

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 Number: 1-5318

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

KENNAMETAL THRIFT PLUS PLAN

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

Kennametal Inc.
1600 Technology Way
P.O. Box 231
Latrobe, Pennsylvania 15650

KENNAMETAL THRIFT PLUS PLAN
INDEX TO FINANCIAL STATEMENTS

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	2
Financial Statements:	
Statements of Net Assets Available for Benefits December 31, 2006 and 2005	3
Statement of Changes in Net Assets Available for Benefits For the Year ended December 31, 2006	4
Notes to Financial Statements	5
Supplemental Schedule:	
Schedule H, Line 4i — Schedule of Assets (Held at End of Year) December 31, 2006	13
Signatures	14
Exhibit 23 – Consent of Independent Registered Public Accounting Firm EX-23	15
Note: Other schedules required by Section 2520.103-10 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under ERISA have been omitted because they are not applicable.	

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of
the Kennametal Thrift Plus Plan

We have audited the accompanying statements of net assets available for benefits of the Kennametal Thrift Plus Plan (the Plan) as of December 31, 2006 and 2005, and the related statement of changes in net assets available for benefits for the year ended December 31, 2006. 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. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. 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 at December 31, 2006 and 2005, and the changes in its net assets available for benefits for the year ended December 31, 2006, in conformity with accounting principles generally accepted in the United States.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2006 is presented for purposes of additional analysis and is not a required part of the 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 financial statements taken as a whole.

/s/ Schneider Downs & Co., Inc.
Schneider Downs & Co., Inc.

Pittsburgh, Pennsylvania
June 28, 2007

KENNAMETAL THRIFT PLUS PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2006 AND 2005

	December 31, 2006	December 31, 2005
ASSETS		
Cash	\$ 17,027	\$ 53,159
Receivables:		
Participant contributions	622,999	719,726
Employer contributions	422,420	530,287
Total receivables	<u>1,045,419</u>	<u>1,250,013</u>
Investments:		
Mutual Funds	188,781,569	167,828,499
Master Trust	95,960,068	93,731,688
Common/Collective Trusts	80,210,414	65,942,639
Kennametal Inc. Common Stock	54,633,236	50,529,710
Participant Loans	11,419,869	11,420,248
Total investments	<u>431,005,156</u>	<u>389,452,784</u>
Total Assets	<u>432,067,602</u>	<u>390,755,956</u>
Adjustment from fair value to contract value for fully benefit- responsive investment contracts	<u>957,583</u>	<u>320,163</u>
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$433,025,185</u>	<u>\$ 391,076,119</u>

The accompanying notes are an integral part of these statements.

KENNAMETAL THRIFT PLUS PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2006

	December 31, 2006
ADDITIONS TO NET ASSETS ATTRIBUTED TO:	
Participant contributions	\$ 20,968,166
Employer contributions, net of forfeitures	16,399,060
Dividends and interest	19,634,450
Net appreciation in fair value of investments	25,447,772
Adjustment to contract value on Master Trust	637,420
Total additions	<u>83,086,868</u>
DEDUCTIONS FROM NET ASSETS ATTRIBUTED TO:	
Benefits paid to participants	41,607,460
Loan distributions	11,487
Administrative fees	21,892
Total deductions	<u>41,640,839</u>
NET INCREASE BEFORE TRANSFER OF ASSETS	41,446,029
Transfers from other Kennametal Plans	<u>503,037</u>
NET INCREASE	41,949,066
NET ASSETS AVAILABLE FOR BENEFITS:	
Beginning of year	391,076,119
End of year	<u>\$ 433,025,185</u>

The accompanying notes are an integral part of these statements.

**KENNAMETAL THRIFT PLUS PLAN
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2006 AND 2005**

1. DESCRIPTION OF PLAN

The following general description of the Kennametal Thrift Plus Plan, as amended (the Plan), is provided for general information purposes only. Participants should refer to the plan document for complete information.

The Plan is a defined contribution employee benefit plan, established to encourage investment and savings for certain salaried, hourly and union employees of Kennametal Inc. and certain of its subsidiaries (the Company) and to provide a method to supplement their retirement income. The Plan provides these employees the opportunity to defer a portion of their annual compensation for federal income tax purposes in accordance with Section 401(k) of the Internal Revenue Code, as amended (IRC). The Plan also provides for Company contributions. The Plan is subject to certain provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). Kennametal Inc. is the Plan sponsor.

