UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED DECEMBER 31, 2017

Commission file number 1-5318

KENNAMETAL INC.

(Exact name of registrant as specified in its charter)

| Pennsylvania | 25-0900168 |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| 600 Grant Street Suite 5100 | 4F340 370C |
| Pittsburgh, Pennsylvania | 15219-2706 |
| (Address of principal executive offices) | (Zip Code) |
| Registrant's telephone number, including area code: (412 | 2) 248-8000 |
| Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section during the preceding 12 months (or for such shorter period that the registrant was required to file requirements for the past 90 days. YES $[X]$ NO $[\]$ | |
| Indicate by check mark whether the registrant has submitted electronically and posted on its corporate be submitted and posted pursuant to Rule 405 of Regulation S-T ($\S 232.405$ of this chapter) during the registrant was required to submit and post such files). YES [X] NO [] | |
| Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a nemerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smalle in Rule 12b-2 of the Exchange Act. | |
| Large accelerated filer [X] Acc | celerated filer [] |
| Non-accelerated filer [] (Do not check if a smaller reporting company) Smaller reporting company) | aller reporting company [] |
| Emo | erging growth company [] |
| If an emerging growth company, indicate by check mark if the registrant has elected not to use the exterior revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [] | ended transition period for complying with any new or |
| Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Excl | hange Act). YES [] NO [X] |
| Indicate the number of shares outstanding of each of the issuer's classes of capital stock, as of the lates | st practicable date. |
| Title of Each Class | Outstanding at January 31, 2018 |
| Capital Stock, par value \$1.25 per share | 81,573,415 |

Signatures

KENNAMETAL INC.

FORM 10-Q

FOR THE THREE AND SIX MONTHS ENDED DECEMBER 31, 2017

TABLE OF CONTENTS

| <u>Item N</u> | <u>No.</u> | <u>Page No.</u> |
|---------------|---|-----------------|
| | PART I - FINANCIAL INFORMATION | |
| 1. | Financial Statements | |
| | Condensed Consolidated Statements of Income (Unaudited) Three and six months ended December 31, 2017 and 2016 | 4 |
| | <u>Condensed Consolidated Statements of Comprehensive Income (Unaudited)</u> <u>Three and six months ended December 31, 2017 and 2016</u> | <u>5</u> |
| | <u>Condensed Consolidated Balance Sheets (Unaudited)</u> <u>December 31, 2017 and June 30, 2017</u> | <u>6</u> |
| | Condensed Consolidated Statements of Cash Flow (Unaudited) Six months ended December 31, 2017 and 2016 | 7 |
| | Notes to Condensed Consolidated Financial Statements (Unaudited) | <u>8</u> |
| 2. | Management's Discussion and Analysis of Financial Condition and Results of Operations | <u>24</u> |
| 3. | Quantitative and Qualitative Disclosures About Market Risk | <u>37</u> |
| 4. | Controls and Procedures | 38 |
| | PART II - OTHER INFORMATION | |
| 1. | <u>Legal Proceedings</u> | <u>39</u> |
| 2. | Unregistered Sales of Equity Securities and Use of Proceeds | <u>39</u> |
| 6. | <u>Exhibits</u> | <u>40</u> |
| | | |

<u>41</u>

Table of Contents

FORWARD-LOOKING INFORMATION

This Quarterly Report on Form 10-Q contains "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are statements that do not relate strictly to historical or current facts. You can identify forward-looking statements by the fact they use words such as "should," "anticipate," "estimate," "approximate," "expect," "may," "will," "project," "intend," "plan," "believe" and other words of similar meaning and expression in connection with any discussion of future operating or financial performance or events. We have also included forward looking statements in this Quarterly Report on Form 10-Q concerning, among other things, our strategy, goals, plans and projections regarding our financial position, liquidity and capital resources, results of operations, market position and product development. These statements are based on current estimates that involve inherent risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should the assumptions underlying the forward-looking statements prove incorrect, our actual results could vary materially from our current expectations. There are a number of factors that could cause our actual results to differ from those indicated in the forward-looking statements. They include: downturns in the business cycle or economic downturns; our ability to achieve all anticipated benefits of our restructuring initiatives; risks related to our foreign operations and international markets, such as fluctuations in currency exchange rates, different regulatory environments, trade barriers, exchange controls, and social and political instability; changes in the regulatory environment in which we operate, including environmental, health and safety regulations; potential for future goodwill and other intangible asset impairment charges; our ability to protect and defend our intellectual property; continuity and security of information technology infrastructure; competition; our ability to retain our management and employees; demands on management resources; availability and cost of the raw materials we use to manufacture our products; product liability claims; integrating acquisitions and achieving the expected savings and synergies; global or regional catastrophic events; demand for and market acceptance of our products; business divestitures; labor relations; and implementation of environmental remediation matters. We provide additional information about many of the specific risks we face in the "Risk Factors" section of our Annual Report on Form 10-K. We can give no assurance that any goal or plan set forth in forward-looking statements can be achieved and readers are cautioned not to place undue reliance on such statements, which speak only as of the date made. Except as required by law, we do not intend to release publicly any revisions to forward-looking statements as a result of future events or developments.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KENNAMETAL INC. CONDENSED CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)

| | Three Months Ended December 31, | | | | 5 | Six Months E | December | |
|---|---------------------------------|---------|----|---------|----|--------------|----------|----------|
| (in thousands, except per share amounts) | | 2017 | | 2016 | | 2017 | | 2016 |
| Sales | \$ | 571,345 | \$ | 487,573 | \$ | 1,113,799 | \$ | 964,713 |
| Cost of goods sold | | 378,800 | | 339,950 | | 736,261 | | 673,560 |
| Gross profit | | 192,545 | | 147,623 | | 377,538 | | 291,153 |
| Operating expense | | 120,649 | | 111,004 | | 239,980 | | 230,869 |
| Restructuring and asset impairment charges (Note 7) | | 45 | | 8,456 | | 5,570 | | 37,061 |
| Amortization of intangibles | | 3,677 | | 4,150 | | 7,338 | | 8,421 |
| Operating income | | 68,174 | | 24,013 | | 124,650 | | 14,802 |
| Interest expense | | 7,231 | | 7,151 | | 14,379 | | 14,144 |
| Other expense, net | | 1,313 | | 726 | | 1,401 | | 844 |
| Income (loss) before income taxes | | 59,630 | | 16,136 | | 108,870 | | (186) |
| Provision for income taxes | | 17,472 | | 8,221 | | 27,074 | | 13,100 |
| Net income (loss) | | 42,158 | | 7,915 | | 81,796 | | (13,286) |
| Less: Net income attributable to noncontrolling interests | | 557 | | 653 | | 1,011 | | 1,108 |
| Net income (loss) attributable to Kennametal | \$ | 41,601 | \$ | 7,262 | \$ | 80,785 | \$ | (14,394) |
| PER SHARE DATA ATTRIBUTABLE TO KENNAMETAL SHAREHOLDERS | | | | | | | | |
| Basic earnings (loss) per share | \$ | 0.51 | \$ | 0.09 | \$ | 0.99 | \$ | (0.18) |
| Diluted earnings (loss) per share | \$ | 0.50 | \$ | 0.09 | \$ | 0.98 | \$ | (0.18) |
| Dividends per share | \$ | 0.20 | \$ | 0.20 | \$ | 0.40 | \$ | 0.40 |
| Basic weighted average shares outstanding | | 81,477 | | 80,206 | | 81,274 | | 80,131 |
| Diluted weighted average shares outstanding | | 82,778 | · | 81,026 | | 82,446 | | 80,131 |

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

KENNAMETAL INC. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

| | Thi | | Ende | d December | Six Months E | December | |
|---|-----|--------|------|------------|--------------|----------|----------|
| (in thousands) | | 2017 | | 2016 | 2017 | | 2016 |
| Net income (loss) | \$ | 42,158 | \$ | 7,915 | \$ 81,796 | \$ | (13,286) |
| Other comprehensive income (loss), net of tax | | | | | | | |
| Unrealized (loss) gain on derivatives designated and qualified as cash flow hedges | | (286) | | 1,606 | (905) | | 1,480 |
| Reclassification of unrealized loss on expired derivatives designated and qualified as cash flow hedges | | 1,007 | | 382 | 1,403 | | 769 |
| Unrecognized net pension and other postretirement benefit (loss) gain | | (625) | | 3,471 | (2,590) | | 4,101 |
| Reclassification of net pension and other postretirement benefit loss | | 1,569 | | 1,796 | 3,348 | | 3,630 |
| Foreign currency translation adjustments | | 13,924 | | (41,428) | 33,793 | | (40,264) |
| Total other comprehensive income (loss), net of tax | | 15,589 | | (34,173) | 35,049 | | (30,284) |
| Total comprehensive income (loss) | | 57,747 | | (26,258) | 116,845 | | (43,570) |
| Less: comprehensive income (loss) attributable to noncontrolling interests | | 1,445 | | (401) | 2,184 | | 469 |
| Comprehensive income (loss) attributable to Kennametal Shareholders | \$ | 56,302 | \$ | (25,857) 5 | \$ 114,661 | \$ | (44,039) |

