

TITANIUM METALS CORP
 Form 4
 July 20, 2005

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
SIMMONS HAROLD C

2. Issuer Name and Ticker or Trading Symbol
TITANIUM METALS CORP [TIE]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 5430 LBJ FREEWAY, SUITE 1700

3. Date of Earliest Transaction (Month/Day/Year)
 07/18/2005

Director 10% Owner
 Officer (give title below) Other (specify below)
 Vice Chairman

(Street)
 DALLAS, TX 75240

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

(City) (State) (Zip)

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)			
			Code	V	Amount	(A) or (D)	Price			
Common Stock, \$.01 par value	07/18/2005		P		5,000	A	\$ 50	196,200	D	
Common Stock, \$.01 par value	07/18/2005		P		5,000	A	\$ 51	201,200	D	
Common Stock, \$.01 par value	07/18/2005		P		10,000	A	\$ 51.5	211,200	D	
Common Stock, \$.01	07/18/2005		P		5,000	A	\$ 52	216,200	D	

par value

Common Stock, \$.01 07/18/2005 P 4,500 A \$ 52.5 220,700 D

Common Stock, \$.01 07/18/2005 P 500 A \$ 52.65 221,200 D

Common Stock, \$.01 par value 6,309,250 I by Tremont (1)

Common Stock, \$.01 par value 690,000 I by Valhi (2)

Common Stock, \$.01 par value 65,000 I by Spouse (3)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned (Instr. 6)
--------------------------------------------	--------------------------------------------------------	--------------------------------------	----------------------------------------------------	--------------------------------	-----------------------------------------------------------------------------------------	----------------------------------------------------------	---------------------------------------------------------------	--------------------------------------------	------------------------------------------------------------------

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
	X	X	Vice Chairman	

SIMMONS HAROLD C
5430 LBJ FREEWAY
SUITE 1700
DALLAS, TX 75240

Signatures

A. Andrew R. Louis, Attorney-in-fact, for Harold C.
Simmons

07/20/2005

__Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Directly held by Tremont LLC. See the Additional Information filed as Exhibit 99 to this statement for a description of how these securities are held.
- (2) Directly held by Valhi, Inc. See the Additional Information filed as Exhibit 99 to this statement for a description of how these securities are held.
- (3) Directly held by the Reporting Person's spouse. Mr. Simmons disclaims beneficial ownership of any shares of the issuer's common stock that his spouse holds.

Remarks:

Exhibit Index

99 Additional Information

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.