ADMINISTRATION OF THE PLAN – The management of the Company has the authority and responsibility for the general administration of the Plan. Fidelity Management Trust Company functions as the trustee, and Fidelity Investments Institutional Operations Company functions as the recordkeeper.

ELIGIBILITY – All employees become eligible to participate in the Plan on the first day of the first payroll period subsequent to their employment date. Under present federal income tax law, employer contributions and all earnings of the Plan do not constitute taxable income to the participants until withdrawn from the Plan by the participants.

VESTING – Employee contributions are fully vested. Employer matching contributions cliff vest after the third anniversary of the participant's employment date. At December 31, 2006, forfeited nonvested accounts totaled \$51,192. These amounts will be used to reduce future employer contributions.

PARTICIPANT ACCOUNTS – A separate account is maintained for each participant in the Plan, reflecting contributions, investments, investment gains and losses, distributions, loans, withdrawals and transfers.

CONTRIBUTIONS – The Plan allows participants to elect a contribution rate (either before-tax, after-tax, or a combination of both) of 1% to 20% of the employee's eligible wages, which include base salary, overtime, shift differential pay and incentive compensation. Highly compensated employees are limited to contributing 8% pre-tax and 4% after-tax of their eligible wages. Employees who are age 50 or older and who exceed the annual dollar limit under the law or the Plan are eligible to make Catch-Up contributions. Newly hired non-union employees are automatically enrolled at 3%.

Employee contributions up to 6% are matched at 50%. The maximum employer matching contribution is 3%.

Table of Contents

The participants can elect to have their contributions invested in the different investment funds available under the plan. Currently, the Plan offers 10 mutual funds, 8 common/collective trusts, Kennametal Inc. common stock and a Master Trust. In 2005, employer-matching contributions were made concurrently with participant contributions and solely in Kennametal Inc. common stock. As a result of a Plan amendment during 2006, participant contributions are invested in the same investment fund elections that the employee has elected for their pre-tax or after-tax contributions. These employer-matching contributions can be transferred to other investment options at any time at the participant's election.

In connection with certain changes to the Kennametal Inc. Retirement Income Plan, a Company-sponsored defined benefit pension plan, certain employees are no longer eligible to participate in that plan. These employees are eligible to participate in the Plan and receive a fixed Basic contribution equal to 3% of the employee's eligible compensation and an additional Discretionary contribution from 0% up to 3% depending on the Company's fiscal year performance. During 2006, the Company made a Discretionary contribution of 1.5%. The Basic and Discretionary contributions are invested in the same investment fund elections that the employee has elected for their pre-tax or after-tax contributions.

DISTRIBUTIONS – Distributions to participants due to disability, retirement or death are payable in either a lump sum or periodic payments for a period not to exceed ten (10) years at the participant's election. If a participant's vested interest in his or her account exceeds \$1,000, a participant may elect to defer distribution to a future date as more fully described in the Plan.

In addition, while still employed, participants may withdraw after-tax employee contributions, rollover contributions and pre-tax employee contributions if over age 59.5 at any time. Vested Company contributions and pre-tax employee contributions if under 59.5 may be withdrawn only for specific hardship reasons.

PARTICIPANT LOANS – A participant may borrow up to the lesser of \$50,000 or 50% of his or her vested account balance, with a minimum loan amount of \$1,000. Loans are repayable through payroll deductions. The maximum term permissible for a general-purpose loan is 5 years and 30 years for a residential loan. The interest rate is determined by the plan administrator based on existing market conditions and is fixed over the life of the loan. Interest rates on participant loans ranged from 5.0% to 10.5% at December 31, 2006 and 2005. Participant loans outstanding at December 31, 2006 have maturity dates ranging from 2007 to 2036.

INVESTMENTS – Participants direct their contributions and all Company contributions by electing that such contributions be placed in a single investment fund or allocated to any combination of investment funds available under the Plan. Earnings derived from the assets of any investment fund are reinvested in the fund to which they relate. Participants may elect at any time to transfer all or a portion of the value of their accounts among the investment funds.

2. ACCOUNTING POLICIES

BASIS OF ACCOUNTING – The financial statements of the Plan are maintained on the accrual basis of accounting.

