
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 11-K

FOR ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS AND SIMILAR
PLANS PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

(Mark One)

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2013

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

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>
<u>Report of Independent Registered Public Accounting Firm</u>	<u>3</u>
Financial Statements:	
<u>Statements of Net Assets Available for Benefits December 31, 2013 and 2012</u>	<u>4</u>
<u>Statement of Changes in Net Assets Available for Benefits For the Year Ended December 31, 2013</u>	<u>5</u>
<u>Notes to Financial Statements</u>	<u>6</u>
Supplemental Schedule:	
<u>Schedule H, Line 4i - Schedule of Assets (Held at End of Year) December 31, 2013</u>	<u>18</u>
<u>Signatures</u>	<u>19</u>
Exhibit 23 – Consent of Independent Registered Public Accounting Firm	

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 (Plan) as of December 31, 2013 and 2012, and the related statement of changes in net assets available for benefits for the year ended December 31, 2013. 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. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit 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 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 as of December 31, 2013 and 2012, and the changes in its net assets available for benefits for the year ended December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets held at end of year (supplemental information) as of December 31, 2013 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 information 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.

/s/ Schneider Downs & Co., Inc.

Schneider Downs & Co., Inc.

Pittsburgh, Pennsylvania
June 17, 2014

KENNAMETAL THRIFT PLUS PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2013 AND 2012

	2013	2012
ASSETS		
Receivables:		
Notes receivable from participants	\$ 11,608,316	\$ 11,316,500
Participant contributions	524,476	412,687
Employer contributions	321,979	245,419
Total receivables	12,454,771	11,974,606
Investments at fair value (Note 3):		
Mutual funds	233,093,150	184,236,021
Common / collective trusts	167,162,911	132,500,564
Master trust	106,667,463	111,865,865
Kennametal Inc. capital stock	59,944,832	56,433,742
Self-directed brokerage account	5,176,837	2,330,335
Total investments at fair value	572,045,193	487,366,527
Net assets reflecting investments at fair value	584,499,964	499,341,133
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(2,491,037)	(5,831,727)
NET ASSETS AVAILABLE FOR BENEFITS	\$ 582,008,927	\$ 493,509,406

The accompanying notes are an integral part of these financial statements.

KENNAMETAL THRIFT PLUS PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2013

2013

ADDITIONS TO NET ASSETS ATTRIBUTED TO:	
Net appreciation in fair value of investments	\$ 85,802,553
Participant contributions	17,908,675
Employer contributions	12,014,310
Dividends and interest	8,733,499
Interest - notes receivable from participants	502,923
Total additions	124,961,960
DEDUCTIONS FROM NET ASSETS ATTRIBUTED TO:	
Benefits paid to participants	40,876,835
Loan distributions	35,854
Administrative fees	614,790
Total deductions	41,527,479
NET INCREASE BEFORE TRANSFER OF ASSETS	83,434,481
Transfers from other Kennametal Plans	5,065,040
NET INCREASE	88,499,521
NET ASSETS AVAILABLE FOR BENEFITS:	
Beginning of year	493,509,406
End of year	\$ 582,008,927

The accompanying notes are an integral part of these financial statements.

**KENNAMETAL THRIFT PLUS PLAN
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2013 AND 2012**

NOTE 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 plan, established to encourage investment and savings for certain salaried, hourly and union employees of Kennametal Inc. and certain of its business entities and business units (Kennametal or 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 employee-after tax and Company contributions. The Plan is subject to certain provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The Company is the Plan sponsor.

Effective May 1, 2013, the Plan was amended to accept Roth contributions in accordance with IRC § 402(A).

Effective July 1, 2012, employees of three business entities who had participated in the Kennametal Affiliated Savings Plan (KASP) became eligible to participate in the Plan. Employees of a fourth business entity, who had also been participants in the KASP, also became eligible to participate in the Plan on January 1, 2013. The impact of this is reflected as transfers in the statement of changes in net assets available for benefits

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 record keeper.

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, Company contributions and all earnings of the Plan do not constitute taxable income to the participants until withdrawn from the Plan by the participants (excluding where applicable, earnings on Roth contributions).

VESTING – Employee contributions are fully vested. All Company contributions (basic, matching and discretionary) cliff vest after the third anniversary of the participant's employment date. At December 31, 2013 and 2012, forfeited nonvested accounts totaled \$52,851 and \$41,775, respectively. These amounts will be used to reduce future Company contributions. Also in 2013, employer contributions were reduced by \$275,000 for forfeited nonvested accounts.

