

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, 2004

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

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, 2004 and 2003, 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 audits 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, 2004 and 2003, 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, 2004 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 audit 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 22, 2005

2

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

	December 31,	
	2004	2003
Investments (Note 3):		
In securities of participating employer	\$ 44,350	\$ 38,952
In securities of unaffiliated issuers:		
Common stock	54,186	80,268
Commingled funds	85,131	77,658
Mutual funds	3,913	3,594
Loans to participants	3,184	3,239
Total investments	190,764	203,711
Contributions receivable	--	355
Dividends and interest receivable	126	86
Due from broker for securities sold	--	161
Cash and cash equivalents	808	391
Net assets available for benefits	\$ 191,698	\$ 204,704

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,	
	2004	2003
Additions:		
Additions to net assets attributed to:		
Investment income (loss):		
Net appreciation (depreciation) in fair value of investments (Note 3)	\$ (7,011)	\$ 33,287
Dividends	2,020	1,546
Interest	1,308	1,300
Investment income (loss)	(3,683)	36,133
Contributions:		
Participants	6,460	6,370
Participants' rollovers	231	546
Employer	3,030	2,973
Total contributions	9,721	9,889
Net additions	6,038	46,022
Deductions from net assets attributed to:		
Benefits paid to participants	19,019	11,385
Administrative expenses (Note 7)	25	16
Total deductions	19,044	11,401
Net (decrease) increase	(13,006)	34,621
Net assets available for benefits:		
Beginning of year	204,704	170,083
End of year	\$ 191,698	\$ 204,704

See accompanying notes to the financial statements.

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

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

Each participant may elect to contribute between 2% and 15% of his or her 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 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. Contributions due from the Company amounted to \$114,000 at December 31, 2003.

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 \$13,000 and \$12,000 for 2004 and 2003, respectively.

However, a participant's contributions may be further limited as a result of the nondiscrimination test criteria as defined by the Internal Revenue Code (IRC).

Participant Accounts

Each participant's account is credited with the participant's contribution and allocations of (a) the Company's contribution and (b) Plan earnings, 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:

Fixed Income Fund: This fund invests 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.

MINERALS TECHNOLOGIES INC. SAVINGS AND INVESTMENT PLAN

Notes to Financial Statements

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 activated. No new contributions can be made to this fund.

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

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

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 10.50 percent, which are commensurate with prevailing rates as determined quarterly by the Plan administrator. At December 31, 2004, there were 397 individual loans outstanding, carrying an average interest rate of 6.10 percent, with maturities through the year 2019.

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.

(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 accounting principles generally accepted in the United States of America 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.

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

Notes to Financial Statements

Investment Valuation and Income Recognition

Investments in the Principal Accumulation Return Fund are valued at cost plus reinvested interest, which approximates 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 stated at quoted market price. The Balanced Growth Fund, S & P 500 Index Fund, Matrix Equity Fund and International Fund are stated at fair market 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 the 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.

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. Income from other investments 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,	
	2004	2003
MTI Common Stock Fund,** 664 and 657 units, respectively	\$ 44,350	\$ 38,952
Pfizer Common Stock Fund,* 2,015 and 2,272 units, respectively	\$ 54,186	\$ 80,268
Fixed Income Fund, 25,789 and 25,981 units, respectively	\$ 25,789	\$ 25,981
Balanced Growth Fund 489 and 420 units, respectively	\$ 11,490	\$ 9,258
S&P 500 Index Fund, 120 and 122 units, respectively	\$ 26,443	\$ 24,270
Matrix Equity Fund, 886 and 921 units, respectively	\$ 17,228	\$ 16,136

* Non-participant-directed

**Employer contributions are non-participant-directed

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

Notes to Financial Statements

For the years ended December 31, 2004 and 2003, the Plan's investments (including gains and losses on investments bought and sold, as well as those held during the year) appreciated (depreciated) in value by \$(7,011) and \$33,287, respectively, as follows:

(in thousands)	Year Ended December 31,	
	2004	2003
Common stock	\$ (12,922)	\$ 21,996
Commingled funds	5,592	10,529
Mutual funds	319	762
Total	\$ (7,011)	\$ 33,287

