

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

MINERALS TECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

25-1190717

(I.R.S. Employer Identification No.)

**The Chrysler Building
405 Lexington Avenue
New York, New York**

(Address of Principal Executive Offices)

10174-0002

(Zip Code)

Minerals Technologies Inc. 2001 Stock Award and Incentive Plan

(Full title of the plan)

**Kirk G. Forrest, Esq.
Vice President, General Counsel and Secretary
Minerals Technologies Inc.
The Chrysler Building
405 Lexington Avenue
New York, New York 10174-0002**

(Name and address of agent for service)

(212) 878-1856

(Telephone Number, Including Area Code, of Agent for Service)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered ⁽¹⁾⁽²⁾	Proposed Maximum Offering Price Per Share ⁽³⁾	Proposed Maximum Aggregate Offering Price ⁽³⁾	Amount of Registration Fee
Common Stock, \$0.10 par value	1,517,268	\$54.85	\$83,222,150	\$8,904.77

(1) This Registration Statement covers an aggregate of 1,517,268 shares of common stock of Minerals Technologies Inc., par value \$0.10 per share ("Common Stock") available for offers and sales under the Minerals Technologies Inc. 2001 Stock Award and Incentive Plan (the "2001 Plan"), including (i) 1,017,268 shares of Common Stock that were previously registered for offers or sales under the registrant's prior Stock and Incentive Plan (the "Old Plan") (such shares, the "Carried Forward Shares") and (ii) 500,000 shares of Common Stock not previously registered. The Carried Forward Shares were previously registered under a Form S-8 Registration Statement (Registration No. 333-62739) filed on September 2, 1998 (the "Prior Registration Statement"). See "Explanatory Note" below.

(2) Each share of Common Stock registered hereunder includes an associated preferred stock purchase right described in the Company's Rights Agreement dated September 13, 1999. This Registration Statement shall also cover any additional shares of Common Stock (including the associated preferred stock purchase rights) which become issuable under the 2001 Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the registrant's receipt of consideration, which results in an increase in the number of the outstanding shares of registrant's Common Stock.

(3) Pursuant to paragraphs (c) and (h) of Rule 457 of the Securities Act of 1933, as amended (the "Securities Act"), the proposed maximum offering price per share is estimated solely for the purpose of determining the registration fee and is based upon the average of the high and low prices per share of the registrant's Common Stock reported on the New York Stock Exchange on October 20, 2006.

EXPLANATORY NOTE

On May 24, 2001 (the "Effective Date"), the 2001 Plan replaced the Old Plan. Since the Effective Date, all awards of the Registrant have been granted from the Carried Forward Shares under the 2001 Plan. The Carried Forward Shares became available for offers or sales under the 2001 Plan as of the Effective Date.

Pursuant to Interpretation 89 under Section G of the Manual of Publicly Available Telephone Interpretations of the Division of Corporation Finance of the Securities and Exchange Commission (July 1997) and Instruction E to the General Instructions of Form S-8, the registrant (i) has carried forward the Carried Forward Shares from the Prior Registration Statement to this Registration Statement and (ii) is contemporaneously filing a post-effective amendment to the Prior Registration Statement to remove the Carried Forward Shares from such Prior Registration Statement to this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents previously filed with the Securities and Exchange Commission (the "Commission") by the registrant, are incorporated by reference in this Registration Statement:

1. The registrant's Annual Report on Form 10-K filed with the Commission on March 8, 2006, for the fiscal year ended December 31, 2005, including any documents or portions thereof incorporated by reference therein;
2. The registrant's Quarterly Reports on Form 10-Q filed with the Commission on May 8, 2006 (as amended by the Form 10-Q/A filed with the Commission on May 10, 2006) and August 7, 2006 (as amended by the Form 10-Q/A filed with the Commission on August 7, 2006), including any documents or portions thereof incorporated by reference therein;
3. The registrant's Current Reports on Form 8-K filed with the Commission on January 27, 2006, February 28, 2006, April 27, 2006, May 17, 2006, June 28, 2006, July 28, 2006, August 14, 2006, October 2, 2006, October 5, 2006, October 11, 2006 and October 26, 2006, including any documents or portions thereof incorporated by reference therein;
4. The registrant's Definitive Proxy Statement for its 2006 Annual Meeting of Stockholders filed with the Commission on April 4, 2006, including any documents or portions thereof incorporated by reference therein;
5. The registrant's description of the Common Stock contained in its Registration Statement on Form 8-A filed with the Commission on September 28, 1992, as amended by an amendment thereto filed with the Commission on October 23, 1992, and as it may be further amended in the future; and

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6. The registrant's description of the preferred stock purchase rights as set forth in the registrant's Registration Statement on Form 8-A filed with the Commission on September 3, 1999, as it may be amended in the future.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

The validity of the Common Stock to be issued in connection with the 2001 Plan will be passed upon by Kirk G. Forrest, the Vice President, General Counsel and Secretary of Minerals Technologies Inc. Mr. Forrest is paid a salary by the registrant, is a participant in various benefit plans offered by the registrant to employees of the registrant (including the 2001 Plan) and beneficially owns, or has rights to acquire, shares of Common Stock representing less than 1% of the registrant's outstanding Common Stock.

Item 6. Indemnification of Directors and Officers

Paragraph 13 of Article Seventh of the registrant's Amended and Restated Certificate of Incorporation eliminates the liability of the registrant's directors to the fullest extent permitted by the Delaware General Corporation Law. The Delaware General Corporation Law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for (i) any breach of their duty of loyalty to the corporation or its stockholders, (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law or (iv) any transaction from which the director derives an improper personal benefit. The registrant's By-Laws provide that the registrant shall indemnify and hold harmless, to the fullest extent permitted by applicable law, any person involved in any action, suit or proceeding by reason of the fact that such person is or was a director or officer, employee or agent of the corporation or is or was serving at the request of the registrant as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or

nonprofit enterprise, against all liability and loss suffered and expenses reasonably incurred by such person. The registrant also maintains a directors and officers liability insurance policy.