PARTICIPANT ACCOUNTS – A separate account is maintained for each participant in the Plan. Each participant's account is credited with the participant's contributions and Company matching contributions and Company discretionary contributions. Fixed administrative expenses are deducted quarterly from the participants' accounts. The benefit to which a participant is entitled is the balance of the participant's vested account.

CONTRIBUTIONS – The Plan allows participants to elect a contribution rate (either pre-tax, Roth, after-tax, or a combination) of 1% to 50% of the employee’s eligible wages, which include base salary, overtime, shift differential pay and incentive compensation. Highly compensated employees are limited to contributing 9% pre-tax and 4% after-tax of their eligible wages. Newly hired employees are automatically enrolled at 3%. 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.

The Plan provides for Company matching contributions of 50% of employee contributions, up to 6% of compensation. As such, the maximum Company matching contribution is 3% of compensation. Under the Plan, the Company has the discretion to make matching contributions in Kennametal capital stock.

The participants can elect to have their contributions (pre-tax, Roth, after-tax, catch-up and rollover amounts) invested in the different investment funds available under the Plan. Currently, the Plan offers 12 mutual funds, 9 common/collective trusts, Kennametal Inc. capital stock, a Master Trust, as well as a self-directed brokerage account. Company matching contributions are invested in the same investment elections that the employee elected for their pre-tax or after-tax contributions.

Participants receive a fixed basic contribution equal to 3% of the employee’s eligible compensation and an additional discretionary contribution from 0% up to 3%. Under the Plan, the Company has the right to make its basic and discretionary contributions in Kennametal capital stock. During 2013, the Company did not make any discretionary contributions. Company basic and discretionary contributions are invested in the same investment fund elections that the employee elected for their pre-tax or after-tax contributions.

DISTRIBUTIONS – Distributions to participants due to disability, retirement or death are payable, at the participant’s election, as a single distribution consisting of whole shares of Kennametal capital stock plus cash for fractional shares, a cash lump sum or periodic payments for a period not to extend beyond the life (or life expectancy) of the participant or the joint lives (or life expectancy) of the participant and their designated beneficiary. 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 document.

In addition, while still employed, participants may withdraw their after-tax employee contributions or rollover contributions at any time. Participants over the age of 59.5, may withdraw their vested balance at any time. Vested Company contributions and pre-tax employee contributions may be withdrawn by participants under age 59.5 only for specific hardship reasons.

NOTES RECEIVABLE FROM PARTICIPANTS – A participant may borrow up to the lesser of \$50,000 or 50% of his or her vested account balance, with a minimum note amount of \$1,000. Principal and interest are paid ratably through payroll deductions. The maximum term permissible for a general-purpose note is 5 years and 30 years for a residential note. The interest rate is determined by the plan administrator based on existing market conditions and is fixed over the life of the note. Interest rates on notes receivable from participants ranged from 4.25% to 10.50% at December 31, 2013 and 2012, respectively. Notes receivable from participants outstanding at December 31, 2013 have maturity dates ranging from 2014 to 2043.

INVESTMENTS – Participants direct their contributions and Company cash contributions by electing that such contributions be placed in a single investment or allocated to any combination of investments or the self-directed brokerage account available under the Plan. Earnings derived from the assets of any investment are reinvested in the investment 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 options.

For Company contributions made in Kennametal capital stock, participants have the ability to exchange the Kennametal capital stock for a single investment or for any combination of investments offered by the Plan.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING – The financial statements of the Plan are prepared under the accrual basis of accounting.

As described in the accounting guidance on “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,” investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. As required by this standard, the statements of net assets available for benefits presents the fair value of the investment contract as well as the adjustment of the fully benefit-responsive investment contract from fair value to contract value. The statements of net assets available for benefits are prepared on a contract value basis.

USE OF ESTIMATES – The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles (GAAP) 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 – Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Plan's Investment Committee determines the Plan's valuation policies utilizing information provided by the investment advisers, investment consultants and the custodian. See Note 3 for discussion of fair value measurements.

Investment transactions are recorded on a trade date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation includes the Plan's gains and losses on investments bought and sold as well as held during the year.