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

KENNAMETAL INC. CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

| (in thousands, except per share data) | Ε | December 31, 2017 | June 30, 2017 |
|---|----|----------------------|------------------|
| ASSETS | | | |
| Current assets: | | | |
| Cash and cash equivalents | \$ | 159,940 | \$ 190,629 |
| Accounts receivable, less allowance for doubtful accounts of \$13,332 and \$13,693, respectively | | 392,923 | 380,425 |
| Inventories (Note 10) | | 507,462 | 487,681 |
| Other current assets | | 68,057 | 55,166 |
| Total current assets | | 1,128,382 | 1,113,901 |
| Property, plant and equipment: | | | |
| Land and buildings | | 351,190 | 350,002 |
| Machinery and equipment | | 1,660,218 | 1,577,776 |
| Less accumulated depreciation | | (1,231,743) | (1,183,390) |
| Property, plant and equipment, net | | 779,665 | 744,388 |
| Other assets: | | | |
| Assets held for sale (Note 7) | | 7,547 | 6,980 |
| Goodwill (Note 17) | | 306,147 | 301,367 |
| Other intangible assets, less accumulated amortization of \$139,202 and \$129,981, respectively (Note 17) | | 184,523 | 190,527 |
| Deferred income taxes (Note 3) | | 21,667 | 28,349 |
| Other | | 47,930 | 29,984 |
| Total other assets | | 567,814 | 557,207 |
| Total assets | \$ | 2,475,861 | \$ 2,415,496 |
| LIABILITIES | | | |
| Current liabilities: | | | |
| Current maturities of long-term debt and capital leases | \$ | 48 | \$ 190 |
| Notes payable to banks | | 1,312 | 735 |
| Accounts payable | | 190,592 | 215,722 |
| Accrued income taxes | | 17,370 | 6,202 |
| Accrued expenses | | 64,631 | 85,682 |
| Other current liabilities | | 133,668 | 152,947 |
| Total current liabilities | | 407,621 | 461,478 |
| Long-term debt and capital leases, less current maturities (Note 11) | | 695,722 | 694,991 |
| Deferred income taxes | | 15,141 | 14,883 |
| Accrued pension and postretirement benefits | | 164,701 | 160,860 |
| Accrued income taxes | | 2,776 | 2,636 |
| Other liabilities | | 25,952 | 27,995 |
| Total liabilities | | 1,311,913 | 1,362,843 |
| Commitments and contingencies | | | |
| EQUITY (Note 15) | | | |
| Kennametal Shareholders' Equity: | | | |
| Preferred stock, no par value; 5,000 shares authorized; none issued | | _ | _ |
| Capital stock, \$1.25 par value; 120,000 shares authorized; 81,517 and 80,665 shares issued, respectively | | 101,897 | 100,832 |
| Additional paid-in capital | | 500,388 | 474,547 |
| Retained earnings | | 813,936 | 765,607 |
| Accumulated other comprehensive loss | | (289,816) | (323,692) |
| Total Kennametal Shareholders' Equity | | 1,126,405 | 1,017,294 |
| Noncontrolling interests | | 37,543 | 35,359 |
| Total equity | | 1,163,948 | 1,052,653 |
| Total liabilities and equity | \$ | 2,475,861 | \$ 2,415,496 |

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

KENNAMETAL INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOW (UNAUDITED)

| | Six Months I | Ended I | nded December 31, | | |
|---|--------------|---------|-------------------|--|--|
| (in thousands) | 2017 | | 2016 | | |
| OPERATING ACTIVITIES | | | | | |
| Net income (loss) | \$ 81,79 | 6 \$ | (13,286) | | |
| Adjustments for non-cash items: | | | | | |
| Depreciation | 46,06 | 1 | 45,994 | | |
| Amortization | 7,33 | 8 | 8,421 | | |
| Stock-based compensation expense | 11,99 | 5 | 13,275 | | |
| Restructuring and asset impairment charges (Note 7) | 3,17 | 2 | 781 | | |
| Deferred income tax provision | 7,24 | 1 | 1,274 | | |
| Other | 3,47 | 4 | (2,773) | | |
| Changes in certain assets and liabilities: | | | | | |
| Accounts receivable | (3,29 | 0) | 20,423 | | |
| Inventories | (9,08 | 0) | (1,938) | | |
| Accounts payable and accrued liabilities (Note 3) | (66,62 | 0) | (5,497) | | |
| Accrued income taxes | 3,96 | 6 | 1,632 | | |
| Accrued pension and postretirement benefits | (13,82 | 4) | (11,298) | | |
| Other | (5,45 | 5) | (8,309) | | |
| Net cash flow provided by operating activities | 66,77 | 4 | 48,699 | | |
| INVESTING ACTIVITIES | | | | | |
| Purchases of property, plant and equipment | (85,22 | 3) | (70,573) | | |
| Disposals of property, plant and equipment | 84 | 6 | 3,509 | | |
| Other | 24 | 4 | 100 | | |
| Net cash flow used for investing activities | (84,13 | 3) | (66,964) | | |
| FINANCING ACTIVITIES | | | | | |
| Net increase in notes payable | 64 | 3 | 1,005 | | |
| Term debt repayments | (14 | 1) | (427) | | |
| Purchase of capital stock | (10 | 9) | (125) | | |
| Dividend reinvestment and the effect of employee benefit and stock plans (Note 3) | 15,02 | 0 | 1,341 | | |
| Cash dividends paid to Shareholders | (32,45 | 6) | (31,970) | | |
| Other | (27 | 1) | (6,626) | | |
| Net cash flow used for financing activities | (17,31 | 4) | (36,802) | | |
| Effect of exchange rate changes on cash and cash equivalents | 3,98 | 4 | (4,511) | | |
| CASH AND CASH EQUIVALENTS | | | | | |
| Net decrease in cash and cash equivalents | (30,68 | 9) | (59,578) | | |
| Cash and cash equivalents, beginning of period | 190,62 | | 161,579 | | |
| Cash and cash equivalents, end of period | \$ 159,94 | | 102,001 | | |

 $The \ accompanying \ notes \ are \ an \ integral \ part \ of \ these \ condensed \ consolidated \ financial \ statements.$

Table of Contents

KENNAMETAL INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

ORGANIZATION

Kennametal Inc. was incorporated in Pennsylvania in 1943 as a manufacturer of tungsten carbide metal cutting tooling. From this beginning, Kennametal Inc. and its subsidiaries (collectively, Kennametal or the Company) has grown into a global leader in the development and application of tungsten carbides, ceramics, super-hard materials and solutions used in metal cutting and mission-critical wear applications to combat extreme conditions associated with wear fatigue, corrosion and high temperatures. The Company's reputation for material technology, metal cutting application knowledge, as well as expertise and innovation in the development of custom solutions and services, contributes to its leading position in its primary markets.

Our product offering includes a wide selection of standard and customized technologies for metalworking applications, such as turning, milling, hole making, tooling systems and services. End users of the Company's metalworking products include manufacturers engaged in a diverse array of industries including: the manufacturers of transportation vehicles and components, machine tools and light and heavy machinery; airframe and aerospace components; and energy-related components for the oil and gas industry, as well as power generation.

We also produce specialized wear components and metallurgical powders that are used for custom-engineered and challenging applications. End users of the Company's products include producers and suppliers in equipment-intensive operations such as coal mining, road construction, quarrying, oil and gas exploration, refining, production and supply.

2. BASIS OF PRESENTATION

The condensed consolidated financial statements, which include our accounts and those of our majority-owned subsidiaries, should be read in conjunction with our 2017 Annual Report on Form 10-K. The condensed consolidated balance sheet as of June 30, 2017 was derived from the audited balance sheet included in our 2017 Annual Report on Form 10-K. These interim statements are unaudited; however, we believe that all adjustments necessary for a fair statement of the results of the interim periods were made and all adjustments are normal recurring adjustments. The results for the six months ended December 31, 2017 and 2016 are not necessarily indicative of the results to be expected for a full fiscal year. Unless otherwise specified, any reference to a "year" is to a fiscal year ended June 30. For example, a reference to 2018 is to the fiscal year ending June 30, 2018. When used in this Quarterly Report on Form 10-Q, unless the context requires otherwise, the terms "we," "our" and "us" refer to Kennametal Inc. and its subsidiaries.

3. NEW ACCOUNTING STANDARDS

Adopted

In March 2016, the Financial Accounting Standards Board (FASB) issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which is intended to simplify equity-based award accounting and presentation. The guidance impacts income tax accounting related to equity-based awards, the classification of awards as either equity or liabilities, and the classification on the statement of cash flows. We adopted this guidance July 1, 2017. The adoption of this guidance resulted in three changes: (1) the increase to deferred tax assets of \$1.4 million related to cumulative excess tax benefits previously unrecognized was offset by a valuation allowance, due to the valuation allowance position of our U.S. entity at the time of adoption of this standard; (2) excess tax benefits, previously reported in the financing activities section of the condensed consolidated statements of cash flow, is now reported in the operating activities section, adopted on a prospective basis. Therefore, prior period statements of cash flow were not retrospectively adjusted for this provision; and (3) employee taxes paid when Kennametal withholds shares for tax withholding purposes, previously reported in the operating activities section of the condensed consolidated statement of cash flows, is now reported in the financing activities section, adopted on a retrospective basis. Therefore, prior period statements of cash flow were retrospectively adjusted for this provision. Cash flow provided by operating activities and cash flow used for financing activities increased by \$2.1 million for the six months ended December 31, 2016.

In July 2015, the FASB issued ASU No. 2015-11, "Simplifying the Measurement of Inventory," which requires that inventory other than LIFO be subsequently measured at the lower of cost and net realizable value, as opposed to the previous practice of lower of cost or market. Subsequent measurement is unchanged for inventory measured using LIFO. We adopted this guidance July 1, 2017. Adoption of this guidance did not have a material impact on our condensed consolidated financial statements.

Issued

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers: Topic 606." This ASU replaces nearly all existing U.S. GAAP guidance on revenue recognition. The standard prescribes a five-step model for recognizing revenue, the application of which will require significant judgment. It also requires additional disclosures. We will adopt this standard on July 1, 2018. Currently, we are analyzing the standard's impact on our customer arrangements and evaluating the new standard against our historical accounting policies and practices, including the timing of revenue recognition. In particular, we are assessing the identification of performance obligations and the impact of variable consideration on the transaction price determination. Further, we continue to assess certain marketing programs and expect to identify more performance obligations under ASC 606 as compared with deliverables and separate units of account previously identified, primarily in the Industrial and Widia segments. We are evaluating the timing of revenue to determine if it will occur in the same or different periods. We have a project team that is performing a detailed review of the terms and provisions of our customer contracts. We have not yet determined the complete impact of adoption of this standard on our condensed consolidated financial statements.