RECENT ACCOUNTING PRONOUNCEMENTS – As of December 31, 2006, the Plan adopted the Financial Accounting Standards Board (FASB) Staff Position FSP 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 to 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.

In September 2006, the FASB issued Statement of Financial Accounting Standard No. 157, “Fair Value Measurement” (SFAS 157), which establishes a framework for measuring fair value under generally accepted accounting principles and expands disclosure about fair value measurements. SFAS 157 is effective for financial statements issued with fiscal years beginning after November 15, 2007. The Plan’s management does not believe that the adoption of SFAS 157 will have a material impact on the Plan’s financial statements.

In February 2007, the FASB issued Statement No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities” (SFAS 159). The fair value option established by SFAS 159 permits entities to choose to measure eligible items at fair value at specified election dates. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings at each subsequent reporting date. SFAS 159 is effective as of the beginning of an entity’s first fiscal year that begins after November 15, 2007. The Plan’s management does not believe that the adoption of SFAS 159 will have a material impact on the Plan’s financial statements.

Table of Contents

INVESTMENTS – Investment transactions are recorded on a trade date basis. Invesco Institutional, Inc. reported that all the investment contracts held in the Master Trust under the Stable Value Fund (see Note 4) are fully benefit-responsive. Fully benefit-responsive investment contracts are valued at fair value under investments with a corresponding reduction to contract value for purposes of reporting net assets available for investments in accordance with the provisions of AICPA Statement of Position (SOP) 94-4-1, “Reporting of Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans”. Shares of registered investment companies are valued at the net asset value of shares held by the Plan at year-end. Units of common/collective trust funds are valued at the net asset value of units held by the Plan at year-end. Investments in common stock are valued at their quoted market price at year-end. Participant loans are valued at cost, which approximates fair value.

PAYMENT OF BENEFITS – Benefit payments are recorded as distributed.

INVESTMENT INCOME – Interest and dividend income are recorded in the period earned.

NET APPRECIATION – Net appreciation in fair value of investments is composed of unrealized gains and losses, which represent the change in market value compared to the cost of investments in each year, and realized gains or losses on security transactions, which represent the difference between proceeds received and average cost.

Net appreciation in fair value of investments for the year ended December 31, 2006 was as follows:

	2006
Mutual Fund	\$13,712,922
Kennametal Inc. Common Stock Fund	7,999,743
Common / Collective Trusts	3,735,107
	<u>\$25,447,772</u>

PLAN EXPENSES – Investment management fees and certain other administrative fees were paid by the Plan. Investment management fees are included as a reduction in the income of the fund.

USE OF ESTIMATES IN PREPARATION OF FINANCIAL STATEMENTS – 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.

[Table of Contents](#)

3. INVESTMENTS EXCEEDING FIVE PERCENT OF NET ASSETS

The values of individual investments that represent five percent or more of the Plan's total net assets as of December 31, 2006 and 2005 were as follows:

	2006	2005
Stable Value Fund	\$95,960,068	\$93,731,688
Kennametal Inc. Common Stock Fund	54,633,236	50,529,710
MSIFT Mid Cap Growth Fund	38,120,696	37,525,741
Fidelity Capital Appreciation Fund	36,897,858	33,540,158
Hotchkis & Wiley Large Cap Value Fund	27,833,624	25,710,108
Fidelity Freedom 2015 Fund	27,831,628	24,649,155
American Funds EuroPacific Growth Fund	22,962,533	—

4. MASTER TRUST

A portion of the Plan's investments are held in a Master Trust that was established for the investment of assets of the Plan and two other Company-sponsored defined contribution plans. Each plan has an undivided interest in the underlying assets of the Master Trust. The assets of the Master Trust are held in a stable value fund by Invesco (Trustee). Investment income relating to the Master Trust is allocated to the individual plans based upon average monthly balances invested by each plan. The underlying assets of the Master Trust include benefit-responsive investment contracts (the contracts). The crediting interest rates on the contracts ranged from 0.5 percent to 5.4 percent and 0.7 percent to 6.0 percent at December 31, 2006 and 2005, respectively.

The Master Trusts' key objectives are to provide preservation of principal, maintain a stable interest rate, and provide daily liquidity at contract value for participant withdrawals and transfers in accordance with the provisions of the Plan.