INVESCO Institutional, Inc. reported that all the investment contracts held in the Master Trust under the Stable Value Fund (see Note 5) are fully benefit-responsive. Fully benefit-responsive investment contracts are reported at fair value with a corresponding adjustment to contract value for purposes of reporting net assets available for investments. Shares of mutual funds and common stock are valued at the net asset value (NAV) of shares held by the Plan at year-end. Investments in Kennametal capital stock are valued at their quoted market price at year-end.

NOTES RECEIVABLE FROM PARTICIPANTS – Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded in the period earned. Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses has been recorded as of December 31, 2013 or 2012. If a participant ceases to make loan repayments and the plan administrator deems the participant loan to be in default, the participant loan balance is reduced and a benefit payment is recorded.

PAYMENT OF BENEFITS – Benefit payments are recorded when paid to participants / beneficiaries.

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 and 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, 2013 was as follows:

		2013
Mutual Funds	\$	47,295,977
Common / Collective Trusts		23,438,631
Kennametal Inc. Capital Stock		15,067,945
Total	\$	85,802,553

PLAN EXPENSES – Certain expenses of maintaining the Plan are paid directly by the Company and are excluded from these financial statements. Record keeping fees are charged equally to each participant and are classified as administrative fees on the statement of changes in net assets. Fees related to the administration of notes receivable from participants are charged directly to the participant's account and are included in administrative expenses. Investment related expenses are included in net appreciation of fair value of investments.

NOTE 3 – FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three levels to prioritize the inputs used in valuations, as defined below:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3: Inputs that are unobservable.

The following sections describe the valuation methodologies used by the Plan to measure investments at fair value, including an indication of the level in the fair value hierarchy in which each major category of investments is generally classified. Where appropriate, the description includes details of the valuation models and any significant assumptions. There have been no changes in the methodologies used and no transfers between fair value levels at December 31, 2013 and 2012.

Mutual Funds Investments in mutual funds are valued at quoted net asset values at year end.

Master Trust The plan has an undivided interest in the underlying assets of the Master Trust. Assets of the Master Trust are held in a stable value fund by INVESCO. The Master Trust primarily invests in wrapper contracts, or synthetic guaranteed investment contracts. See Note 5 for additional disclosures on the Master Trust. The fair value of the underlying assets of the Master Trust were determined using a present value model and the principal inputs are discount rate, fee periods, fee invoice schedule, contract value, replacement cost and actual cost.

Capital Stock Investments in capital stock are valued at their quoted market price at year-end.

Common / collective trusts Investments in common / collective trusts are valued using the NAV of units of a bank collective trust. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liabilities. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. Participant transactions (purchases and sales) may occur daily. Were the Plan to initiate a full redemption of the collective trust, the investment adviser reserves the right to temporarily delay withdrawal from the trust in order to ensure that securities liquidations will be carried out in an orderly business manner. These investments do not have any unfunded commitments as of December 31, 2013 and have a nominal redemption period.

Self-Directed Brokerage Account The following investment types of the self-directed brokerage account are valued as follows:

Mutual Funds - valued at the quoted net asset values at year end.

Common and Preferred Stocks - valued at the closing price reported on the active market on which the individual securities are traded.

Cash and Cash Equivalents - value approximates fair value due to the short term nature of this instrument.

Units in Trust - valued at the quoted net asset values at year end.

As of December 31, 2013, the fair values of the Plan's investments measured on a recurring basis are categorized as follows:

	Level 1	Level 2	Level 3	Total
Mutual funds:				
Growth funds	\$ 127,080,735	\$ —	\$ —	\$ 127,080,735
Value funds	65,512,965	—	—	65,512,965
Fixed income funds	18,468,857	—	—	18,468,857
Index funds	22,030,593	—	—	22,030,593
Common / collective trusts:				
Balanced funds *	—	167,162,911	—	167,162,911
Plan's interest in Kennametal Inc. Master Trust:				
Synthetic guaranteed investment contracts	—	105,438,327	—	105,438,327
Money market fund	—	1,229,136	—	1,229,136
Kennametal Inc. capital stock	59,944,832	—	—	59,944,832
Self-directed brokerage account:				
Mutual funds	1,917,073	—	—	1,917,073
Common and preferred stocks	1,502,523	—	—	1,502,523
Cash and cash equivalents	1,446,654	—	—	1,446,654
Units in trust	310,587	—	—	310,587
Total investments	\$ 298,214,819	\$ 273,830,374	\$ —	\$ 572,045,193

* Common / collective trusts consist of various JP Morgan investments. The investment strategies of these investments are detailed below.