4. SUPPLEMENTAL CASH FLOW DISCLOSURES

| | Six | cember 31, | | |
|---|------|------------|----|--------|
| (in thousands) | 2017 | | | 2016 |
| Cash paid during the period for: | | | | |
| Income taxes | \$ | 15,866 | \$ | 10,191 |
| Interest | | 13,714 | | 13,480 |
| Supplemental disclosure of non-cash information: | | | | |
| Changes in accounts payable related to purchases of property, plant and equipment | | 11,477 | | 15,404 |

5. FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received on the sale of 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.

As of December 31, 2017, the fair values of the Company's financial assets and financial liabilities are categorized as follows:

| (in thousands) | Level 1 | Level 2 | Level 3 | Total |
|---------------------------------|---------|-------------|------------|-------|
| Assets: | | | | |
| Derivatives (1) | \$ | \$ 212 | \$ — \$ | 212 |
| Total assets at fair value | \$ _ | \$ 212 | \$ — \$ | 212 |
| | | | | |
| Liabilities: | | | | |
| Derivatives (1) | \$ _ | \$ 1,253 | \$ — \$ | 1,253 |
| Total liabilities at fair value | \$ _ | \$ 1,253 | \$ — \$ | 1,253 |

As of June 30, 2017, the fair values of the Company's financial assets and financial liabilities are categorized as follows:

| (in thousands) | Level 1 | Level 2 | Level 3 | Total |
|---------------------------------|---------|-----------|------------|-------|
| Assets: | | | | |
| Derivatives (1) | \$ | \$ 359 | \$ — \$ | 359 |
| Total assets at fair value | \$ _ | \$ 359 | \$ — \$ | 359 |
| | | | | |
| Liabilities: | | | | |
| Derivatives (1) | \$ _ | \$ 910 | \$ — \$ | 910 |
| Total liabilities at fair value | \$ _ | \$ 910 | \$ — \$ | 910 |

⁽¹⁾ Currency derivatives are valued based on observable market spot and forward rates and are classified within Level 2 of the fair value hierarchy.

There have been no changes in classification and transfers between levels in the fair value hierarchy in the current period.

6. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

As part of our financial risk management program, we use certain derivative financial instruments. We do not enter into derivative transactions for speculative purposes and, therefore, hold no derivative instruments for trading purposes. We account for derivative instruments as a hedge of the related asset, liability, firm commitment or anticipated transaction, when the derivative is specifically designated and qualifies as a hedge of such items. Our objective in managing foreign exchange exposures with derivative instruments is to reduce volatility in cash flow. We measure hedge effectiveness by assessing the changes in the fair value or expected future cash flows of the hedged item. The ineffective portions are recorded in other expense, net.

The fair value of derivatives designated and not designated as hedging instruments in the condensed consolidated balance sheet are as follows:

| | December 31, | | | June 30, |
|---|--------------|---------|----|----------|
| (in thousands) | | 2017 | | 2017 |
| Derivatives designated as hedging instruments | | | | |
| Other current assets - range forward contracts | \$ | 25 | \$ | 1 |
| Other current liabilities - range forward contracts | | (1,224) | | (671) |
| Other assets - range forward contracts | | 3 | | _ |
| Other liabilities - range forward contracts | | (6) | | (101) |
| Total derivatives designated as hedging instruments | | (1,202) | | (771) |
| Derivatives not designated as hedging instruments | | | | |
| Other current assets - currency forward contracts | | 184 | | 358 |
| Other current liabilities - currency forward contracts | | (23) | | (138) |
| Total derivatives not designated as hedging instruments | • | 161 | • | 220 |
| Total derivatives | \$ | (1,041) | \$ | (551) |

Certain currency forward contracts that hedge significant cross-border intercompany loans are considered as other derivatives and therefore do not qualify for hedge accounting. These contracts are recorded at fair value in the condensed consolidated balance sheet, with the offset to other expense, net. Gains related to derivatives not designated as hedging instruments have been recognized as follows:

| | Th | ree Months E | d December | S | December | | | |
|---|----|--------------------|------------|------|----------|-------|-----|-------|
| | | 31, | | | | 3 | 81, | |
| (in thousands) | | 2017 | | 2016 | | 2017 | | 2016 |
| Other expense, net - currency forward contracts | \$ | \$ (92) \$ (59) \$ | | | \$ | (208) | \$ | (377) |

KENNAMETAL INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

CASH FLOW HEDGES

Range forward contracts (a transaction where both a put option is purchased and a call option is sold) are designated as cash flow hedges and hedge anticipated cash flows from cross-border intercompany sales of products and services. Gains and losses realized on these contracts are recorded in accumulated other comprehensive loss and are recognized as a component of other expense, net when the underlying sale of products or services is recognized into earnings. The notional amount of the contracts translated into U.S. dollars at December 31, 2017 and June 30, 2017, was \$77.9 million and \$75.3 million, respectively. The time value component of the fair value of range forward contracts is excluded from the assessment of hedge effectiveness. Assuming the market rates remain constant with the rates at December 31, 2017, we expect to recognize into earnings in the next 12 months \$1.6 million of expense on outstanding derivatives.

The following represents gains and losses related to cash flow hedges:

| | Three Months Ended December 31, | | | Six Months Ended Decembe 31, | | | | |
|---|---------------------------------|-----------|----|------------------------------|----|-------|------|-------|
| (in thousands) | | 2017 2016 | | 2017 | | | 2016 | |
| (Losses) gains recognized in other comprehensive loss, net | \$ | (287) | \$ | 1,606 | \$ | (906) | \$ | 1,481 |
| Losses reclassified from accumulated other comprehensive loss into other expense, net | \$ | 870 | \$ | 382 | \$ | 1,262 | \$ | 768 |

No portion of the gains or losses recognized in earnings was due to ineffectiveness and no amounts were excluded from our effectiveness testing for the six months ended December 31, 2017 and 2016.

NET INVESTMENT HEDGES

As of December 31, 2017, we had certain foreign currency-denominated intercompany loans payable with total aggregate principal amounts of €33.0 million as net investment hedges to hedge the foreign exchange exposure of our net investment in Euro-based subsidiaries. Losses of \$0.5 million and \$1.9 million were recorded as a component of foreign currency translation adjustments in other comprehensive income for the three and six months ended December 31, 2017, respectively. We did not have net investment hedges during the three and six months ended December 31, 2016.

As of December 31, 2017, the foreign currency-denominated intercompany loans payable designated as net investment hedges consisted of:

| | N | otional (EUR in | Notional (USD in | |
|--|---|-----------------|---------------------------|-------------------|
| Instrument | | thousands)(2) | thousands) ⁽²⁾ | Maturity |
| Foreign currency-denominated intercompany loan payable | € | 26,929 | \$ 32,279 | June 26, 2022 |
| Foreign currency-denominated intercompany loan payable | | 8,667 | 10,388 | November 20, 2018 |
| Foreign currency-denominated intercompany loan payable | | 2,004 | 2,402 | October 11, 2019 |

⁽²⁾ Includes principal and accrued interest.

7. RESTRUCTURING AND RELATED CHARGES

In prior years, we implemented restructuring actions to streamline the Company's cost structure. The purpose of these initiatives was to improve the alignment of our cost structure with the current operating environment through employment reductions, as well as rationalization and consolidation of certain manufacturing facilities. These restructuring actions were substantially completed in the first quarter of fiscal 2018 and were mainly cash expenditures.

Total restructuring and related charges since inception of \$156.0 million have been recorded for these programs through December 31, 2017: \$84.6 million in Industrial, \$50.3 million in Infrastructure, \$13.8 million in Widia and \$7.3 million in Corporate.

We recorded restructuring and related charges of \$1.5 million and \$11.8 million for the three months ended December 31, 2017 and 2016, respectively. Of these amounts, restructuring charges were less than \$0.1 million for the three months ended December 31, 2017 and totaled \$8.8 million for the three months ended December 31, 2016, of which expense of \$0.3 million was related to inventory and was recorded in cost of good sold. Restructuring-related charges of \$1.3 million and \$2.1 million were recorded in cost of goods sold and \$0.2 million and \$0.9 million in operating expense for the three months ended December 31, 2017 and 2016, respectively.

Table of Contents

KENNAMETAL INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

We recorded restructuring and related charges of \$8.4 million and \$43.4 million for the six months ended December 31, 2017 and 2016, respectively. Of these amounts, restructuring charges totaled \$5.6 million and \$37.3 million, respectively, of which expense of \$0.3 million for the six months ended December 31, 2016 was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of \$2.5 million and \$4.1 million were recorded in cost of goods sold and \$0.3 million and \$2.0 million in operating expense for the six months ended December 31, 2017 and 2016, respectively.

As of December 31, 2017 and June 30, 2017, property, plant, and equipment of \$7.5 million and \$7.0 million, respectively, for certain closed manufacturing locations that are part of our restructuring programs met held for sale criteria. We expect to sell these assets within one year from the balance sheet date. These assets are recorded at the lower of carrying amount or fair value less cost to sell. We have also ceased depreciating these assets.