To accomplish the objectives above, the Trust primarily invests in wrapper contracts or synthetic guaranteed investment contracts (GICS). In wrapper contracts, the investments are owned and held by the Trust for Plan participants. The Trust purchases a wrapper contract from an insurance company or bank. The wrapper contract amortizes the realized and unrealized gains and losses on the underlying fixed-income investments, typically over the duration of the investments, through adjustments to the future interest-crediting rate, the rate earned by participants in the Trust for the underlying investments. The issuer of the wrapper contract provides assurance that the adjustment to the interest-crediting rate will not result in a future interest-crediting rate that is less than zero. An interest-crediting rate less than zero would result in a loss of principal or accrued interest.

[Table of Contents](#)

The key factors that influence future interest-crediting rates for a wrapper contract include the level of market interest rates, the amount and timing of participant activity within the wrapper contract, the investment returns and the duration of the underlying investments. Most wrapper contracts use a formula based on the characteristics of the underlying fixed-income portfolio to determine a crediting rate. Over time, the crediting rate formula amortizes the Trust's realized and unrealized market value gains and losses over the duration of the investments. The wrapper contracts' interest-crediting rates are typically reset on a monthly or quarterly basis.

The average yield earned by the Plan based on actual earnings was 5.15% and 4.89% at December 31, 2006 and 2005, respectively. The average yield earned by the Plan based on interest rate credited to participants was 5.15% and 4.79% for December 31, 2006 and 2005, respectively.

Investments held by the Master Trust at December 31, 2006:

Security	Issuer Rating	Investment at Fair Value	Adjustment to Contract Value	Investments at Contract Value
Wrapped Portfolios				
Common Collective Trusts:				
IXIS IGT AAA Asset-Backed Securities Fund	AAA/Aaa	\$ 23,915,421	\$ (7,328)	\$ 23,908,093
ING IGT INVESCO Multi-Mgr A or Better Interm. G/C Fund	AA/Aa3	20,012,084	227,212	20,239,296
Pacific Life IGT INVESCO Multi-Mgr A or Better Interm. G/C Fund	AA/Aa3	19,380,428	281,667	19,662,095
UBS AG IGT INVESCO Multi-Mgr A or Better Core Fund	AA+/Aa2	16,596,979	459,451	17,056,430
State Street IGT INVESCO Short-term Bond Fund	AA/Aa2	14,746,482	183,310	14,929,792
JP Morgan Chase IGT INVESCO Short-term Bond Fund	AA/Aa2	14,715,069	(13,754)	14,701,315
Short-Term Investments				
Fidelity Money Market	N/A	2,601,466	—	2,601,466
Total		<u>\$111,967,929</u>	<u>\$ 1,130,558</u>	<u>\$ 113,098,487</u>

At December 31, 2006 the Plan's interest in the Master Trust was 84.7 percent. Total investment income for the Master Trust was \$5,458,429 for the year ended December 31, 2006.

[Table of Contents](#)

Investments held by the Master Trust at December 31, 2005:

Security	Issuer Rating	Investment at Fair Value	Adjustment to Contract Value	Investments at Contract Value
Wrapped Portfolios:				
Common Collective Trusts:				
IXIS IGT AAA Asset-Backed Securities Fund	AA/Aaa	\$ 21,549,710	\$ 6,332	\$ 21,556,042
ING IGT INVESCO Multi-Mgr A or Better Interm. G/C Fund	AA/Aa3	20,276,940	9,303	20,286,243
MetLife IGT INVESCO Multi-Mgr A or Better	AA/Aa2	19,669,617	88,172	19,757,789
UBS AG IGT INVESCO Multi-Mgr A or Better Core Fund	AA+/Aa2	16,850,531	287,501	17,138,032
JP Morgan Chase IGT INVESCO Short-term Bond Fund	AA/Aa2	14,439,104	(128,908)	14,310,196
State Street IGT INVESCO Short-term Bond Fund	AA/Aa2	14,085,400	109,497	14,194,897
Monumental US Treasury Note	AA/Aa3	3,064,024	27,205	3,091,229
Prudential Traditional GIC	AA-/Aa3	2,637,103	(10,082)	2,627,021
Short-Term Investments:				
Fidelity Money Market	N/A	1,009,726	—	1,009,726
Total		<u>\$113,582,155</u>	<u>\$ 389,020</u>	<u>\$113,971,175</u>

At December 31, 2005, the Plan's interest in the Master Trust was 82.3 percent.