Common / Collective Trusts Investment Strategies:

Investment Holdings	JP Morgan SmartRetirement 2015 Fund	JP Morgan SmartRetirement 2020 Fund	JP Morgan SmartRetirement 2025 Fund	JP Morgan SmartRetirement 2030 Fund	JP Morgan SmartRetirement 2035 Fund
Domestic equity funds	22.0%	27.5%	30.6%	33.3%	35.5%
International funds	16.4%	21.1%	24.3%	27.8%	30.3%
Taxable fixed income	45.2%	41.0%	33.5%	26.7%	20.4%
Specialty funds	11.2%	7.2%	7.4%	7.9%	9.2%
Money Market Fund	3.8%	2.3%	3.2%	3.0%	3.4%
U.S. Treasuries	0.6%	0.7%	1.0%	1.3%	1.2%
Exchange-traded notes	0.8%	0.2%	—%	—%	—%
	100%	100%	100%	100%	100%

Fair value as of December 31, 2013	\$27,211,251	\$29,815,996	\$33,998,592	\$23,900,478	\$17,082,931
------------------------------------	--------------	--------------	--------------	--------------	--------------

Investment Holdings	JP Morgan SmartRetirement 2040 Fund	JP Morgan SmartRetirement 2045 Fund	JP Morgan SmartRetirement 2050 Fund	JP Morgan SmartRetirement Income Fund
Domestic equity funds	36.2%	35.1%	36.2%	17.7%
International funds	31.2%	31.2%	30.8%	12.8%
Taxable fixed income	18.0%	18.2%	17.9%	46.2%
Specialty funds	9.8%	9.7%	9.8%	11.9%
Money market fund	3.5%	4.5%	4.0%	9.3%
U.S. Treasuries	1.3%	1.3%	1.3%	0.6%
Exchange-traded notes	—%	—%	—%	1.5%
	100%	100%	100%	100%

Fair value as of December 31, 2013	\$14,192,665	\$4,463,751	\$3,621,767	\$12,875,480
------------------------------------	--------------	-------------	-------------	--------------

As of December 31, 2012, the fair values of the Plan's investments measured on a recurring basis are categorized as follows:

	Level 1	Level 2	Level 3	Total
Mutual funds:				
Growth funds	\$ 99,862,654	\$ —	\$ —	\$ 99,862,654
Value funds	44,180,748	—	—	44,180,748
Fixed income funds	25,168,090	—	—	25,168,090
Index funds	15,024,529	—	—	15,024,529
Common / collective trusts:				
Balanced funds *	—	132,500,564	—	132,500,564
Plan's interest in Kennametal Inc. Master Trust:				
Synthetic guaranteed investment contracts	—	108,318,675	—	108,318,675
Money market fund	—	3,547,190	—	3,547,190
Kennametal Inc. capital stock	56,433,742	—	—	56,433,742
Self-directed brokerage account:				
Mutual funds	1,106,211	—	—	1,106,211
Common stock	655,571	—	—	655,571
Units in trust	136,458	—	—	136,458
Cash	432,095	—	—	432,095
Total investments	\$ 243,000,098	\$ 244,366,429	\$ —	\$ 487,366,527

* Common / collective trusts consist of various JP Morgan investments. The investment strategies of these investments are detailed below.

Common / Collective Trusts Investment Strategies:

Investment Holdings	JP Morgan SmartRetirement 2015 Fund	JP Morgan SmartRetirement 2020 Fund	JP Morgan SmartRetirement 2025 Fund	JP Morgan SmartRetirement 2030 Fund	JP Morgan SmartRetirement 2035 Fund
Domestic equity funds	23.4%	26.5%	29.7%	33.4%	34.5%
International funds	20.5%	24.4%	27.6%	30.6%	33.0%
Taxable fixed income	42.5%	39.4%	32.4%	27.2%	21.1%
Specialty funds	10.1%	6.9%	7.2%	5.1%	7.3%
Money market fund	1.8%	1.7%	1.9%	2.0%	2.4%
U.S. Treasuries	0.8%	0.9%	1.2%	1.7%	1.7%
Exchange-traded notes	0.9%	0.2%	—%	—%	—%
	100.0%	100.0%	100.0%	100.0%	100.0%
Fair value as of December 31, 2012	\$23,650,014	\$23,059,714	\$27,059,029	\$18,156,915	\$12,738,702

