



Mineral Industry Surveys

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VANADIUM IN JULY 2007

Reported domestic consumption of vanadium in July 2007 was about 4% more than that of the previous month, and was about 18% more than that of July 2006, according to the U.S. Geological Survey. Consumer stocks of vanadium, in all forms, were 296 metric tons (t) at the beginning of 2007 and 312 t at the end of July.

According to Ryan's Notes (2007b), U.S. ferrovanadium (FeV) prices ranged from \$19.322 to \$19.644 per pound of vanadium content in July, as compared with \$19.889 to \$20.194 in June. European FeV prices ranged from \$36.933 to \$37.833 per kilogram in July, as compared \$38.500 to \$40.111 in June. Vanadium pentoxide (V₂O₅) prices ranged from \$7.500 to \$7.750 per pound in July, as compared with \$7.667 to \$7.944 in June.

Evrax Group S.A. (Russia), which purchased controlling interest in Highveld Steel and Vanadium Corp. Ltd. (South Africa) in May 2007, increased its offer for outstanding shares of Highveld stock by 15% from the June offer of \$11.40. Evrax

was required, by South African law, to tender the offer once its ownership position in Highveld exceeded 35%. Evrax's production of pig iron slag in the first half of 2007 was about 1% more than that of the same period in 2006, and contained about 5,940 t of vanadium. Evrax reported that its South African production of vanadium in alloys and chemicals was 3,450 t in the first half of 2007. Evrax reported that its first half North American production was 992 t of vanadium in alloys and chemicals. Evrax acquired Stratcor Inc., which had operations in South Africa and the United States, in September 2006 (Ryan's Notes, 2007a).

References Cited

Ryan's Notes, 2007a, Ferroalloy notes: Ryan's Notes, v. 13, no. 30, July 23, p. 5.
Ryan's Notes, 2007b, [untitled]: Ryan's Notes, v. 13, no. 32, August 6, p. 10.

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

(Kilograms, contained vanadium)

	2006 ^P		2007					
	Consumption	Stocks	June		July		Year to date	
			Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovandium ²	3,350,000	247,000	274,000	285,000	292,000	273,000	2,000,000	273,000
Vanadium-aluminum alloy	W	W	W	W	W	W	W	W
Other ³	298,000	48,100	72,000	41,300	66,800	38,800	450,000	38,800
Total	3,650,000	296,000	346,000	326,000	359,000	312,000	2,450,000	312,000

^PPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Other."

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 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)

	2006 ^P	2007		
		June	July	Year to date
Steel:				
Carbon	931,000	85,900	85,100	582,000
High-strength low-alloy	1,020,000	106,000	106,000	711,000
Stainless and heat-resisting	60,700	5,110	5,110	35,800
Full alloy	1,020,000	90,400	97,100	669,000
Tool	322,000	31,700	43,400	266,000
Total steel	3,350,000	319,000	337,000	2,260,000
Superalloys	4,130	692	686	4,250
Miscellaneous and unspecified ²	296,000	26,300	21,100	183,000
Total consumption	3,650,000	346,000	359,000	2,450,000

^PPreliminary.

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:				
2006	102,000	\$312,000	121,000	\$5,270,000
2007:				
May	--	--	--	--
June, United Kingdom	18	9,280	--	--
Year to date	797,000	1,130,000	--	--
Exports:				
2006	17,000,000	54,500,000	491,000	13,200,000
2007:				
May	1,400,000	5,850,000	--	--
June:				
Belgium	18,300	537,000	--	--
Canada	861,000	2,820,000	--	--
France	510	6,620	--	--
Japan	5,470	161,000	--	--
Korea, Republic of	4,610	30,800	--	--
Malaysia	615	8,000	--	--
Mexico	674,000	2,210,000	--	--
United Kingdom	38,000	498,000	--	--
Total	1,600,000	6,270,000	--	--
Year to date	11,100,000	39,900,000	--	--

-- 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:						
2006	2,140,000	\$90,500,000	1,920,000	\$45,200,000	129,000	\$3,370,000
2007:						
May	179,000	4,940,000	373,000	6,950,000	--	--
June:						
Austria	19,900	653,000	--	--	--	--
Canada	57,500	1,640,000	--	--	--	--
China	--	--	17,000	512,000	--	--
Czech Republic	100,000	3,510,000	--	--	--	--
Germany	136	7,270	--	--	--	--
Japan	--	--	335	29,000	--	--
Korea, Republic of	162,000	4,970,000	--	--	--	--
Russia	--	--	56,600	896,000	--	--
South Africa	--	--	80,000	1,560,000	--	--
Total	340,000	10,800,000	154,000	3,000,000	--	--
Year to date	1,550,000	42,700,000	1,130,000	22,200,000	8,390	249,000
Exports:						
2006	389,000	11,400,000	341,000	7,150,000	832,000	7,780,000
2007:						
May	21,400	786,000	113,000	1,360,000	4,370	61,800
June:						
Belgium	--	--	18,000	323,000	--	--
Brazil	--	--	--	--	3,790	39,000
Canada	3,530	162,000	--	--	3,790	33,800
Germany	--	--	--	--	50,000	445,000
Italy	48	2,920	8,060	264,000	--	--
Korea, Republic of	--	--	23,800	226,000	--	--
Trinidad & Tobago	--	--	1,630	45,000	--	--
Total	3,570	165,000	51,500	858,000	57,600	518,000
Year to date	79,400	2,860,000	201,000	2,830,000	211,000	2,370,000

-- 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)

	Ash and residues		Ash and residues (not from the manufacture of iron and steel)	
	Quantity	Value	Quantity	Value
2006	637,000	\$7,320,000	1,140,000	\$1,130,000
2007:				
May	54,500	526,000	13,100	39,800
June:				
Canada	73,700	215,000	41,100	9,060
Mexico	40,900	468,000	--	--
Total	115,000	683,000	41,100	9,060
Year to date	506,000	4,600,000	340,000	406,000

-- 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
2006	16	\$26,700	115,000	\$3,330,000
2007:				
May	--	--	29,900	385,000
June:				
South Africa	--	--	11,000	183,000
United Kingdom	--	--	430	9,970
Total	--	--	11,400	193,000
Year to date	81,400	772,000	98,600	1,970,000

-- Zero.

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

Source: U.S. Census Bureau.