

Mineral Industry Surveys

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VANADIUM IN AUGUST 2009

Reported domestic consumption of vanadium in August 2009 was about 7% less than that of the previous month and was about 14% less than that of August 2008, according to the U.S. Geological Survey. Consumer stocks of vanadium, in all forms, were 308 metric tons (t) at the beginning of 2009 and 263 t at the end of August.

According to Ryan's Notes (2009), U.S. ferrovanadium (FeV) prices ranged from \$12.906 to \$13.219 per pound of vanadium content in August, as compared with \$10.756 to \$11.283 in July. European FeV prices ranged from \$32.188 to \$33.313 per kilogram in August, as compared with \$27.661 to \$28.389 in July. Vanadium pentoxide (V₂O₅) prices ranged from \$6.563 to \$7.063 per pound in August, as compared with \$5.383 to \$5.867 in July.

Uranium Star Corp. (Toronto, Ontario, Canada) announced that it signed an agreement with Madagascar Minerals (MMR) to purchase the remaining 25% of the Green Giant vanadium project in Madagascar from MMR for the sum of \$100,000. Once the sale is completed, Uranium Star will have 100% ownership of the 194 square kilometer property and will begin an extensive drilling program (Uranium Star Corp., 2009).

References Cited

Ryan's Notes, 2009, [untitled]: Ryan's Notes, v. 15, no. 36, September 7, p. 10.
Uranium Star Corp., 2009, Uranium Star acquires remaining 25% interest in Green Giant vanadium deposit in Madagascar: Toronto, Ontario, Canada, Uranium Star Corp., August 6. (Accessed December 11, 2009, at http://www.uraniumstar.com/news/index.php?&content_id=72.)

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

(Kilograms, contained vanadium)

	2008		2009					
	Consumption	Stocks	July		August		January-August	
			Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovandium ²	4,030,000	231,000	361,000	149,000	333,000	219,000	2,680,000	219,000
Vanadium-aluminum alloy	W	W	W	W	W	W	W	W
Other ³	817,000	76,400	57,100	40,900	55,300	43,700	471,000	43,700
Total	4,850,000	308,000	418,000	190,000	388,000	263,000	3,150,000	263,000

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)

	2008	2009		
		July	August	January-August
Steel:				
Carbon	760,000	46,900	47,100	384,000
High-strength low-alloy	1,540,000	128,000	128,000	1,030,000
Stainless and heat-resisting	116,000	40,500	13,300	93,500
Full alloy	2,000,000	155,000	154,000	1,250,000
Tool	151,000	34,700	34,700	278,000
Total steel	4,570,000	406,000	378,000	3,040,000
Superalloys	2,490	199	167	1,810
Miscellaneous and unspecified ²	275,000	11,900	10,200	110,000
Total consumption	4,850,000	418,000	388,000	3,150,000

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:				
2008	1,110,000	\$2,110,000	3,620	\$198,000
2009:				
June	--	--	--	--
July:				
Germany	--	--	579	25,900
Netherlands	9,310	32,100	--	--
Total	9,310	32,100	579	25,900
Year to date	257,000	872,000	2,770	313,000
Exports:				
2008	21,900,000	76,200,000	57,100	3,740,000
2009:				
June	1,430,000	3,210,000	--	--
July:				
Brazil	965	20,200	--	--
Canada	243,000	723,000	--	--
China	816	24,000	--	--
Japan	448	13,200	--	--
Kuwait	--	--	221	5,660
Malaysia	273	3,560	--	--
Mexico	541,000	958,000	--	--
United Kingdom	15,400	59,100	--	--
Total	802,000	1,800,000	221	5,660
Year to date	6,530,000	15,800,000	21,100	933,000

-- 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:						
2008	2,800,000	\$159,000,000	3,700,000	\$115,000,000	144,000	\$4,320,000
2009:						
June	4,840	220,000	26,600	426,000	--	--
July:						
Austria	--	--	--	--	8,390	137,000
Canada	21,500	1,380,000	--	--	--	--
China	--	--	8,490	150,000	--	--
Germany	136	14,200	--	--	--	--
Korea, Republic of	4,250	193,000	--	--	--	--
Total	25,900	1,580,000	8,490	150,000	8,390	137,000
Year to date	196,000	8,540,000	675,000	10,600,000	16,800	320,000
Exports:						
2008	281,000	12,600,000	249,000	5,650,000	1,040,000	11,300,000
2009:						
June	27,200	580,000	47,000	450,000	21,900	266,000
July:						
Argentina	66,400	713,000	--	--	--	--
Brazil	--	--	9,980	116,000	--	--
Canada	23,300	612,000	--	--	7,560	104,000
China	--	--	2,990	24,700	--	--
Germany	--	--	--	--	449	4,000
India	16,300	364,000	--	--	--	--
Japan	--	--	--	--	--	--
Korea, Republic of	21,700	436,000	--	--	--	--
Mexico	6,230	165,000	437	7,390	--	--
Netherlands	--	--	--	--	20,200	180,000
Trinidad and Tobago	--	--	1,500	22,200	--	--
Total	134,000	2,290,000	14,900	170,000	28,200	288,000
Year to date	495,000	9,950,000	237,000	2,360,000	181,000	1,800,000

-- 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
2008	1,040,000	\$18,000,000	601,000	\$795,000
2009:				
June	148,000	2,680,000	51,900	77,700
July:				
Canada	--	--	57,500	106,000
Mexico	81,900	799,000	--	--
Total	81,900	799,000	57,500	106,000
Year to date	641,000	10,400,000	338,000	579,000

-- 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
2008	2,160	\$119,000	187,000	\$4,230,000
2009:				
June	--	--	167	3,250
July:				
India	--	--	92	4,750
South Africa	--	--	22,500	206,000
Total	--	--	22,500	211,000
Year to date	6,730	68,400	90,500	1,200,000

-- Zero.

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

Source: U.S. Census Bureau.