

### INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934  
or Section 30(h) of the Investment Company Act of 1940

<b>1. Name and Address of Reporting Person*</b> <u>DIETRICH DOUGLAS T</u>  (Last) (First) (Middle) <u>MINERALS TECHNOLOGIES INC.</u> <u>405 LEXINGTON AVENUE</u>  (Street) <u>NEW YORK NY 10174</u>  (City) (State) (Zip)	<b>2. Date of Event Requiring Statement (Month/Day/Year)</b> <u>08/01/2007</u>	<b>3. Issuer Name and Ticker or Trading Symbol</b> <u>MINERALS TECHNOLOGIES INC [ MTX ]</u>  <table style="width: 100%;"> <tr> <td colspan="2"><b>4. Relationship of Reporting Person(s) to Issuer (Check all applicable)</b></td> <td><b>5. If Amendment, Date of Original Filed (Month/Day/Year)</b></td> </tr> <tr> <td style="width: 33%;"> <input type="checkbox"/> Director  <input checked="" type="checkbox"/> Officer (give title below)  <p style="text-align: center;"><u>Vice President</u></p> </td> <td style="width: 33%;"> <input type="checkbox"/> 10% Owner  <input type="checkbox"/> Other (specify below)                 </td> <td style="width: 34%; vertical-align: top;"> <input type="checkbox"/> Form filed by One Reporting Person  <input type="checkbox"/> Form filed by More than One Reporting Person                 </td> </tr> </table>	<b>4. Relationship of Reporting Person(s) to Issuer (Check all applicable)</b>		<b>5. If Amendment, Date of Original Filed (Month/Day/Year)</b>	<input type="checkbox"/> Director <input checked="" type="checkbox"/> Officer (give title below) <p style="text-align: center;"><u>Vice President</u></p>	<input type="checkbox"/> 10% Owner <input type="checkbox"/> Other (specify below)	<input type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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#### Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>COMMON STOCK</u>	<u>0</u>	<u>D</u>	

#### Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Employee Stock Option (Right to Buy)</u>	<u>(1)</u>	<u>08/01/2017</u>	<u>Common Stock</u>	<u>2,100</u>	<u>65.35</u>	<u>D</u>	
<u>Deferred Restricted Stock Units ("DRSUs")</u>	<u>(2)</u>	<u>(2)</u>	<u>Common Stock</u>	<u>1,050</u>	<u>(3)</u>	<u>D</u>	

**Explanation of Responses:**

1. The options vest in three equal annual installments beginning of August 1, 2008.
2. DRSUs vest in three equal annual installments beginning on August 1, 2008. Vested shares will be delivered to the reporting person upon vesting.
3. Each DRSU is the economic equivalent of one share of Minerals Technologies Inc. common stock.

**Remarks:**

Laszlo Serester for Douglas T. Dietrich 08/07/2007

\*\* Signature of Reporting Person      Date

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

\* If the form is filed by more than one reporting person, see Instruction 5 (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).

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

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 Number.

**POWER OF ATTORNEY**

Know all by these presents, that the undersigned hereby constitutes and appoints each of Kirk G. Forrest, Linda A. Buggeln, Victoria Lukauskas, and Laszlo Serester, signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Minerals Technologies Inc. (the "Company"), Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

All pre-existing Powers of Attorney granted to the parties named above are hereby revoked. This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 26<sup>th</sup> day of January, 2005.

\_\_\_\_\_, as Power of Attorney  
Joseph C. Muscari