

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K
ANNUAL REPORT

████████████████████

PURSUANT TO SECTION 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2006

Commission file no. 1-3295

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN**

- B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

MINERALS TECHNOLOGIES INC.
The Chrysler Building
405 Lexington Avenue
New York, New York, 10174-0002

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Report of Independent Registered Public Accounting Firm

The Savings and Investment Plan Committee
of Minerals Technologies Inc.:

We have audited the accompanying statements of net assets available for benefits of the Minerals Technologies Inc. Savings and Investment Plan (the Plan) as of December 31, 2006 and 2005, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2006 and 2005, and the changes in net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule H, line 4i - schedule of assets (held at end of year) as of December 31, 2006 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG LLP

New York, New York
June 21, 2007

MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN
Statements of Net Assets Available for Benefits
(in thousands)

| | December 31, | |
|--|---------------------|-------------|
| | 2006 | 2005 |
| Assets: | | |
| Investments, at fair value (Note 3): | | |
| In securities of participating employer | \$ 33,621 | \$ 36,062 |
| In securities of unaffiliated issuers: | | |
| Common stock | 37,324 | 42,436 |
| Commingled funds | 115,506 | 90,277 |
| Mutual funds | 4,503 | 3,647 |
| Loans to participants | 3,216 | 3,346 |
| Total investments, at fair value | 194,170 | 175,768 |
| Cash and cash equivalents | 424 | 2,549 |
| Contributions receivable from participants | 263 | 249 |
| Contributions receivable from employer | 122 | 118 |
| Dividends and interest receivable | 156 | 125 |
| Total assets | 195,135 | 178,809 |
| Liabilities: | | |
| Due to broker for securities purchased | -- | 667 |
| Other payables | 230 | 148 |
| Total liabilities | 230 | 815 |
| Net assets available for benefits, at fair value | 194,905 | 177,994 |

| | | |
|---|---------------------------|---------------------------|
| Adjustment from fair value to contract value for fully benefit-responsive investment contracts (Note 1) | 291 | 365 |
| | <u> </u> | <u> </u> |
| Net assets available for benefits | \$ 195,196 | \$ 178,359 |
| | <u> </u> | <u> </u> |

See accompanying notes to the financial statements.

**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN
Statements of Changes in Net Assets Available for Benefits
(in thousands)**

| | Year Ended December 31, | |
|---|--------------------------------|-------------------|
| | 2006 | 2005 |
| | <u> </u> | <u> </u> |
| Additions to net assets attributed to: | | |
| Investment income (loss): | | |
| Net appreciation (depreciation) in fair value of investments (Note 3) | \$ 17,140 | \$ (9,801) |
| Dividends | 2,963 | 1,947 |
| Interest | <u>1,701</u> | <u>1,383</u> |
| Investment income (loss) | <u>21,804</u> | <u>(6,471)</u> |
| Contributions: | | |
| Participants | 7,074 | 6,745 |
| Participants' rollovers | 593 | 402 |
| Employer | <u>3,298</u> | <u>3,182</u> |
| Total contributions | <u>10,965</u> | <u>10,329</u> |
| Net additions | <u>32,769</u> | <u>3,858</u> |
| Deductions from net assets attributed to: | | |
| Benefits paid to participants | 15,732 | 17,076 |
| Administrative expenses (Note 7) | <u>200</u> | <u>121</u> |
| Total deductions | <u>15,932</u> | <u>17,197</u> |
| Net increase (decrease) | 16,837 | (13,339) |
| Net assets available for benefits: | | |
| Beginning of year | <u>178,359</u> | <u>191,698</u> |
| End of year | <u>\$ 195,196</u> | <u>\$ 178,359</u> |

See accompanying notes to the financial statements.