As of December 31, 2017 and June 30, 2017, \$15.8 million and \$27.3 million of the restructuring accrual is recorded in other current liabilities and \$0.7 million and \$2.5 million is recorded in other liabilities, respectively, in our condensed consolidated balance sheet. The amount attributable to each segment is as follows:

| (in thousands) | June | e 30, 2017 | Expense | As | Asset Write-Down | | Translation | Ca | Cash Expenditures | | cember 31, 2017 |
|----------------------|------|------------|-------------|----|------------------|----|-------------|----|-------------------|----|-----------------|
| Industrial | | | | | | | | | | | |
| Severance | \$ | 17,639 | \$ 1,618 | \$ | _ | \$ | 820 | \$ | (11,214) | \$ | 8,863 |
| Facilities | | _ | 2,356 | | (2,356) | | _ | | _ | | _ |
| Other | | 94 | (29) | | _ | | 2 | | (28) | | 39 |
| Total Industrial | \$ | 17,733 | \$ 3,945 | \$ | (2,356) | \$ | 822 | \$ | (11,242) | \$ | 8,902 |
| | | | | | | | | | | | |
| Widia | | | | | | | | | | | |
| Severance | \$ | 2,434 | \$ 414 | \$ | _ | \$ | 209 | \$ | (2,865) | \$ | 192 |
| Facilities | | _ | 747 | | (747) | | _ | | _ | | _ |
| Other | | _ | (7) | | _ | | 1 | | 7 | | 1 |
| Total Widia | \$ | 2,434 | \$ 1,154 | \$ | (747) | \$ | 210 | \$ | (2,858) | \$ | 193 |
| | | | | | | | | | | | |
| Infrastructure | | | | | | | | | | | |
| Severance | \$ | 9,573 | \$ 409 | \$ | _ | \$ | 207 | \$ | (2,831) | \$ | 7,358 |
| Facilities | | 21 | 69 | | (69) | | _ | | (21) | | _ |
| Other | | 45 | (7) | | _ | | _ | | (21) | | 17 |
| Total Infrastructure | \$ | 9,639 | \$ 471 | \$ | (69) | \$ | 207 | \$ | (2,873) | \$ | 7,375 |
| Total | \$ | 29,806 | \$ 5,570 | \$ | (3,172) | \$ | 1,239 | \$ | (16,973) | \$ | 16,470 |

8. STOCK-BASED COMPENSATION

Stock Options

There were no grants made during the six months ended December 31, 2017 and 2016.

Changes in our stock options for the six months ended December 31, 2017 were as follows:

| | Options | Weighted Average Exercise Price | Weighted Average Remaining Life (years) | Aggregate Intrinsic value (in thousands) |
|---|-----------|---------------------------------------|--|--|
| Options outstanding, June 30, 2017 | 1,726,791 | \$ 34.08 | | |
| Granted | _ | _ | | |
| Exercised | (521,259) | 36.63 | | |
| Lapsed or forfeited | (62,763) | 39.46 | | |
| Options outstanding, December 31, 2017 | 1,142,769 | \$ 32.62 | 5.4 | \$ 18,049 |
| Options vested and expected to vest, December 31, | | | | |
| 2017 | 1,136,169 | \$ 32.64 | 5.4 | \$ 17,916 |
| Options exercisable, December 31, 2017 | 888,358 | \$ 34.36 | 4.7 | \$ 12,485 |

During the six months ended December 31, 2017 and 2016, compensation expense related to stock options was \$0.4 million and \$1.0 million, respectively. As of December 31, 2017, the total unrecognized compensation cost related to options outstanding was \$0.5 million and is expected to be recognized over a weighted average period of 0.8 years.

Fair value of options vested during the six months ended December 31, 2017 and 2016 was \$1.7 million and \$3.1 million, respectively.

Tax benefits relating to excess stock-based compensation deductions are presented in the operating activities section of the condensed consolidated statements of cash flow for the six months ended December 31, 2017. Tax benefits resulting from stock-based compensation deductions were less than the amounts reported for financial reporting purposes by \$0.2 million for the six months ended December 31, 2017, and no tax benefits were realized for the six months ended December 31, 2016 due to the valuation allowance on U.S. deferred tax assets.

The amount of cash received from the exercise of capital stock options during the six months ended December 31, 2017 and 2016 was \$19.1 million and \$3.1 million, respectively. The related tax benefit was \$1.1 million for the six months ended December 31, 2017, and there was no related tax benefit realized for the six months ended December 31, 2016 due to the valuation allowance on U.S. deferred tax assets. The total intrinsic value of options exercised during the six months ended December 31, 2017 was \$4.8 million and was immaterial for the six months ended December 31, 2016.

Under the provisions of the Kennametal Inc. Stock and Incentive Plan of 2010, as amended and restated on October 22, 2013 and as further amended January 27, 2015, and the Kennametal Inc. 2016 Stock and Incentive Plan, plan participants may deliver stock, owned by the holder for at least six months, in payment of the option price and receive credit for the fair market value of the shares on the date of delivery. The fair market value of shares delivered during the six months ended December 31, 2017 and 2016 was immaterial.

Restricted Stock Units - Time Vesting and Performance Vesting

Performance vesting restricted stock units are earned pro rata each year if certain performance goals are met over a three-year period and are also subject to a service condition that requires the individual to be employed by the Company at the vesting date after the three-year performance period has ended, with the exception of retirement eligible grantees, who upon retirement are entitled to vest in any units that have been earned, including a prorated portion for the partially completed fiscal year in which the retirement occurs. Time vesting stock units are valued at the market value of the stock on the grant date. Performance vesting stock units with a market condition are valued using a Monte Carlo model.

Changes in our time vesting and performance vesting restricted stock units for the six months ended December 31, 2017 were as follows:

| | Performance Vesting Stock Units | Performance Vesting Weighted Average Fair Value | Time Vesting Stock Units | Time Vesting Weighted Average Fair Value |
|-------------------------------------|---------------------------------|---|-----------------------------|---|
| Unvested, June 30, 2017 | 280,250 | \$ 27.62 | 1,153,444 | \$ 27.66 |
| Granted | 158,397 | 38.81 | 424,754 | 37.64 |
| Vested | (10,031) | 42.83 | (390,874) | 30.67 |
| Performance metric adjustments, net | 16,766 | 25.84 | _ | _ |
| Forfeited | _ | _ | (20,192) | 31.89 |
| Unvested, December 31, 2017 | 445,382 | \$ 31.19 | 1,167,132 | \$ 30.20 |

During the six months ended December 31, 2017 and 2016, compensation expense related to time vesting and performance vesting restricted stock units was \$11.0 million and \$12.3 million, respectively. As of December 31, 2017, the total unrecognized compensation cost related to unvested time vesting and performance vesting restricted stock units was \$23.2 million and is expected to be recognized over a weighted average period of 2.1 years.

BENEFIT PLANS

We sponsor several defined benefit pension plans. Additionally, we provide varying levels of postretirement health care and life insurance benefits to some U.S. employees.

The table below summarizes the components of net periodic pension income:

| | Th | ree Months I 3 | Endeo | d December | Six Months End | | | December |
|---|----|-------------------|-------|------------|----------------|----------|------|----------|
| (in thousands) | | 2017 | 2016 | 2017 | | | 2016 | |
| Service cost | \$ | 406 | \$ | 727 | \$ | 810 | \$ | 1,460 |
| Interest cost | | 7,678 | | 7,770 | | 15,335 | | 15,579 |
| Expected return on plan assets | | (14,132) | | (14,672) | | (28,221) | | (29,429) |
| Amortization of transition obligation | | 23 | | 22 | | 46 | | 45 |
| Amortization of prior service (credit) cost | | (41) | | (113) | | 132 | | (226) |
| Recognition of actuarial losses | | 1,718 | | 2,088 | | 3,428 | | 4,200 |
| Net periodic pension income | \$ | (4,348) | \$ | (4,178) | \$ | (8,470) | \$ | (8,371) |

The table below summarizes the components of net periodic other postretirement benefit cost:

| | Th | nree Months En | ded | December 31, | Six Months End | ded December 31, | | |
|--|----|----------------|-----|--------------|----------------|------------------|------|--|
| (in thousands) | | 2017 | | 2016 | 2017 | | 2016 | |
| Interest cost | \$ | 157 | \$ | 168 | \$ 314 | \$ | 337 | |
| Amortization of prior service credit | | (6) | | (6) | (11) | | (11) | |
| Recognition of actuarial loss | | 70 | | 89 | 140 | | 177 | |
| Net periodic other postretirement benefit cost | \$ | 221 | \$ | 251 | \$ 443 | \$ | 503 | |

10. INVENTORIES

We used the last-in, first-out (LIFO) method of valuing inventories for 41 percent and 43 percent of total inventories at December 31, 2017 and June 30, 2017, respectively. Since inventory valuations under the LIFO method are based on an annual determination of quantities and costs as of June 30 of each year, the interim LIFO valuations are based on our projections of expected year-end inventory levels and costs. Therefore, the interim financial results are subject to any final year-end LIFO inventory adjustments.

Inventories consisted of the following:

| (in thousands) | Decem | ber 31, 2017 | Jun | e 30, 2017 |
|-----------------------------------|-------|--------------|-----|------------|
| Finished goods | \$ | 283,812 | \$ | 290,817 |
| Work in process and powder blends | | 210,265 | | 166,857 |
| Raw materials | | 86,944 | | 87,627 |
| Inventories at current cost | | 581,021 | | 545,301 |
| Less: LIFO valuation | | (73,559) | | (57,620) |
| Total inventories | \$ | 507,462 | \$ | 487,681 |

11. LONG-TERM DEBT

Our five-year, multi-currency, revolving credit facility, as amended and restated in April 2016 (Credit Agreement), provides for revolving credit loans of up to \$600 million for working capital, capital expenditures and general corporate purposes. The Credit Agreement requires us to comply with various restrictive and affirmative covenants, including two financial covenants: a maximum leverage ratio and a minimum consolidated interest coverage ratio (as those terms are defined in the Credit Agreement). We were in compliance with all such covenants as of December 31, 2017. We had no borrowings outstanding under the Credit Agreement as of December 31, 2017 and June 30, 2017. Borrowings under the Credit Agreement are guaranteed by our significant domestic subsidiaries. The Credit Agreement matures in April 2021.