(4) 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,	
	2004	2003
Net Assets:		
MTI common stock	\$ 44,350	\$ 38,952
Pfizer common stock	54,186	80,268
Contributions receivable	--	142
Due from broker for securities sold	--	161
Cash and cash equivalents	801	391
Total	\$ 99,337	\$ 119,914

(in thousands)	Year Ended December 31,	
	2004	2003
Changes in Net Assets:		
Participants' contributions	\$ 772	\$ 841
Employer contributions	3,030	2,973
Dividends	1,607	1,489
Interest	8	6
Net appreciation (depreciation) in fair value of investments	(12,922)	21,996
Benefits paid to participants	(8,365)	(6,381)
Administrative expenses	(4)	(4)
Transfers to participant-directed investments	(4,703)	(3,131)
Total	\$ (20,577)	\$ 17,789

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 stock between the participant-directed and non-participant-directed investments.

(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 tax exempt, respectively, within the meaning of Sections 401(a) and 501(a) of the IRC. The Company 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 fund, which are charged to the respective funds. Fees paid by the Plan for loan origination and maintenance trustee expenses amounted to \$25,000 and \$16,000 for the years ended December 31, 2004 and 2003, 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 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 security of a single issuer.

The Plan offers 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**

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

**December 31, 2004
(in thousands)**

(a)	(b) Identity of issue, borrower, lessor or similar party	(c) Description of investment/interest	(d) Cost	(e) Current Value
Commingled Funds:				
*	Fixed Income Fund			
	SSgA Fixed Income Fund	25,789 units	\$	25,789
	Balanced Growth Fund			
	Oakmark Equity & Income Fund	489 units	\$	11,490
*	S & P 500 Index Fund			
	SSgA Flagship Fund Series A			
	S & P 500 Index Fund	120 units	\$	26,443
*	Matrix Equity Fund			
	SSgA US Matrix Stock Fund	886 units	\$	17,228
*	International Fund			
	SSgA Daily Activity			
	International Fund	258 units	\$	4,181

Common Stock:

* MTI Common Stock Fund				
Minerals Technologies Inc.				
Common Stock	664 units	\$	26,421	\$ 44,350
Pfizer Common Stock Fund				
Pfizer Inc. Common Stock	2,015 units	\$	3,613	\$ 54,186
Mutual Funds:				
Mutual Fund Window				
Participant-Directed Brokerage Account	3,913 units		\$	3,913
Participant Loans:				
* Participant Loan Fund				
Participant Loans	397 loans with interest from 5.00% to 10.50%		\$	<u>3,184</u>
Total			\$	<u><u>190,764</u></u>

* Parties in interest, as defined by ERISA.

See accompanying report of independent registered public accounting firm.

SIGNATURE

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 27, 2005

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. 33-59080, 33-65268, 33-96558 and 333-62739) of our report dated June 22, 2005, relating to the statements of net assets available for benefits of the Minerals Technologies Inc. Savings and Investment Plan as of December 31, 2004 and 2003, 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, 2004, which report appears in the December 31, 2004 Annual Report on Form 11-K of the Minerals Technologies Inc. Savings and Investment Plan.

KPMG LLP

New York, New York
June 27, 2005

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

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2003**

In connection with the Annual Report on Form 11-K of the Minerals Technologies Inc. Savings and Investment Plan for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of John A. Sorel, Senior Vice President - Finance, Chief Financial Officer and Member, Minerals Technologies Inc. Savings and Investment Plan Committee; and Gordon S. Borteck, Vice President, Organization and Human Resources, and Chairman, Minerals Technologies Inc. Savings and Investment Plan Committee, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the net assets available for benefits and changes in net assets available for benefits of the Minerals Technologies Inc. Savings and Investment Plan.

Dated: June 27, 2005

/s/John A. Sorel

Name: John A. Sorel
Title: Senior Vice President - Finance,
Chief Financial Officer;
Member, Minerals Technologies Inc.
Savings and Investment Plan Committee

Dated: June 27, 2005

/s/Gordon S. Borteck

Name: Gordon S. Borteck
Title: Vice President, Organization and Human Resources
Chairman, Minerals Technologies Inc.
Savings and Investment Plan Committee

A signed original of this written statement required by Section 906 has been provided to Minerals Technologies Inc. and will be retained by Minerals Technologies Inc. and furnished to the Securities and Exchange Commission or its staff upon request.