Notes to Financial Statements

(1) **Description of Plan**

The following description of the Minerals Technologies Inc. Savings and Investment Plan (the Plan) provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan sponsored by Minerals Technologies Inc. (the Plan Sponsor or Company). Employees become eligible to participate in the Plan on the date of their employment.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Contributions

Participants may elect to contribute between 2% and 20% of eligible earnings. Contributions may be made on a before-tax basis, on an after-tax basis, or on a combined basis. Employee contributions of up to 2% of eligible compensation are matched 100% by the Company and the next 4% are matched 50% by the Company. Employee contributions in excess of 6% are not matched. The Company's matching contributions are invested solely in the Company's common stock. Participants may transfer or reallocate amounts held for more than two years in the MTI Common Stock Fund to another fund under the Plan. Effective January 1, 2007, participants may, at any time, transfer or reallocate amounts held in the MTI Common Stock Fund to another fund under the Plan.

Participants may also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans. Participants direct the investment of their contributions into various investment options offered by the Plan. The maximum before-tax contribution was generally \$15,000 and \$14,000 for 2006 and 2005, respectively. However, a participant's contributions may be further increased or reduced based on the rules and regulations of the Internal Revenue Code (IRC).

Participant Accounts

Each participant's account is credited with the participant's contributions and allocations of (a) the Company's contributions and (b) Plan earnings or loss, and charged with an allocation of administrative expenses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

Vesting

Participants are fully vested in the entire value of their accounts at the time of contribution.

Investment Options

Each participant in the Plan elects to have contributions invested in any one or a combination of the following separate investment options:

Stable Value Fund:* This fund invests in high-quality investment contracts issued by insurance companies, banks and other financial institutions, as well as short-term investment products. Investment contracts pay a fixed or variable interest rate over the life of the contract.

Balanced Growth Fund: This fund is invested in stocks, bonds and cash equivalents. Approximately 50% of the fund is invested in common stocks of U.S. companies, 40% in fixed income securities, and 10% in international equities.

S & P 500 Index Fund:* This fund is designed to match the risk and return of the Standard & Poor's 500 Index, a broadly based average of the U.S. equity market.

Matrix Equity Fund:* This fund is invested in a broad range of diversified common stocks.

MTI Common Stock Fund: This fund invests in the Company's common stock. All Company matching contributions are invested in this fund and are non-participant-directed. Employee contributions are participant-directed.

Pfizer Common Stock Fund: This fund invests in the common stock of Pfizer Inc. The fund holds contributions to the Pfizer Common Stock Fund, which were transferred from Pfizer Inc. when the Plan was established. No new contributions or transfers can be made into this fund.

International Fund:* This fund invests in a broad range of international stocks traded in public markets.

Notes to Financial Statements

Mutual Fund Window: This is a participant-directed brokerage account which invests primarily in a variety of publicly available mutual funds.

* These Plan investments are shares of commingled funds managed by State Street Global Advisors (SSgA).

The investments of the Plan are maintained in a trust (the Trust) held by State Street Bank and Trust Company. The Trust was established on December 30, 1992. The Trust agreement provides that any portion of any funds may, pending its permanent investment or distribution, be invested in short-term investments.

Participant Loans

Participants may borrow from their accounts an amount up to \$50,000 or 50 percent of their account balance, whichever is less. The minimum amount a participant may borrow is \$1,000. The loan repayments and interest earned are allocated to each eligible investment option based upon the participant's current contribution election percentages.

The loans are secured by the balance in the participant's account and bear interest at rates that range from 5.00 percent to 9.75 percent, which are fixed at the time of the loan and which are commensurate with prevailing rates as determined quarterly by the Plan administrator. At December 31, 2006, there were 387 individual loans outstanding, carrying an average interest rate of 7.29 percent, with maturities through 2021.

Payment of Benefits

On termination of service due to death, disability, retirement, or other reasons, a participant would receive a lump-sum amount equal to the value of the participant's account. In-service withdrawals may also be made under certain circumstances.

New Accounting Pronouncements

As of December 31, 2006, the Plan adopted Financial Accounting Standards Board (FASB) Staff Position AAG INV-1 and Statement of Position No. 94-4-1, Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans (the FSP). The FSP requires the Statement of Net Assets Available for Benefits present the fair value of the Plan's investments as well as the adjustment from fair value to contract value for the fully benefit-responsive investment contracts. The Statement of Changes in Net Assets Available for Benefits is prepared on a contract value basis for the fully benefit-responsive investment contracts. The FSP was applied retroactively to the prior period presented on the Statement of Net Assets Available for Benefits as of December 31, 2005.

