

Mineral Industry Surveys

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VANADIUM IN AUGUST 2002

According to Metal Bulletin, the range for U.S. ferrovanadium prices narrowed during August to \$4.50 to \$5.15 per pound of vanadium content, compared with \$4.40 to \$5.25 in July. The range for European ferrovanadium prices in August was \$8.00 to \$8.65 per kilogram of vanadium content. In July, European ferrovanadium ranged from \$8.40 to \$9.00 per kilogram of vanadium content. In August, vanadium pentoxide prices ranged from \$1.45 to \$1.65 per pound. U.S. prices for

ferrovanadium narrowed during August, and industry observers attributed the movement to a combination of fewer customers and increased competition among sellers (Ryan's Notes, 2002).

Reference Cited

Ryan's Notes, 2002, [Untitled]: Ryan's Notes, v. 8, no. 33, August 19, p. 4.

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

(Kilograms, contained vanadium)

	2001 p/		2002			
	Consumption	Stocks	July		August	
			Consumption r/	Stocks r/	Consumption	Stocks
Ferrovandium 2/	2,800,000	245,000	233,000	169,000	231,000	251,000
Vanadium-aluminum alloy	W	10,500	W	7,900	W	10,800
Other 3/	484,000	7,910	31,100	21,000	31,100	8,090
Total	3,280,000	264,000	264,000	197,000	262,000	270,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Data are rounded to three significant digits; may not add to totals shown.

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

3/ Includes 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 USE 1/

(Kilograms, contained vanadium)

	2001 p/	2002		
		July	August	Year to date
Steel:				
Carbon	997,000	84,700 r/	71,100	5,840,000
High-strength low-alloy	769,000	W	W	W
Stainless and heat-resisting	26,300	W	W	W
Full alloy	701,000	53,500 r/	64,700	512,000
Tool	261,000	22,000	18,400	184,000
Total steel	2,750,000	231,000 r/	227,000	1,860,000
Superalloys	16,000	1,180	1,630	9,730
Miscellaneous and unspecified 2/	514,000	32,700 r/	33,000	282,000
Total consumption	3,280,000	264,000 r/	262,000	2,150,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Total steel."

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

2/ Includes 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 SCRAP 1/

(Kilograms, gross weight)

	Aluminum-vanadium master alloy		Vanadium metal, including waste and scrap	
	Quantity	Value	Quantity	Value
Imports for consumption:				
2001	10,100	\$45,100	50,000	\$639,000
2002:				
May	--	--	110	66,500
June	19,500	33,100	283	55,100
July, Germany	--	--	18,400	256,000
Year to date	78,400	170,000	21,700	511,000
Exports:				
2001	363,000	6,990,000	26,300	380,000
2002:				
May	31,800	735,000	999	203,000
June	34,600	1,010,000	6,280	67,100
July:				
Australia	410	4,190	--	--
Canada	16,300	479,000	--	--
France	--	--	10	5,490
Hong Kong	4,280	90,200	--	--
Korea, Republic of	180	2,950	--	--
Singapore	993	29,200	--	--
United Kingdom	1,390	41,000	--	--
Total	23,600	647,000	10	5,490
Year to date	315,000	7,190,000	14,500	521,000

-- Zero.

1/ Data 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 VANADIUM 1/

(Kilograms, contained vanadium)

	Ferrovanadium		Vanadium pentoxide (anhydride) 2/		Other oxides and hydroxides of vanadium	
	Quantity	Value	Quantity	Value	Quantity	Value
Imports for consumption:						
2001	2,550,000	\$20,500,000	600,000	\$3,460,000	1,080,000	\$510,000
2002:						
May	247,000	1,640,000	58,800	427,000	50	2,600
June	222,000	1,690,000	--	--	16,000	150,000
July:						
Austria	14,500	139,000	--	--	--	--
Canada	50,000	369,000	--	--	--	--
Czech Republic	128,000	1,020,000	--	--	--	--
France	800	10,300	--	--	--	--
Germany	12,200	97,000	--	--	--	--
South Africa	--	--	70,800	373,000	--	--
Total	206,000	1,640,000	70,800	373,000	--	--
Year to date	1,490,000	10,500,000	252,000	1,200,000	37,600	463,000

See footnotes at end of table.

TABLE 4--Continued
U.S. IMPORTS AND EXPORTS OF FERROVANADIUM, VANADIUM PENTOXIDE (ANHYDRIDE) AND
OTHER OXIDES AND HYDROXIDES OF VANADIUM 1/

(Kilograms, contained vanadium)

	Ferrovanadium		Vanadium pentoxide (anhydride) 2/		Other oxides and hydroxides of vanadium	
	Quantity	Value	Quantity	Value	Quantity	Value
Exports:						
2001	70,000	\$768,000	71,400	\$407,000	63,000	\$562,000
2002:						
May	15,900	125,000	1,060	14,500	36,000	313,000
June	1,600	50,100	1,170	13,400	5,390	55,100
July:						
Canada	16,600	214,000	--	--	15,500	170,000
Mexico	14,800	150,000	--	--	--	--
Trinidad and Tobago	--	--	1,040	8,970	--	--
Total	31,500	364,000	1,040	8,970	15,500	170,000
Year to date	87,800	927,000	31,700	189,000	139,000	1,010,000

-- Zero.

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

2/ May include catalysts containing vanadium pentoxide.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF VANADIUM-BEARING ASH, SLAG 1/

(Kilograms, contained vanadium pentoxide)

	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	Value
2001	1,980,000	\$2,270,000	1,980,000	\$1,290,000	998,000	\$1,170,000
2002:						
May	--	--	216,000	153,000	--	--
June	--	--	348,000	161,000	--	--
July:						
Canada	--	--	152,000	114,000	--	--
Mexico	--	--	42,900	12,000	--	--
United Kingdom	--	--	35,100	41,200	--	--
Total	--	--	230,000	167,000	--	--
Year to date	--	--	1,480,000	803,000	480,000	75,200

-- Zero.

1/ Data 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 CHEMICALS 1/

(Kilograms, contained vanadium)

	Sulfates		Vanadates	
	Quantity	Value	Quantity	Value
2001	--	--	102,000	\$623,000
2002:				
May	3,130	\$84,800	414	86,000
June	7,890	212,000	--	--
July:				
Germany	--	--	41	3,750
South Africa	1,580	42,400	--	--
Total	1,580	42,400	41	3,750
Year to date	14,000	384,000	28,500	354,000

-- Zero.

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

Source: U.S. Census Bureau.