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

Source: U.S. Census Bureau.