(2) Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared on the accrual basis of accounting.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. Short-term investments are recorded at cost, which approximates fair value. The MTI Common Stock Fund, Pfizer Common Stock Fund, and Mutual Fund Window are valued using quoted market prices. The Balanced Growth Fund, S & P 500 Index Fund, Matrix Equity Fund and International Fund are stated at fair value reported by the fund manager based on the underlying investment within each fund and are expressed in units representing the net asset value of each fund. The value of a unit will fluctuate in response to various factors including, but not limited to, the price of the underlying shares, dividends paid, earnings and losses, and the mix of assets in the respective fund. Loans receivable from participants are valued at cost, which approximates fair value.

The investment contracts in the Fixed Income Fund (Stable Value Fund) are presented at fair value on the statement of net assets available for benefits. This FSP requires that fully benefit-responsive investment contracts be reported at fair value rather than contract value, as they were previously reported. Accordingly, investment contracts in the Fixed Income Fund are now stated at fair value for all periods presented with a corresponding adjustment to reflect the investment at contract value. The fair value of fully benefit-responsive investment contracts is calculated using a discounted cash flow model which considers recent fee bids as determined by recognized dealers, discount rate and the duration of the underlying portfolio securities.

Purchases and sales of securities are recorded on a trade date basis. The net appreciation (depreciation) in fair value of investments consists of the net realized gains and losses from the sale of investments and the unrealized appreciation (depreciation) of the fair value for the investments remaining in the Plan.

Dividend income is recorded on the ex-dividend date. Interest income is recorded on an accrual basis.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, contributions receivable and dividends and interest receivable approximate fair value because of the short maturities of those instruments.

Payment of Benefits

Benefits are recorded when paid.

(3) Investments

The following presents investments that represent 5 percent or more of the Plan's net assets:

| (in thousands) | December 31, | |
|---|---------------------|-------------|
| | 2006 | 2005 |
| MTI Common Stock Fund,** 572 and 645 units, respectively | \$ 33,621 | \$ 36,062 |
| Pfizer Common Stock Fund,* 1,441 and 1,820 units, respectively | \$ 37,324 | \$ 42,436 |
| Stable Value Fund,**** 30,461 and 26,404 units, respectively | \$ 30,170 | \$ 26,039 |
| Balanced Growth Fund 682 and 538 units, respectively | \$ 17,638 | \$ 13,430 |
| S&P 500 Index Fund, 117 and 117 units, respectively | \$ 31,518 | \$ 27,041 |
| Matrix Equity Fund, 884 and 842 units, respectively | \$ 22,018 | \$ 17,927 |
| International Fund, *** 590 and 312 units, respectively | \$ 14,162 | \$ 5,840 |

* Non-participant-directed

** Employer contributions are non-participant-directed

*** 2005 included for comparative purposes

**** Contract value as of December 31, 2006 and 2005 of the Stable Value Fund was \$30,461 and \$26,404 respectively. Amounts presented in the table reflect fair value.

**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN**

Notes to Financial Statements

For the years ended December 31, 2006 and 2005, the Plan's investments appreciated (depreciated) (including gains and losses on investments bought and sold, as well as those held during the year) in value by \$17,140 and \$(9,801), respectively, as follows:

| (in thousands) | Year Ended December 31, | |
|-----------------------|--------------------------------|-------------------|
| | 2006 | 2005 |
| Common stock | \$ 6,519 | \$ (14,164) |
| Commingled funds | 10,350 | 4,087 |
| Mutual funds | <u>271</u> | <u>276</u> |
| Total | <u>\$ 17,140</u> | <u>\$ (9,801)</u> |

The average yield of the underlying assets earned by the Plan from the Fixed Income Fund was 3.27% and 4.51% at December 31, 2006 and 2005, respectively. The average crediting interest rate was 4.97% and 4.55% at December 31, 2006 and 2005, respectively.

(4) Non-participant-Directed Investments

The MTI Common Stock Fund includes both participant-directed and non-participant-directed investments. It is not practicable to segregate the changes in net assets related to the MTI common stock between the participant-directed and non-participant-directed investments.

