MINERALS TECHNOLOGIES INC
Form SC 13G
February 15, 2005

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
ANNUAL FILING

MINERALS TECHNOLOGY
(NAME OF ISSUER)
COMMON STOCK
(TITLE CLASS OF SECURITIES)
603158106
(CUSIP NUMBER)
12/31/2004
(DATE OF EVENT WHICH REQUIRES FILING OF THIS STATEMENT)

CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE IS FILED:

(X) RULE 13D-1(B)
( ) RULE 13D-1(C)
( ) RULE 13D-1(D)

*THE REMAINDER OF THIS COVER PAGE SHALL BE FILLED OUT FOR A REPORTING PERSON'S INITIAL FILING ON THIS FORM WITH RESPECT TO THE SUBJECT CLASS OF SECURITIES, AND FOR ANY SUBSEQUENT AMENDMENT CONTAINING INFORMATION WHICH WOULD ALTER THE DISCLOSURES PROVIDED IN A PRIOR COVER PAGE.

THE INFORMATION REQUIRED IN THE REMAINDER OF THIS COVER PAGE SHALL NOT BE DEEMED TO BE "FILED" FOR THE PURPOSE OF SECTION 18 OF THE SECURITIES EXCHANGE ACT OF 1934 ("ACT") OR OTHERWISE SUBJECT TO THE LIABILITIES OF THAT SECTION OF THE ACT BUT SHALL BE SUBJECT TO ALL OTHER PROVISIONS OF THE ACT (HOWEVER, SEE THE NOTES).

CUSIP NO. 603158106 13G PAGE 2 OF 5 PAGES

1. NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF PERSON
STATE STREET BANK AND TRUST COMPANY, ACTING IN VARIOUS FIDUCIARY CAPACITIES. 04-1867445

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP.*

NOT APPLICABLE A __
B __

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

5. SOLE VOTING POWER

1,162,780 SHARES
6. SHARED VOTING POWER
0 SHARES
7. SOLE DISPOSITIVE POWER
0 SHARES
8. SHARED DISPOSITIVE POWER
1,162,780 SHARES
9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
1,162,780 SHARES
10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9
5.7%

12. TYPE OF REPORTING PERSON*

BK

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ITEM 1.
(A) NAME OF ISSUER

MINERALS TECHNOLOGIES INC

(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

405 LEXINGTON AVENUE
19TH FLOOR
NEW YORK, NY 10174

ITEM 2.

(A) NAME OF PERSON FILING
STATE STREET BANK AND TRUST COMPANY, TRUSTEE

(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

225 FRANKLIN STREET, BOSTON, MA 02110

(C) CITIZENSHIP

BOSTON, MASSACHUSETTS

(D) TITLE OF CLASS OF SECURITIES

COMMON STOCK

(E) CUSIP NUMBER

603158106

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B), CHECK WHETHER THE PERSON FILING IS A:

(B) _X_ BANK AS DEFINED IN SECTION 3(A)(6) OF THE ACT

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ITEM 4. OWNERSHIP

(A) AMOUNT BENEFICIALLY OWNED
1,162,780 SHARES

(B) PERCENT OF CLASS
5.7%

(C) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS:
(I) SOLE POWER TO VOTE OR TO DIRECT THE VOTE OF
1,162,780 SHARES
(II) SHARED POWER TO VOTE OR TO DIRECT THE VOTE OF
0 SHARES
(III) SOLE POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF
0 SHARES
(IV) SHARED POWER TO DISPOSE OR TO DIRECT THE DISPOSITION OF
1,162,780 SHARES

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

NOT APPLICABLE

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

NOT APPLICABLE

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

NOT APPLICABLE

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP

NOT APPLICABLE

ITEM 9. NOTICE OF DISSOLUTION OF GROUP

NOT APPLICABLE

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ITEM 10. CERTIFICATION

THE FOLLOWING CERTIFICATION SHALL BE INCLUDED IF THE STATEMENT IS FILED PURSUANT TO RULE 13D-1(B):

BY SIGNING BELOW I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE SECURITIES REFERRED TO ABOVE WERE ACQUIRED IN THE ORDINARY COURSE OF BUSINESS AND WERE NOT ACQUIRED FOR THE PURPOSE OF AND DO NOT HAVE THE EFFECT OF CHANGING OR INFLUENCING THE CONTROL OF THE ISSUER OF SUCH SECURITIES AND WERE NOT ACQUIRED IN CONNECTION WITH OR AS A PARTICIPANT IN ANY TRANSACTION HAVING SUCH PURPOSES OR EFFECT.

THIS REPORT IS NOT AN ADMISSION THAT STATE STREET BANK AND

TRUST COMPANY IS THE BENEFICIAL OWNER OF ANY SECURITIES COVERED BY THIS REPORT, AND STATE STREET BANK AND TRUST COMPANY EXPRESSLY DISCLAIMS BENEFICIAL OWNERSHIP OF ALL SHARES REPORTED HEREIN PURSUANT TO RULE 13D-4.

SIGNATURE

AFTER REASONABLE INQUIRY AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, I CERTIFY THAT THE INFORMATION SET FORTH IN THIS STATEMENT IS TRUE, COMPLETE AND CORRECT.

15 FEBRUARY 2005

STATE STREET CORPORATION
STATE STREET BANK AND TRUST COMPANY,
TRUSTEE

/S/ SUSAN C. DANIELS
VICE PRESIDENT