5. TAX STATUS

The Internal Revenue Service has determined and informed the plan sponsor by a letter dated December 16, 2005, that the Plan and related trust are designed in accordance with applicable sections of the IRC.

6. PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right to amend, suspend or terminate the Plan at any time, subject to the provisions of ERISA. In the event of Plan termination, the accounts of all participants will become fully vested and non-forfeitable.

7. RELATED PARTY TRANSACTIONS

Certain investments of the Plan are mutual funds managed by Fidelity Investments. The trustee of the Plan is Fidelity Management Trust Company and, therefore, these transactions qualify as party-in-interest transactions.

One of the investment fund options available to participants is stock of Kennametal Inc., the plan sponsor. The Plan held 928,334 and 989,988 shares of Kennametal Inc. common stock at December 31, 2006 and 2005, respectively. As a result, transactions related to this investment fund qualify as party-in-interest transactions.

[Table of Contents](#)

KENNAMETAL THRIFT PLUS PLAN
PLAN NUMBER: 002
EIN: 25-0900168
SCHEDULE H, LINE 4i
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2006

(a)	(b) Issuer	(c) Description	(d) Cost	Fair (e) Value
Mutual Funds				
	Morgan Stanley	MSIFT Mid Cap Growth Portfolio		\$ 38,120,696
*	Fidelity	Fidelity Capital Appreciation Fund		36,897,858
	Hotchkis & Wiley	H&W Large Cap Value Fund		27,833,624
	American Funds	American Funds EuroPacific Growth Fund		22,962,533
	Lord Abbett	Lord Abbett Small Cap Value Fund		19,124,666
	Vanguard	Vanguard Institutional Index Fund		16,796,523
	Hotchkis & Wiley	H&W Mid Cap Value Fund		9,658,717
	Morgan Stanley	MSIF Small Company Growth Portfolio		8,502,839
	Vanguard	Vanguard Total Bond Market Index Fund		5,155,256
	Franklin Templeton	Templeton Foreign Fund		<u>3,728,857</u>
		Total Mutual Funds		<u>188,781,569</u>
Common/Collective Trusts				
*	Fidelity	Fidelity Freedom 2015		27,831,628
*	Fidelity	Fidelity Freedom 2025 Fund		14,163,035
*	Fidelity	Fidelity Freedom 2020 Fund		10,672,193
*	Fidelity	Fidelity Freedom Income Fund		7,147,309
*	Fidelity	Fidelity Freedom 2010 Fund		6,804,902
*	Fidelity	Fidelity Freedom 2030 Fund		5,948,268
*	Fidelity	Fidelity Freedom 2035 Fund		3,896,715
*	Fidelity	Fidelity Freedom 2040		<u>3,746,364</u>
		Total Common / Collective Trusts		<u>80,210,414</u>
Master Trust				
	Invesco	Stable Value Fund		<u>95,960,068</u>
Kennametal Inc. Common Stock				
*	Kennametal	Kennametal Inc. Common Stock Fund		<u>54,633,236</u>
Loans to Participants				
	Participant Loans	5.0% to 10.5%		<u>11,419,869</u>
		Total Investments		<u>\$ 431,005,156</u>

* Party-in-interest, for which a statutory exemption exists.

SIGNATURES

THE PLAN. Pursuant to the requirements of the Securities Exchange Act of 1934, the plan administrator of the Kennametal Thrift Plus Plan has duly caused this annual report to be signed by the undersigned hereunto duly authorized.

KENNAMETAL THRIFT PLUS PLAN

Date: June 28, 2007

By: /s/ Veronica McDonough

Veronica McDonough
Plan Administrator

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Nos. 333-18423, 333-88049 and 333-124774) on Form S-8 of Kennametal Inc. of our report dated June 28, 2007 with respect to the statements of net assets available for benefits of the Kennametal Thrift Plus Plan as of December 31, 2006 and 2005, the related statement of changes in net assets available for benefits for the year ended December 31, 2006, and the supplemental schedule as of December 31, 2006, which report appears in the December 31, 2006 Annual Report on the Form 11-K of the Kennametal Thrift Plus Plan.

/s/ Schneider Downs & Co., Inc.

Schneider Downs & Co., Inc.

Pittsburgh, Pennsylvania
June 28, 2007