Investment Holdings	JP Morgan SmartRetirement 2040 Fund	JP Morgan SmartRetirement 2045 Fund	JP Morgan SmartRetirement 2050 Fund	JP Morgan SmartRetirement Income Fund
Domestic equity funds	36.3%	36.7%	35.1%	18.0%
International funds	34.1%	33.8%	34.0%	17.7%
Taxable fixed income	19.2%	18.8%	18.8%	41.5%
Specialty funds	6.3%	6.6%	7.7%	12.8%
Money market fund	2.3%	2.3%	2.6%	7.9%
U.S. Treasuries	1.8%	1.8%	1.8%	0.8%
Exchange-traded notes	—%	—%	—%	1.3%
	100.0%	100.0%	100.0%	100.0%
Fair value as of December 31, 2012	\$10,603,043	\$3,007,976	\$2,444,489	\$11,780,682

NOTE 4 – INVESTMENTS EXCEEDING FIVE PERCENT OF NET ASSETS

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

	2013	2012
Stable Value Fund	\$ 106,667,463	\$ 111,865,865
Kennametal Inc. Capital Stock	59,944,832	56,433,742
Prudential Jennision Mid-Cap Growth Fund	46,109,076	38,894,258
T. Rowe Price Institutional Large Cap Growth Fund	44,376,965	31,693,874
JP Morgan SmartRetirement 2025 Fund	33,998,592	27,059,029
JP Morgan SmartRetirement 2020 Fund *	29,815,996	23,059,714

* The fair value of the investment in JP Morgan SmartRetirement 2020 Fund as of December 31, 2012 is not five percent or more of the Plan's total net assets available for benefits, but the fair value is presented for comparison purposes.

NOTE 5 – 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. 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 Master Trust's 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 described above, the Master Trust primarily invests in wrapper contracts, or synthetic guaranteed investment contracts (GICs). In wrapper contracts, the investments are owned and held by the Master 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 Master 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.

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 Master 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 1.36% and 0.88% for the years ended December 31, 2013 and 2012, respectively. The average yield earned by the Plan based on the interest rate credited to participants was 1.89% and 2.34% for the years ended December 31, 2013 and 2012, respectively.

In certain circumstances, the amount withdrawn from the wrapper contract would be payable at fair value rather than at contract value. These events include termination of the Plan, a material adverse change to the provisions of the Plan, if the employer elects to withdraw from a contract in order to switch to a different investment provider, or if the terms of a successor plan do not meet the wrapper contract issuer's underwriting criteria for issuance of a clone wrapper contract. Management believes that the events described above could result in the payment of benefits at fair value rather than contract value and are not probable of occurring in the foreseeable future.

Investments held by the Master Trust at December 31, 2013 were as follows:

Security	Issuer Rating	Investments at Fair Value	Adjustments to Contract Value	Investments at Contract Value
Wrapped Portfolios				
Common Collective Trusts:				
Pacific Life IGT INVESCO Multi-Mgr A or Better Interm. G/C Fund	A+/A1	\$ 22,393,262	\$ (854,297)	\$ 21,538,965
ING IGT INVESCO Multi-Mgr A or Better Interm. G/C Fund	A-/A3	22,299,900	(853,883)	21,446,017
RGA IGT INVESCO Short Term Bond Fund	AA-/A1	21,666,900	(335,024)	21,331,876
Prudential Insurance IGT INVESCO Short Term Bond Fund	AA-/A1	18,127,602	(186,316)	17,941,286
Monumental IGT INVESCO Short Term Bond Fund	AA-/A1	16,594,524	(314,145)	16,280,379
Monumental IGT Goldman Sachs Core A	AA-/A1	4,703,485	(89,040)	4,614,445
Monumental IGT BlackRock A or Better Core Fixed Income Fund	AA-/A1	4,694,580	(88,871)	4,605,709
Prudential Insurance IGT INVESCO A or Better Core Fixed Income Fund	AA-/A1	3,882,514	(39,905)	3,842,609
Prudential Insurance IGT PIMCO A or Better Core Fixed Income Fund	AA-/A1	3,870,297	(39,779)	3,830,518
Monumental IGT INVESCO A or Better Core Fixed Income Fund	AA-/A1	829,305	(15,699)	813,606
Monumental IGT PIMCO A or Better Core Fixed Income Fund	AA-/A1	826,696	(15,650)	811,046
Monumental Wrapper Contracts	AA-/A1	35,370	(670)	34,700
Short Term Investments				
Fidelity Money Market	N/A	1,398,006	—	1,398,006
Total		\$ 121,322,441	\$ (2,833,279)	\$ 118,489,162

At December 31, 2013, the Plan's interest in the Master Trust was approximately 88 percent. Total investment income for the Master Trust was \$2,355,874 for the year ended December 31, 2013. The investment income for the Master Trust is recorded in dividends and interest in the statement of changes in net assets available for benefits.