The provisions in the registrant's Amended and Restated Certificate of Incorporation and By-Laws do not eliminate the officers' and directors' fiduciary duties, and in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each officer and director of the registrant will continue to be subject to liability for any breach of loyalty to the registrant for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the officer or director and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. These provisions also do not affect an officer's or director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Item 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits

<u>Exhibit No.</u>	<u>Description</u>
4	Minerals Technologies Inc. 2001 Stock Award and Incentive Plan (as amended December 20, 2005). (Included as Exhibit 10.9 to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2005 and incorporated herein by reference.)
5	Opinion of Kirk G. Forrest.
15	Letter regarding Unaudited Interim Financial Information.
23.1	Consent of Kirk G. Forrest (included in Exhibit 5).
23.2	Consent of Independent Registered Public Accounting Firm.
24	Powers of Attorney (included on signature pages).

Item 9. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on this 26th day of October 2006.

MINERALS TECHNOLOGIES INC.

(Registrant)

By: /s/ Paul R. Saueracker

Name: Paul R. Saueracker

Title: Chairman, President and
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below under the heading "Signature" constitutes and appoints Paul R. Saueracker and Kirk G. Forrest his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign any or all amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the United States Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Paul R. Saueracker _____ Paul R. Saueracker	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	October 26, 2006
/s/ John A. Sorel _____ John A. Sorel	Senior Vice President-Finance and Chief Financial Officer (Principal Financial Officer)	October 26, 2006
/s/ Michael A. Cipolla _____ Michael A. Cipolla	Vice President-Controller and Chief Accounting Officer (Principal Accounting Officer)	October 26, 2006
/s/ Paula H.J. Cholmondeley _____ Paula H. J. Cholmondeley	Director	October 26, 2006
/s/ Duane R. Dunham _____ Duane R. Dunham	Director	October 26, 2006
/s/ Steven J. Golub _____ Steven J. Golub	Director	October 26, 2006
/s/ Kristina M. Johnson _____ Kristina M. Johnson	Director	October 26, 2006
/s/ Joseph C. Muscari _____ Joseph C. Muscari	Director	October 26, 2006
/s/ Michael F. Pasquale _____ Michael F. Pasquale	Director	October 26, 2006

/s/ John T. Reid

Director

October 26, 2006

John T. Reid

Director

October __, 2006

William C. Stivers

Director

October 26, 2006

/s/ Jean-Paul Vallès

Jean-Paul Vallès

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23.1	Consent of Kirk G. Forrest (included in Exhibit 5).
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24	Powers of Attorney (included on signature pages).

Minerals Technologies Inc.
The Chrysler Building
405 Lexington Avenue
New York, NY 10174-0002

October 26, 2006

The Board of Directors
Minerals Technologies Inc.
405 Lexington Avenue
New York, NY 10174-0002

Ladies and Gentlemen:

This opinion is rendered in connection with the registration of 1,517,268 shares of common stock (the "Common Stock"), par value \$.10 per share, of Minerals Technologies Inc. (the "Company") pursuant to a Registration Statement on Form S-8 to be filed with the Securities and Exchange Commission.

I have examined certificates of public officials, certificates of officers of the Company, originals or copies certified to my satisfaction of corporate documents and records of the Company, and other instruments and documents, all to the extent I deem relevant and necessary as a basis for my opinion. I have relied, to the extent that I deemed such reliance proper, upon such certificates with respect to the accuracy of factual matters contained therein that were not independently established. Based upon my review, I am of the opinion that all necessary corporate proceedings have been duly taken to authorize the issuance of the Common Stock covered by the Registration Statement, and all such Common Stock, upon issuance in accordance with the terms of the Minerals Technologies Inc. 2001 Stock Award and Incentive Plan, will be validly issued and outstanding, fully paid and nonassessable.

I hereby consent to the use of this opinion in the above-referenced Registration Statement on Form S-8 and to the reference to my name under the heading "Interests of Named Experts and Counsel" in such Registration Statement.

Very truly yours,

/s/ Kirk G. Forrest

Kirk G. Forrest
Vice President, General Counsel and Secretary

Accountants' Acknowledgement

October 26, 2006

Minerals Technologies Inc.
New York, NY

Re: Form S-8 Registration Statement

With respect to the subject registration statement, we acknowledge our awareness of the use therein of our reports dated May 4, 2006 and August 3, 2006 related to our reviews of interim financial information.

Pursuant to Rule 436 under the Securities Act of 1933 (the "Act"), such report is not considered part of a registration statement prepared or certified by an independent registered public accounting firm, or a report prepared or certified by an independent registered public accounting firm within the meaning of Sections 7 and 11 of the Act.

/s/ KPMG LLP

New York, New York

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Minerals Technologies Inc.:

We consent to the use of our audit reports dated March 2, 2006, with respect to the consolidated balance sheets of Minerals Technologies Inc. and subsidiary companies as of December 31, 2005 and 2004, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2005, and the related financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2005, and effectiveness of internal control over financial reporting as of December 31, 2005, incorporated by reference herein.

Our audit report refers to the Company's adoption in 2003 of Statement of Financial Accounting Standards No. 143, "Accounting for Asset Retirement Obligations."

/s/ KPMG LLP

New York, New York

October 26, 2006