Information about the net assets and the significant components of the changes in net assets relating to the non-participant-directed investments is as follows:

| (in thousands) | December 31, | |
|--|---------------------|------------------|
| | 2006 | 2005 |
| Net Assets: | | |
| MTI common stock | \$ 33,621 | \$ 36,062 |
| Pfizer common stock | 37,324 | 42,436 |
| Contributions receivable from participants | 24 | 30 |
| Contributions receivable from employer | 122 | 118 |
| Cash and cash equivalents | 376 | 2,549 |
| Due to broker for securities purchased | -- | (667) |
| Inter-fund transfers receivable | <u>10</u> | <u>103</u> |
| Total | <u>\$ 71,477</u> | <u>\$ 80,631</u> |

| (in thousands) | Year Ended December 31, | |
|---|--------------------------------|--------------------|
| | 2006 | 2005 |
| Changes in Net Assets: | | |
| Participants' contributions | \$ 724 | \$ 897 |
| Employer contributions | 3,298 | 3,182 |
| Dividends | 1,770 | 1,595 |
| Interest | 26 | 20 |
| Net appreciation (depreciation) in fair value of investments | 6,519 | (14,164) |
| Benefits paid to participants | (9,129) | (6,551) |
| Administrative expenses | (4) | (4) |
| Transfers to participant-directed investments | <u>(12,358)</u> | <u>(3,681)</u> |
| Total | <u>\$ (9,154)</u> | <u>\$ (18,706)</u> |

**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN**

Notes to Financial Statements

(5) Plan Terminations

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan by action of the Company's Board of Directors, subject to

the provisions of ERISA. Upon termination of the Plan, each participant thereby affected would receive the entire value of his or her account as though he or she had retired as of the date of such termination. No part of the assets in the investment funds established pursuant to the Plan would at any time revert to the Company.

(6) Tax Status

The Internal Revenue Service (IRS) determined and informed the Company by a letter dated October 22, 2002, that the Plan and related Trust established thereunder are properly designed and, thus, qualified and are tax exempt, respectively, within the meaning of Sections 401(a) and 501(a) of the IRC. The Company and legal counsel believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC.

(7) Administrative Costs

The Company pays all costs of administering the Plan except for the fees of the investment advisor, if any, for each actively managed fund, which are charged to the respective funds. Fees paid by the Plan for investment management services and trustee expenses amounted to \$200,000 and \$121,000 for the years ended December 31, 2006 and 2005, respectively. However, participants are responsible for any origination and maintenance fees for each loan, and certain expenses for participating in the Mutual Fund Window.

(8) Related-Party Transactions

Certain Plan investments are shares of commingled funds managed by State Street Global Advisors (SSgA), an affiliate of State Street Bank and Trust Company. State Street Bank and Trust Company is the Trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions.

Certain Plan investments are shares of the Company's common stock, which qualify as party-in-interest transactions.

(9) Concentration of Risks and Uncertainties

The Plan's exposure to a concentration of credit risk is limited by the diversification of investments across several participant-directed fund elections. Additionally, the investments within each participant-directed fund election are further diversified into varied financial instruments, with the exception of the MTI and Pfizer common stock funds, which principally invest in securities of a single issuer.

The Plan investments include a number of investment options including MTI and Pfizer common stock and a variety of investment funds, some of which are mutual funds. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility risk. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of net assets for benefits and participant account balances.

**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN**

Notes to Financial Statements

(10) Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements as of December 31, 2006 to the Form 5500 (in thousands):

| | | |
|---|----|-----------------------|
| Net assets available for benefits per the financial statements | \$ | 195,196 |
| Less: Adjustment from contract value to fair value for fully benefit-responsive investment contracts | | 291 |
| Less: Amounts allocated to withdrawing participants | | <u>1,861</u> |
| Net assets available for benefits per the Form 5500 | \$ | <u><u>193,044</u></u> |