Fixed rate debt had a fair market value of \$702.1 million and \$704.0 million at December 31, 2017 and June 30, 2017, respectively. The Level 2 fair value is determined based on the quoted market price of this debt as of December 31, 2017 and June 30, 2017, respectively.

12. ENVIRONMENTAL MATTERS

The operation of our business has exposed us to certain liabilities and compliance costs related to environmental matters. We are involved in various environmental cleanup and remediation activities at certain of our locations.

Superfund Sites Among other environmental laws, we are subject to the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), under which we have been designated by the United States Environmental Protection Agency (USEPA) as a Potentially Responsible Party (PRP) with respect to environmental remedial costs at certain Superfund sites. We have evaluated our claims and liabilities associated with these Superfund sites based upon best currently available information. We believe our environmental accruals are adequate to cover our portion of the environmental remedial costs at the Superfund sites where we have been designated a PRP, to the extent these expenses are probable and reasonably estimable.

Other Environmental Matters We establish and maintain reserves for other potential environmental issues. At December 31, 2017 and June 30, 2017, the balances of these reserves were \$12.7 million and \$12.4 million, respectively. These reserves represent anticipated costs associated with the remediation of these issues.

The reserves we have established for environmental liabilities represent our best current estimate of the costs of addressing all identified environmental situations, based on our review of currently available evidence, and taking into consideration our prior experience in remediation and that of other companies, as well as public information released by the USEPA, other governmental agencies and by the PRP groups in which we are participating. Although the reserves currently appear to be sufficient to cover these environmental liabilities, there are uncertainties associated with environmental liabilities, and we can give no assurance that our estimate of any environmental liability will not increase or decrease in the future. The reserved and unreserved liabilities for all environmental concerns could change substantially due to factors such as the nature and extent of contamination, changes in remedial requirements, technological changes, discovery of new information, the financial strength of other PRPs, the identification of new PRPs and the involvement of and direction taken by the government on these matters.

Table of Contents

KENNAMETAL INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

We maintain a Corporate Environmental Health and Safety (EHS) Department to monitor compliance with environmental regulations and to oversee remediation activities. In addition, we have designated EHS analysts who are responsible for each of our global manufacturing facilities. Our financial management team periodically meets with members of the Corporate EHS Department and the Corporate Legal Department to review and evaluate the status of environmental projects and contingencies. On a quarterly basis, we review financial provisions and reserves for environmental contingencies and adjust these reserves when appropriate.

13. INCOME TAXES

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (TCJA) was signed into law in the U.S. TCJA amends the Internal Revenue Code of 1986 to reduce tax rates and modify policies, credits and deductions for individuals and corporations. For corporations, TCJA reduces the federal tax rate from a maximum of 35.0 percent to a flat 21.0 percent rate and transitions from a worldwide tax system to a territorial tax system. TCJA also adds many new provisions including changes to bonus depreciation, the deduction for executive compensation and interest expense, a tax on global intangible low-taxed income (GILTI), the base erosion anti-abuse tax (BEAT) and a deduction for foreign-derived intangible income (FDII). We are assessing the impact of certain provisions, including the tax on GILTI, the BEAT and the deduction for FDII, which do not apply to the Company until fiscal 2019. This assessment includes the evaluation of our accounting election relative to GILTI as either a period cost or an adjustment to deferred tax assets or liabilities of our foreign subsidiaries for the new tax. The two material items that effect the Company for fiscal 2018 are the reduction in the tax rate and a one-time tax that is imposed on our unremitted foreign earnings (toll tax).

On December 22, 2017, the SEC issued Staff Accounting Bulletin 118 (SAB 118) that includes additional guidance allowing companies to use a measurement period, similar to that used in business combinations, to account for the impacts of TCJA in their financial statements. We have accounted for the impacts of TCJA to the extent a reasonable estimate could be made during the three months ended December 31, 2017. We will continue to refine our estimates throughout the measurement period, which will not extend beyond 12 months from the enactment of TCJA, or until the accounting is complete.

The U.S. federal tax rate reduction is effective as of January 1, 2018. As a June 30 fiscal year-end taxpayer, our 2018 fiscal year U.S. federal statutory tax rate is expected to be a blended rate of 28.1 percent. We expect our U.S. federal statutory tax rate to be 21.0 percent in 2019.

As a result of the reduction in the U.S. corporate income tax rate from 35.0 percent to 21.0 percent under TCJA, we recorded a provisional reduction to our net deferred tax assets with a corresponding decrease to the valuation allowance prior to its release on December 31, 2017. The result of this reduction had no impact on our condensed consolidated statement of income for the six months ended December 31, 2017. The revaluation of our deferred tax assets and liabilities are subject to further adjustments during the measurement period due to the complexity of determining our net deferred tax liability as of the enactment date. Some of the information necessary to determine the accounting impacts of the tax rate change includes final calculations related to our 2017 tax return as well as refining the analysis of which existing deferred balances at the enactment date will reverse in 2018 at the 28.1 percent tax rate and which deferred balances will reverse after 2018 at the 21.0 percent tax rate.

We have estimated the toll tax charge to be \$77 million after available foreign tax credits. The toll tax charge consumed our entire U.S. federal net operating loss carryforward and other credit carryforwards, which represent a significant portion of our previously available deferred tax assets, and was offset by the release of the valuation allowance associated with these assets. As a result, we do not expect to make a cash payment associated with the toll charge. The toll tax charge is preliminary, and subject to finalization of collecting all information and analyzing the calculation in reasonable detail to complete the accounting.

During the three months ended December 31, 2017, we released a valuation allowance of \$3.9 million that was previously recorded against our net deferred tax assets in the U.S. A benefit of \$6.8 million would have been recorded in the provision for income taxes; however, because of a current period charge of \$2.9 million due to an out of period adjustment, a \$3.9 million benefit was recorded in the provision for income taxes. The valuation allowance release was driven by utilization of a significant portion of our deferred tax assets to satisfy the toll tax provision in TCJA. Along with expected full-year income in the U.S. in fiscal 2018, we anticipate our domestic deferred taxes to be in a net liability position by June 30, 2018.

Table of Contents

KENNAMETAL INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

We consider substantially all of the unremitted earnings of our non-U.S. subsidiaries that have not previously been taxed in the U.S. to be permanently reinvested. As a result of TCJA, which among other provisions allows for a 100% dividends received deduction from controlled foreign subsidiaries, we will re-evaluate our assertion with respect to permanent reinvestment. As part of this evaluation, we will consider our global working capital and capital investment requirements, among other considerations including the potential tax liabilities that would be incurred if the non-U.S. subsidiaries distribute cash to the U.S. parent. If we determine that an entity should no longer remain subject to the permanent reinvestment assertion, we will accrue additional tax charges, including but not limited to state income taxes, withholding taxes and other relevant foreign taxes in the period the conclusion is determined. In accordance with SAB 118, we expect to complete our evaluation by December 22, 2018.

The effective income tax rates for the three months ended December 31, 2017 and 2016 were 29.3 percent and 50.9 percent, respectively. The effective income tax rate for the six months ended December 31, 2017 was 24.9 percent, and the effective income tax rate for the six months ended December 31, 2016 was not meaningful as the prior year loss before income taxes was negligible. The change in both periods was primarily driven by prior year U.S. losses not being tax-effected and current year U.S. income being subject to tax. This is the result of the valuation allowance, originally recorded in the fourth quarter of fiscal 2016, being released in the current quarter.

During the three months ended December 31, 2017, we identified an error related to the tax rate that had historically been used to calculate the deferred tax charge on intra-entity product transfers. This resulted in an overstatement of deferred tax assets of \$8.2 million as of June 30, 2017. During the current quarter, \$2.9 million of this amount was corrected in connection with the release of the U.S. valuation allowance. Therefore, the out of period adjustment recorded resulted in a further increase of \$5.3 million to the provision for income taxes for the three and six months ended December 31, 2017. The remaining balance related to this item has been reclassified and included in other current assets as of December 31, 2017. The impact to the effective tax rate was 8.9 percent and 4.9 percent for the three and six months ended December 31, 2017, respectively. After evaluation, we determined that the impact of the adjustment was not material to the previously issued financial statements, nor are the out of period adjustments material to the estimated results of this fiscal year.

14. EARNINGS PER SHARE

Basic earnings per share is computed using the weighted average number of shares outstanding during the period, while diluted earnings per share is calculated to reflect the potential dilution that would occur related to the issuance of capital stock under stock option grants, performance awards and restricted stock units. The difference between basic and diluted earnings per share relates solely to the effect of capital stock options, performance awards and restricted stock units.

For purposes of determining the number of diluted shares outstanding, weighted average shares outstanding for basic earnings per share calculations were increased due solely to the dilutive effect of unexercised capital stock options, unvested performance awards and unvested restricted stock units by 1.3 million shares and 0.8 million shares for the three months ended December 31, 2017 and 2016, respectively, and 1.2 million shares for the six months ended December 31, 2017. Unexercised capital stock options, performance awards and restricted stock units of 0.2 million shares and 1.7 million shares for the three months ended December 31, 2017 and 2016, respectively, and 0.5 million shares for the six months ended December 31, 2017, were not included in the computation of diluted earnings per share because the option exercise price was greater than the average market price, and therefore the inclusion would have been anti-dilutive. For the six months ended December 31, 2016, the effect of unexercised capital stock options, unvested performance awards and unvested restricted stock units was anti-dilutive as a result of a net loss in the period and therefore has been excluded from diluted shares outstanding as well as from the diluted earnings per share calculation.