Investments held by the Master Trust at December 31, 2012 were as follows:

Security	Issuer Rating	Investments at Fair Value	Adjustments to Contract Value	Investments at Contract Value
Wrapped Portfolios				
Common Collective Trusts:				
Pacific Life IGT INVESCO Multi-Mgr A or Better Intern. G/C Fund	A+/A1	\$ 23,102,264	\$ (1,726,976)	\$ 21,375,288
ING IGT INVESCO Multi-Mgr A or Better Intern. G/C Fund	A-/A3	23,096,358	(1,725,671)	21,370,687
NATIXIS IGT INVESCO Short Term Bond Fund	A/A2	22,221,178	(816,299)	21,404,879
Prudential Insurance IGT INVESCO Short Term Bond Fund	AA-/A2	18,712,540	(693,737)	18,018,803
Monumental IGT INVESCO Short Term Bond Fund	AA-/A1	17,161,278	(841,421)	16,319,857
Monumental IGT Goldman Sachs Core A	AA-/A1	4,854,356	(238,010)	4,616,346
Monumental IGT BlackRock A or Better Core Fixed Income Fund	AA-/A1	4,846,210	(237,611)	4,608,599
Prudential Insurance IGT INVESCO A or Better Core Fixed Income Fund	AA-/A2	3,999,155	(148,262)	3,850,893
Prudential Insurance IGT PIMCO A or Better Core Fixed Income Fund	AA-/A2	3,996,205	(148,153)	3,848,052
Monumental IGT INVESCO A or Better Core Fixed Income Fund	AA-/A1	855,779	(41,959)	813,820
Monumental IGT PIMCO A or Better Core Fixed Income Fund	AA-/A1	855,148	(41,928)	813,220
Monumental Wrapper Contracts	AA-/A1	34,167	(1,675)	32,492
Short Term Investments				
Fidelity Money Market	N/A	4,052,029	—	4,052,029
Total		\$ 127,786,667	\$ (6,661,702)	\$ 121,124,965

At December 31, 2012, the Plan's interest in the Master Trust was approximately 88 percent.

NOTE 6 – TAX STATUS

The Internal Revenue Service (IRS) has determined and informed the Plan sponsor by a letter dated April 15, 2013, that the Plan and related trust are designed in accordance with applicable sections of the IRC. Although the Plan has been amended since receiving the determination letter, the Plan administrator and the Plan's tax counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believe that the Plan is qualified and the related trust is tax-exempt.

U.S. GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability if the Plan has taken an uncertain position that more likely would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2010.

NOTE 7 – PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions and to terminate the Plan at any time, subject to the provisions of ERISA. In the event of Plan termination, participants would become 100 percent vested in the Company contributions.

NOTE 8 – RISKS AND UNCERTAINTIES

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. 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 participants' account balances and the amounts reported in the statements of net assets available for benefits.

NOTE 9 – RELATED PARTY TRANSACTIONS AND PARTY-IN-INTEREST TRANSACTIONS

Certain investments of the plan are 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 capital stock of Kennametal Inc., the Plan sponsor. The Plan held 1,146,351 and 1,410,029 shares of Kennametal capital stock, or \$59,944,832 and \$56,433,742 at December 31, 2013 and 2012, respectively. As a result, transactions related to this investment fund qualify as party-in-interest transactions.