The following is a reconciliation of investment income per the financial statements for the year ended December 31, 2006 to the Form 5500 (in thousands):

| | | |
|---|----|----------------------|
| Total investment income per the financial statements | \$ | 21,804 |
| Less: Adjustment from contract value to fair value for fully benefit-responsive investment contracts | | <u>291</u> |
| Total investment income per the Form 5500 | \$ | <u><u>21,513</u></u> |

The following is a reconciliation of benefits paid to participants per the financial statements for the year ended December 31, 2006 to the Form 5500 (in thousands):

| | | |
|---|----|--------|
| Benefits paid to participants per the financial statement | \$ | 15,732 |
|---|----|--------|

Add: Amounts allocated to withdrawing participants
for the year ended December 31, 2006
Benefits paid to participants per Form 5500

1,861

\$ 17,593

Amounts allocated to withdrawing participants are recorded on the Form 5500 for benefit claims that have been processed and approved for payment prior to December 31, 2006 but not yet paid as of that date.

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**MINERALS TECHNOLOGIES INC.
SAVINGS AND INVESTMENT PLAN**

SCHEDULE H, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

**December 31, 2006
(in thousands)**

| (a) | (b) Identity of issue, borrower, lessor or similar party | (c) Description of investment/interest | (d) Cost | (e) Current Value |
|-----|--|--|-------------|--------------------------|
| | Commingled Funds: | | | |
| * | Stable Value Fund | | | |
| | SSgA Principal Accumulation Return Fund | 30,461 units | 30,461 | \$ 30,170 |
| | Balanced Growth Fund | | | |
| | Oakmark Equity & Income Fund | 682 units | 15,801 | \$ 17,638 |
| * | S & P 500 Index Fund | | | |
| | SSgA Flagship Securities Lending Series Fund - Class A | 117 units | 23,720 | \$ 31,518 |
| * | Matrix Equity Fund | | | |
| | SSgA Active U.S. Large Cap Core Non-Lending Fund | 884 units | 17,136 | \$ 22,018 |
| * | International Fund | | | |
| | SSgA Daily International Alpha Securities Lending Fund | 590 units | 10,779 | \$ 14,162 |
| | Common Stock: | | | |
| * | MTI Common Stock Fund | | | |
| | Minerals Technologies Inc. Common Stock | 572 units | \$ 24,129 | \$ 33,621 |
| | Pfizer Common Stock Fund | | | |
| | Pfizer Inc. Common Stock | 1,441 units | \$ 2,584 | \$ 37,324 |
| | Mutual Funds: | | | |
| | Mutual Fund Window | | | |
| | Participant-Directed Brokerage Account | various shares | 4,503 | \$ 4,503 |
| | Participant Loans: | | | |
| * | Participant Loan Fund | | | |
| | Participant Loans | 387 participant loans with interest rates ranging from 5.00% to 9.75% | 3,216 | \$ <u>3,216</u> |
| | Total | | | \$ <u>194,170</u> |

* Parties in interest, as defined by ERISA

See accompanying report of independent registered public accounting firm.

Pursuant to the requirements of the Securities Exchange Act of 1934, the members of the Savings and Investment Plan Committee, which administers the Minerals Technologies Inc. Savings and Investment Plan, have duly caused this annual report to be signed on their behalf by the undersigned thereunto duly authorized.

Minerals Technologies Inc. Savings and Investment Plan

By: /s/John A. Sorel
John A. Sorel
Senior Vice President-Finance and
Chief Financial Officer
Member, Minerals Technologies Inc. Savings
and Investment Plan Committee

Date: June 21, 2007

Consent of Independent Registered Public Accounting Firm

The Savings and Investment Plan Committee
of Minerals Technologies Inc.:

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 33-138245, 33-65268, and 333-62739) of our report dated June 21, 2007, relating to the statements of net assets available for benefits of the Minerals Technologies Inc. Savings and Investment Plan as of December 31, 2006 and 2005, and the related statements of changes in net assets available for benefits for the years then ended and the supplemental schedule H, line 4i - schedule of assets (held at end of year) as of December 31, 2006, which report appears in the December 31, 2006 Annual Report on Form 11-K of the Minerals Technologies Inc. Savings and Investment Plan.

KPMG LLP

New York, New York
June 21, 2007