15. EQUITY

A summary of the changes in the carrying amounts of total equity, Kennametal Shareholders' equity and equity attributable to noncontrolling interests as of December 31, 2017 and 2016 is as follows:

| | | Kennametal S | Shar | eholders' Equity | | | | |
|--|------------------|----------------------------------|------|----------------------|------------------------------|----------------------------------|----|--------------|
| (in thousands) | Capital stock | Additional paid-in capital | | Retained earnings | other prehensive loss | Non- controlling interests | - | Total equity |
| Balance as of June 30, 2017 | \$ 100,832 | \$ 474,547 | \$ | 765,607 | \$ (323,692) | \$ 35,359 | \$ | 1,052,653 |
| Net income | _ | _ | | 80,785 | _ | 1,011 | | 81,796 |
| Other comprehensive income | _ | _ | | _ | 33,876 | 1,173 | | 35,049 |
| Dividend reinvestment | 3 | 106 | | _ | _ | _ | | 109 |
| Capital stock issued under employee benefit and stock plans ⁽³⁾ | 1,065 | 25,841 | | _ | _ | _ | | 26,906 |
| Purchase of capital stock | (3) | (106) | | _ | _ | _ | | (109) |
| Cash dividends paid | _ | _ | | (32,456) | _ | _ | | (32,456) |
| Balance as of December 31, 2017 | \$ 101,897 | \$ 500,388 | \$ | 813,936 | \$ (289,816) | \$ 37,543 | \$ | 1,163,948 |

| | | Kennametal S | Share | eholders' Equity | | | | |
|--|------------------|----------------------------------|-------|----------------------|---|---------------------------------|----|--------------|
| (in thousands) | Capital stock | Additional paid-in capital | | Retained earnings | Accumulated other comprehensive loss | Non- ontrolling interests | , | Total equity |
| Balance as of June 30, 2016 | \$ 99,618 | \$ 436,617 | \$ | 780,597 | \$ (352,509) | \$ 31,478 | \$ | 995,801 |
| Net (loss) income | _ | _ | | (14,394) | _ | 1,108 | | (13,286) |
| Other comprehensive income | _ | _ | | _ | (29,645) | (639) | | (30,284) |
| Dividend reinvestment | 5 | 122 | | _ | _ | _ | | 127 |
| Capital stock issued under employee benefit and stock plans ⁽³⁾ | 464 | 14,028 | | _ | _ | _ | | 14,492 |
| Purchase of capital stock | (5) | (122) | | _ | _ | _ | | (127) |
| Cash dividends paid | _ | _ | | (31,970) | _ | (72) | | (32,042) |
| Balance as of December 31, 2016 | \$ 100,082 | \$ 450,645 | \$ | 734,233 | \$ (382,154) | \$ 31,875 | \$ | 934,681 |

⁽³⁾ Net of restricted stock units delivered upon vesting to satisfy tax withholding requirements.

The amounts of comprehensive loss attributable to Kennametal Shareholders and noncontrolling interests are disclosed in the condensed consolidated statements of comprehensive income.

16. ACCUMULATED OTHER COMPREHENSIVE LOSS

Total accumulated other comprehensive loss (AOCL) consists of net income (loss) and other changes in equity from transactions and other events from sources other than shareholders. It includes postretirement benefit plan adjustments, currency translation adjustments and unrealized gains and losses from derivative instruments designated as cash flow hedges.

The components of, and changes in, AOCL were as follows, net of tax, for the six months ended December 31, 2017 (in thousands):

| Attributable to Kennametal: | Postr | etirement benefit plans | Currency translation adjustment | Derivatives | Total |
|--|-------|----------------------------|---------------------------------|-------------|-----------|
| Balance, June 30, 2017 | \$ | (189,038) \$ | (126,606) \$ | (8,048) \$ | (323,692) |
| Other comprehensive income before reclassifications | | (2,590) | 32,620 | (905) | 29,125 |
| Amounts reclassified from AOCL | | 3,348 | _ | 1,403 | 4,751 |
| Net current period other comprehensive income | | 758 | 32,620 | 498 | 33,876 |
| AOCL, December 31, 2017 | \$ | (188,280) \$ | (93,986) \$ | (7,550) \$ | (289,816) |
| Attributable to noncontrolling interests: Balance, June 30, 2017 | \$ | — \$ | (2,164) \$ | — \$ | (2,164) |
| Other comprehensive income before reclassifications | ¥ | _ | 1,173 | _ | 1,173 |
| Net current period other comprehensive income | | _ | 1,173 | _ | 1,173 |
| AOCL, December 31, 2017 | \$ | — \$ | (991) \$ | — \$ | (991) |

The components of, and changes in, AOCL were as follows, net of tax, for the six months ended December 31, 2016 (in thousands):

| Attributable to Kennametal: | Postre | etirement benefit plans | Currency translation adjustment | Derivatives | Total |
|--|--------|----------------------------|---------------------------------|-------------|-----------|
| Balance, June 30, 2016 | \$ | (212,163) \$ | (131,212) \$ | (9,134) \$ | (352,509) |
| Other comprehensive income before reclassifications | | 4,101 | (39,625) | 1,480 | (34,044) |
| Amounts reclassified from AOCL | | 3,630 | _ | 769 | 4,399 |
| Net current period other comprehensive income | | 7,731 | (39,625) | 2,249 | (29,645) |
| AOCL, December 31, 2016 | \$ | (204,432) \$ | (170,837) \$ | (6,885) \$ | (382,154) |
| Attributable to noncontrolling interests: Balance, June 30, 2016 | \$ | - \$ | (3,446) \$ | — \$ | (3,446) |
| Other comprehensive income before reclassifications | | _ | (639) | _ | (639) |
| Net current period other comprehensive income | | _ | (639) | _ | (639) |
| AOCL, December 31, 2016 | \$ | — \$ | (4,085) \$ | — \$ | (4,085) |

Reclassifications out of AOCL for the three and six months ended December 31, 2017 and 2016 consisted of the following (in thousands):

Three Months Ended December Six Months Ended December 31. 31.

| | J | τ, | | _ | ΄-, | | |
|---|-------------|----|----------|-------|-----|-------|--|
| Details about AOCL components | 2017 | | 2016 | 2017 | | 2016 | Affected line item in the Income Statement |
| Gains and losses on cash flow hedges: | | | | | | | |
| Forward starting interest rate swaps | \$ 566 | \$ | 545 \$ | 1,132 | \$ | 1,090 | Interest expense |
| Currency exchange contracts | 768 | | (163) | 726 | | (321) | Other expense, net |
| Total before tax | 1,334 | | 382 | 1,858 | | 769 | |
| Tax impact | (327) | | _ | (455) | | _ | Provision for income taxes |
| Net of tax | \$ 1,007 | \$ | 382 \$ | 1,403 | \$ | 769 | |
| | | | | | | | |
| Postretirement benefit plans: | | | | | | | |
| Amortization of transition obligations | \$ 23 | \$ | 22 \$ | 46 | \$ | 45 | See note 9 for further details |
| Amortization of prior service (credit) cost | (47) | | (119) | 121 | | (237) | See note 9 for further details |
| Recognition of actuarial losses | 1,788 | | 2,177 | 3,568 | | 4,377 | See note 9 for further details |
| Total before tax | 1,764 | | 2,080 | 3,735 | | 4,185 | |
| Tax impact | (195) | | (284) | (387) | | (555) | Provision for income taxes |
| Net of tax | \$ 1,569 | \$ | 1,796 \$ | 3,348 | \$ | 3,630 | |

The amount of income tax allocated to each component of other comprehensive income (loss) for the three months ended December 31, 2017 and 2016:

| | | | 20 | 17 | | | 2016 | | | | | |
|---|----|---------|--------|-------|----|------------|------|----------|--------|-------|-------------|--|
| (in thousands) | | Pre-tax | Tax in | npact | ľ | Net of tax | | Pre-tax | Tax im | pact | Net of tax | |
| Unrealized (loss) gain on derivatives designated and qualified as cash flow hedges | \$ | (379) | \$ | 93 | \$ | (286) | \$ | 1,606 | \$ | _ : | \$ 1,606 | |
| Reclassification of unrealized loss on expired derivatives designated and qualified as cash flow hedges | l | 1,334 | | (327) | | 1,007 | | 382 | | _ | 382 | |
| Unrecognized net pension and other postretirement benefit (loss) gain | | (834) | | 209 | | (625) | | 4,639 | (1, | .168) | 3,471 | |
| Reclassification of net pension and other postretirement benefit loss | | 1,764 | | (195) | | 1,569 | | 2,080 | (| (284) | 1,796 | |
| Foreign currency translation adjustments | | 13,996 | | (72) | | 13,924 | | (41,428) | | _ | (41,428) | |
| Other comprehensive income (loss) | \$ | 15,881 | \$ | (292) | \$ | 15,589 | \$ | (32,721) | \$ (1, | 452) | \$ (34,173) | |

The amount of income tax allocated to each component of other comprehensive income (loss) for the six months ended December 31, 2017 and 2016:

| | | | 20 | 017 | | | 2016 | | | | | |
|---|----|---------|-------|--------|----|------------|------|----------|-----------|------------|------------|--|
| (in thousands) | | Pre-tax | Tax i | impact | N | Net of tax | | Pre-tax | Tax impac | : N | let of tax | |
| Unrealized (loss) gain on derivatives designated and qualified as cash flow hedges | \$ | (1,199) | \$ | 294 | \$ | (905) | \$ | 1,480 | \$ _ | - \$ | 1,480 | |
| Reclassification of unrealized loss on expired derivatives designated and qualified as cash flow hedges | l | 1,858 | | (455) | | 1,403 | | 769 | _ | - | 769 | |
| Unrecognized net pension and other postretirement benefit (loss) gain | | (3,434) | | 844 | | (2,590) | | 5,401 | (1,300 |)) | 4,101 | |
| Reclassification of net pension and other postretirement benefit loss | | 3,735 | | (387) | | 3,348 | | 4,185 | (555 | 5) | 3,630 | |
| Foreign currency translation adjustments | | 34,058 | | (265) | | 33,793 | | (40,264) | _ | | (40,264) | |
| Other comprehensive income (loss) | \$ | 35,018 | \$ | 31 | \$ | 35,049 | \$ | (28,429) | \$ (1,855 | 5) \$ | (30,284) | |

17. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill represents the excess of cost over the fair value of the net assets of acquired companies. Goodwill and other intangible assets with indefinite lives are tested at least annually for impairment. We perform our annual impairment tests during the June quarter in connection with our annual planning process, unless there are impairment indicators based on the results of an ongoing cumulative qualitative assessment that warrant a test prior to that. We evaluate the recoverability of goodwill for each of our reporting units by comparing the fair value of each reporting unit with its carrying value. The fair values of our reporting units are determined using a combination of a discounted cash flow analysis and market multiples based upon historical and projected financial information. We apply our best judgment when assessing the reasonableness of the financial projections used to determine the fair value of each reporting unit. We evaluate the recoverability of indefinite-lived intangible assets using a discounted cash flow analysis based on projected financial information. This evaluation is sensitive to changes in market interest rates and other external factors.