NOTE 10 – SUBSEQUENT EVENTS

Effective January 1, 2014, the Plan was amended to (1) provide for the participation of eligible employees of Kennametal Extrude Hone Corporation, Kennametal Tricon Metals and Services Corporation and Kennametal Stellite, L.P. in Company basic contributions, Company discretionary contributions, and all other forms of participant and Company contribution under the Plan (2) provide that eligible employees who are transferred to the Plan shall receive vesting service credit for their service under such other Plans prior to the transfer (3) provide that Kennametal Stellite, L.P. employees whose accounts are merged into the Plan from the Deloro Stellite Co., Inc. Retirement Savings Plan (Stellite Plan) shall be fully vested in such transferred accounts and in their new accounts under the Plan (4) provide for the transfer of accounts of Kennametal Stellite L.P. employees (Goshen, Indiana location) from the Stellite Plan (5) provide for a limited company matching contribution for Kennametal Tungsten Materials Business employees who are covered by a collective bargaining agreement and (6) provide the Plan administrator with the authority to accept the rollover into the Plan of notes associated with the outstanding balance on any loans of transferred or merged employees.

KENNAMETAL THRIFT PLUS PLAN
PLAN NUMBER: 002
EIN: 25-0900168
SCHEDULE H, LINE 4i
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2013

(a)	(b) Issuer	(c) Description	(d) Cost	(e) Fair value
<u>Mutual Funds</u>				
	Prudential	Prudential Jennison Mid-Cap Growth Fund	N/A	\$ 46,109,076
	T. Rowe Price	T. Rowe Price Institutional Large Cap Growth Fund	N/A	44,376,965
	Vanguard	Vanguard Equity Income Fund Admiral Shares	N/A	26,766,585
	American Funds	American Funds EuroPacific Growth Fund	N/A	24,074,059
	Dimensional Fund Advisors	Dimensional Fund Advisors US Small Cap Value	N/A	23,822,823
	Vanguard	Vanguard Institutional Index Fund	N/A	19,012,938
	Vanguard	Vanguard Selected Value Fund	N/A	14,923,557
	Eagle	Eagle Small Cap Growth Fund	N/A	9,779,870
	JP Morgan	JP Morgan Core Bond Fund	N/A	9,476,565
	Vanguard	Vanguard Total Bond Market Index Signal	N/A	8,992,292
	Vanguard	Vanguard Mid Capitalization Index Signal	N/A	3,017,655
	Vanguard	Vanguard Total International Stock	N/A	2,740,765
Total Mutual Funds				233,093,150
<u>Common / Collective Trusts</u>				
	JP Morgan	JP Morgan SmartRetirement 2025 Fund	N/A	33,998,592
	JP Morgan	JP Morgan SmartRetirement 2020 Fund	N/A	29,815,996
	JP Morgan	JP Morgan SmartRetirement 2015 Fund	N/A	27,211,251
	JP Morgan	JP Morgan SmartRetirement 2030 Fund	N/A	23,900,478
	JP Morgan	JP Morgan SmartRetirement 2035 Fund	N/A	17,082,931
	JP Morgan	JP Morgan SmartRetirement 2040 Fund	N/A	14,192,665
	JP Morgan	JP Morgan SmartRetirement Income Fund	N/A	12,875,480
	JP Morgan	JP Morgan SmartRetirement 2045 Fund	N/A	4,463,751
	JP Morgan	JP Morgan SmartRetirement 2050 Fund	N/A	3,621,767
Total Common / Collective Trusts				167,162,911
<u>Master Trust</u>				
	INVESCO	Stable Value Fund	N/A	106,667,463
<u>Kennametal Inc. Capital Stock</u>				
*	Kenametal Inc.	Kenametal Inc. Capital Stock	N/A	59,944,832
<u>Self-Directed Brokerage Account</u>				
	Various	Mutual Funds	N/A	1,917,073
	Various	Common and Preferred Stock	N/A	1,502,523
*	Fidelity	Cash and Cash Equivalents	N/A	1,446,654
	Various	Units in Trust	N/A	310,587
Total Self-Directed Brokerage Account				5,176,837
Total Investments				572,045,193
*	Notes receivable from participants	Maturities from 2014 to 2043, interest rates from 4.25% to 10.50%	N/A	11,608,316
Total				\$ 583,653,509

* 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 on its behalf by the undersigned hereunto duly authorized.

KENNAMETAL THRIFT PLUS PLAN

Date: June 17, 2014

By: /s/ Kimberly Ashby
Kimberly Ashby
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 17, 2014, with respect to the statements of net assets available for benefits of the Kennametal Thrift Plus Plan as of December 31, 2013 and 2012, the related statement of changes in net assets available for benefits for the year ended December 31, 2013, and the supplemental schedule of assets (held at end of year) as of December 31, 2013, which report appears in the December 31, 2013 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 17, 2014