Identifiable assets with finite lives are reviewed for impairment when events or circumstances indicate that the carrying value may not be recoverable.

A summary of the carrying amount of goodwill attributable to each segment, as well as the changes in such, is as follows:

| (in thousands) | Industrial | Widia | Iı | nfrastructure | Total |
|--|---------------|--------------|----|---------------|-----------------|
| Gross goodwill | \$ 410,694 | \$ 41,515 | \$ | 633,211 | \$ 1,085,420 |
| Accumulated impairment losses | (137,204) | (13,638) | | (633,211) | (784,053) |
| Balance as of June 30, 2017 | \$ 273,490 | \$ 27,877 | \$ | _ | \$ 301,367 |
| | | | | | |
| Activity for the six months ended December 31, 2017: | | | | | |
| Change in gross goodwill due to translation | 4,382 | 398 | | _ | 4,780 |
| | | | | | |
| Gross goodwill | 415,076 | 41,913 | | 633,211 | 1,090,200 |
| Accumulated impairment losses | (137,204) | (13,638) | | (633,211) | (784,053) |
| Balance as of December 31, 2017 | \$ 277,872 | \$ 28,275 | \$ | _ | \$ 306,147 |

The components of our other intangible assets were as follows:

| | Estimated | December 31, 2017 | | | | June 30 |), 20 | , 2017 | | | | | | | | | | | | |
|----------------------------|---------------------------|--------------------------|-----------------------------|-----------|----|---------|-------|-----------|--|--|-----|--|--|--|-----|--|--|--------------------------|--|-----------------------------|
| (in thousands) | Useful Life (in years) | Gross Carrying Amount | Accumulated Amortization | | | | | | | | , , | | | | , , | | | Gross Carrying Amount | | Accumulated Amortization |
| Contract-based | 3 to 15 | \$ 7,070 | \$ | (7,033) | \$ | 7,064 | \$ | (7,014) | | | | | | | | | | | | |
| Technology-based and other | 4 to 20 | 47,032 | | (30,497) | | 46,461 | | (29,061) | | | | | | | | | | | | |
| Customer-related | 10 to 21 | 207,102 | | (80,872) | | 205,502 | | (74,669) | | | | | | | | | | | | |
| Unpatented technology | 10 to 30 | 31,924 | | (11,888) | | 31,754 | | (10,589) | | | | | | | | | | | | |
| Trademarks | 5 to 20 | 12,530 | | (8,912) | | 12,401 | | (8,648) | | | | | | | | | | | | |
| Trademarks | Indefinite | 18,067 | | _ | | 17,326 | | _ | | | | | | | | | | | | |
| Total | | \$ 323,725 | \$ | (139,202) | \$ | 320,508 | \$ | (129,981) | | | | | | | | | | | | |

During the six months ended December 31, 2017 and 2016, we recorded amortization expense of \$7.3 million and \$8.4 million, respectively, related to our other intangible assets.

18. SEGMENT DATA

Kennametal delivers productivity to customers seeking peak performance in demanding environments by providing innovative custom and standard wear-resistant solutions. To provide these solutions, we harness our knowledge of advanced materials and application development with a commitment to environmental sustainability. Our product offering includes a wide selection of standard and customized technologies for metalworking, such as sophisticated metal cutting tools, tooling systems and services, as well as advanced, high-performance materials, such as cemented tungsten carbide products, super alloys, coatings and investment castings to address customer demands. We offer these products through a variety of channels to meet customer-specified needs.

Our reportable operating segments have been determined in accordance with our internal management structure, which is organized based on operating activities, the manner in which we organize segments for making operating decisions and assessing performance and the availability of separate financial results. We do not allocate certain corporate expenses related to executive retirement plans, our Board of Directors and strategic initiatives, as well as certain other costs and report them in Corporate. None of our three reportable operating segments represent the aggregation of two or more operating segments.

The Industrial segment generally serves customers that operate in industrial end markets such as transportation, general engineering, aerospace and defense market sectors, as well as the machine tool industry, delivering high performance metalworking tools for specified purposes. Our customers in these end markets use our products and services in the manufacture of engines, airframes, automobiles, trucks, ships and other various types of industrial equipment. The technology and customization requirements we provide vary by customer, application and industry. Industrial goes to market under the Kennametal® brand through its direct sales force, a network of independent and national chain distributors, integrated supplier channels and via the Internet. Application engineers and technicians are critical to the sales process and directly assist our customers with specified product design, selection, application and support.

The Widia segment offers a focused assortment of standard custom metal cutting solutions to general engineering, aerospace, energy and transportation customers. We serve our customers primarily through a network of value added resellers, integrated supplier channels and via the Internet. Widia markets its products under the WIDIA®, WIDIA Hanita® and WIDIA GTD® brands.

The Infrastructure segment generally serves customers that operate in the energy and earthworks market sectors that support primary industries such as oil and gas, power generation and chemicals; underground, surface and hard-rock mining; highway construction and road maintenance; and process industries such as food and feed. Our success is determined by our ability to gain an in-depth understanding of our customers' engineering and development needs, to provide complete system solutions and high-performance capabilities to optimize and add value to their operations. Infrastructure markets its products primarily under the Kennametal® brand and sells through a direct sales force as well as distributors.

Our sales and operating income (loss) by segment are as follows:

| | Three Months Ended December 31, | | | | | Six Months E | December | |
|--|---------------------------------|---------|----|---------|----|--------------|----------|---------|
| (in thousands) | 2017 2016 | | | 2016 | | 2017 | 2016 | |
| Sales: | | | | | | | | |
| Industrial | \$ | 312,448 | \$ | 267,492 | \$ | 609,912 | \$ | 536,536 |
| Widia | | 47,744 | | 42,874 | | 92,987 | | 83,888 |
| Infrastructure | | 211,153 | | 177,207 | | 410,900 | | 344,289 |
| Total sales | \$ | 571,345 | \$ | 487,573 | \$ | 1,113,799 | \$ | 964,713 |
| Operating income (loss): | | | | | | | | |
| Industrial | \$ | 43,292 | \$ | 18,067 | \$ | 78,104 | \$ | 23,603 |
| Widia | | 856 | | (2,666) | | 918 | | (8,403) |
| Infrastructure | | 25,511 | | 10,274 | | 47,580 | | 2,687 |
| Corporate | | (1,485) | | (1,662) | | (1,952) | | (3,085) |
| Total operating income | | 68,174 | | 24,013 | | 124,650 | | 14,802 |
| Interest expense | | 7,231 | | 7,151 | | 14,379 | | 14,144 |
| Other expense, net | | 1,313 | | 726 | | 1,401 | | 844 |
| Income (loss) from continuing operations before income taxes | \$ | 59,630 | \$ | 16,136 | \$ | 108,870 | \$ | (186) |

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (MD&A)

OVERVIEW

Kennametal Inc. was incorporated in Pennsylvania in 1943 as a manufacturer of tungsten carbide metal cutting tooling. From this beginning, the Company has grown into a global leader in the development and application of tungsten carbides, ceramics, super-hard materials and solutions used in metal cutting and mission-critical wear applications to combat extreme conditions associated with wear fatigue, corrosion and high temperatures. The Company's reputation for material technology, metal cutting application knowledge, as well as expertise and innovation in the development of custom solutions and services, contributes to its leading position in its primary markets.

Our product offering includes a wide selection of standard and customized technologies for metalworking applications, such as turning, milling, hole making, tooling systems and services. End users of the Company's metalworking products include manufacturers engaged in a diverse array of industries including: the manufacturers of transportation vehicles and components, machine tools and light and heavy machinery; airframe and aerospace components; and energy-related components for the oil and gas industry, as well as power generation.

We also produce specialized wear components and metallurgical powders that are used for custom-engineered and challenging applications. End users of the Company's products include producers and suppliers in equipment-intensive operations such as coal mining, road construction, quarrying, oil and gas exploration, refining, production and supply.

For the second quarter of fiscal year 2018 Kennametal has reported another strong operating quarter. The markets are continuing to show strength, and our growth initiatives are taking hold. On a consolidated basis, sales increased 17.2 percent, reflecting sales growth in all segments, regions and end markets. By working on our simplification initiatives, we have put the foundation in place for our modernization program to generate further margin improvement. Operating margin improved significantly to 11.9 percent from 4.9 percent in the prior year quarter reflecting improvement in both gross margin and operating expense as a percentage of sales.

Our sales of \$571.3 million for the quarter ended December 31, 2017 increased 17.2 percent compared to sales for the quarter ended December 31, 2016, driven by organic sales growth of 15 percent and favorable currency exchange impact of 3 percent, partially offset by fewer business days impact of 1 percent compared to the prior year quarter. Every segment and every region reported increased sales and improved profitability. The Industrial, Infrastructure and Widia segments posted operating margins of 13.9 percent, 12.1 percent and 1.8 percent, respectively.

Operating income was \$68.2 million, compared to a \$24.0 million in the prior year quarter. Year-over-year comparative operating results reflect organic sales growth, incremental restructuring benefits of approximately \$17 million, \$10.3 million less restructuring and related charges in the current period, higher productivity and fixed cost absorption and favorable mix, partially offset by higher compensation expense and more overtime costs.

While end market demand has trended higher than previously anticipated, our effective tax rate for the full fiscal year is likely to be higher than previously anticipated. This increase in taxes is due primarily to the ongoing effects of no longer having a valuation allowance on U.S. deferred tax assets. The release of the valuation allowance was triggered by the application of the toll tax provision in the Tax Cuts and Jobs Act of 2017 (TCJA). Along with expected full-year income in the U.S. in fiscal 2018, we anticipate our domestic deferred taxes to be in a net liability position by June 30, 2018. In addition to the discrete items discussed below, current period earnings per share included additional tax expense of approximately \$0.08 per share resulting from U.S. income now being subject to taxes as a result of the release of the valuation allowance. As a result of TCJA, we anticipate the long-term, beyond fiscal 2018, tax rate will decrease from mid-20s to low-20s.

We reported current quarter earnings per diluted share of \$0.50, which include a charge of \$0.07 per share from the impact of recording an out of period charge to provision for income taxes and a one-time benefit of \$0.05 per share from releasing the U.S. deferred tax valuation allowance. The earnings per diluted share of \$0.09 in the prior year quarter included \$0.13 per share of restructuring and related charges and \$0.02 per share associated with recording a valuation allowance related to deferred tax assets in Australia.

We substantially completed our existing restructuring programs in the previous quarter. Pre-tax benefits from these restructuring actions were approximately \$41 million in the current quarter, of which approximately \$17 million were incremental to the prior year quarter. Please see the Results of Continuing Operations section of Item 2 for further discussion and analysis of our restructuring programs.

The cost savings we achieved through our existing restructuring programs do not include the anticipated benefits from our modernization initiative. The results of those programs are anticipated to accrue to the Company over the next few years.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

We had a net cash inflow from operating activities of \$66.8 million during the six months ended December 31, 2017 compared to \$48.7 million during the prior year quarter. The increase is due primarily to higher cash from operations before changes in certain other assets and liabilities and lower restructuring payments, partially offset by higher working capital. Capital expenditures were \$85.2 million and \$70.6 million during the six months ended December 31, 2017 and 2016, respectively.

We invested further in technology and innovation to continue delivering high quality products to our customers. Research and development expenses included in operating expense totaled \$9.5 million for the three months ended December 31, 2017.

Throughout the MD&A, we refer to measures used by management to evaluate performance. We also refer to a number of financial measures that are not defined under accounting principles generally accepted in the United States of America (U.S. GAAP), including organic sales growth, constant currency regional sales growth and constant currency end market sales growth. The explanation at the end of the MD&A provides the definition of these non-GAAP financial measures as well as details on the use and the derivation of these financial measures.

RESULTS OF CONTINUING OPERATIONS

SALES

Sales for the three months ended December 31, 2017 were \$571.3 million, an increase of \$83.8 million or 17.2 percent, from \$487.6 million in the prior year quarter. The increase in sales was driven by a 15 percent organic sales growth and a 3 percent favorable currency exchange impact, partially offset by a 1 percent decrease due to fewer business days. Constant currency end market sales growth was approximately 23 percent in energy, 14 percent in transportation, 12 percent in general engineering, 11 percent in earthworks and 9 percent in aerospace and defense. Constant currency regional sales growth was approximately 19 percent in Asia Pacific, 15 percent in the Americas and 9 percent in Europe, the Middle East and Africa (EMEA).

Sales for the six months ended December 31, 2017 were \$1,113.8 million, an increase of \$149.1 million or 15.5 percent, from \$964.7 million in the prior year period. The increase in sales was driven by a 14 percent organic sales growth and a 2 percent favorable currency exchange impact, partially offset by a 1 percent decrease due to fewer business days. Constant currency end market sales growth was approximately 24 percent in energy, 12 percent in earthworks, 10 percent in general engineering, 11 percent in transportation and 8 percent in aerospace and defense. Constant currency regional sales growth was approximately 17 percent in Asia Pacific, 14 percent in the Americas and 9 percent in EMEA.

GROSS PROFIT

Gross profit for the three months ended December 31, 2017 was \$192.5 million, an increase of \$44.9 million from \$147.6 million in the prior year quarter. The increase was primarily due to organic sales growth, incremental restructuring benefits of approximately \$13 million, favorable foreign currency exchange impact of \$5.3 million, higher productivity and fixed cost absorption, favorable mix and \$1.2 million less restructuring-related charges, partially offset by higher compensation expense and more overtime costs. The gross profit margin for the three months ended December 31, 2017 was 33.7 percent, as compared to 30.3 percent in the prior year quarter.

Gross profit for the six months ended December 31, 2017 was \$377.5 million, an increase of \$86.4 million from \$291.2 million in the prior year period. The increase was primarily due to organic sales growth, incremental restructuring benefits of approximately \$28 million, favorable mix, favorable foreign currency exchange impact of \$8.3 million and \$1.9 million less restructuring-related charges, partially offset by higher compensation expense, overtime costs and raw material costs. The gross profit margin for the six months ended December 31, 2017 was 33.9 percent, as compared to 30.2 percent in the prior year period.

OPERATING EXPENSE

Operating expense for the three months ended December 31, 2017 increased to \$120.6 million compared to \$111.0 million for the three months ended December 31, 2016. The increase was primarily due to higher compensation expense and an unfavorable foreign currency exchange impact of \$2.9 million, partially offset by incremental restructuring benefits of approximately \$5 million and \$0.7 million less in restructuring-related charges.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

Operating expense for the six months ended December 31, 2017 increased to \$240.0 million compared to \$230.9 million for the six months ended December 31, 2016. The increase was primarily due to higher compensation expense and an unfavorable foreign currency exchange impact of \$4.5 million, partially offset by incremental restructuring benefits of approximately \$12 million and \$1.6 million less in restructuring-related charges.

RESTRUCTURING AND RELATED CHARGES AND ASSET IMPAIRMENT CHARGES

In prior years, we implemented restructuring actions to streamline the Company's cost structure. The purpose of these initiatives was to improve the alignment of our cost structure with the current operating environment through employment reductions, as well as rationalization and consolidation of certain manufacturing facilities. These restructuring actions were substantially completed in the first quarter of fiscal 2018, were mostly cash expenditures and achieved annual run rate ongoing pre-tax savings of approximately \$165 million.

We recorded restructuring and related charges of \$1.5 million and \$11.8 million for the three months ended December 31, 2017 and 2016, respectively. Of these amounts, restructuring charges were less than \$0.1 million for the three months ended December 31, 2017 and totaled \$8.8 million for the three months ended December 31, 2016, of which expense of \$0.3 million was related to inventory and was recorded in cost of good sold. Restructuring-related charges of \$1.3 million and \$2.1 million were recorded in cost of goods sold and \$0.2 million and \$0.9 million in operating expense for the three months ended December 31, 2017 and 2016, respectively.

We recorded restructuring and related charges of \$8.4 million and \$43.4 million for the six months ended December 31, 2017 and 2016, respectively. Of these amounts, restructuring charges totaled \$5.6 million and \$37.3 million, respectively, of which expense of \$0.3 million for the six months ended December 31, 2016 was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of \$2.5 million and \$4.1 million were recorded in cost of goods sold and \$0.3 million and \$2.0 million in operating expense for the six months ended December 31, 2017 and 2016, respectively.

Total restructuring and related charges since the inception of our restructuring plans through December 31, 2017 were \$156.0 million. See Note 7 in our condensed consolidated financial statements set forth in Part I Item 1 of this Quarterly Report on Form 10-Q (Note 7).

INTEREST EXPENSE

Interest expense for the three months ended December 31, 2017 and 2016 was \$7.2 million. Interest expense for the six months ended December 31, 2017 and 2016 was \$14.4 million and \$14.1 million, respectively.

OTHER EXPENSE, NET

Other expense for the three months ended December 31, 2017 increased to \$1.3 million compared to \$0.7 million for the three months ended December 31, 2016 primarily due to prior year income from transition services provided related to a prior divestiture.

Other expense for the six months ended December 31, 2017 increased to \$1.4 million compared to \$0.8 million for the six months ended December 31, 2016 primarily due to prior year income from transition services provided related to a prior divestiture, partially offset by foreign currency transaction gains in the current period.

INCOME TAXES

The effective income tax rates for the three months ended December 31, 2017 and 2016 were 29.3 percent and 50.9 percent, respectively. The effective income tax rate for the six months ended December 31, 2017 was 24.9 percent, and the effective income tax rate for the six months ended December 31, 2016 was not meaningful as the prior year loss before income taxes was negligible. The change in both periods was primarily driven by prior year U.S. losses not being tax-effected and current year U.S. income being subject to tax. This is the result of the valuation allowance, originally recorded in the fourth quarter of fiscal 2016, being released in the current quarter.

BUSINESS SEGMENT REVIEW

We operate three reportable segments consisting of Industrial, Widia and Infrastructure. Expenses that are not allocated are reported in Corporate. Segment determination is based upon the manner in which we organize segments for making operating decisions and assessing performance and the availability of separate financial results.

Our sales and operating income (loss) by segment are as follows:

| | Three Months Ended December 31, | | | | | Six Months E | December | |
|--|---------------------------------|---------|----|---------|------|--------------|----------|---------|
| (in thousands) | 2017 2016 | | | | 2017 | | 2016 | |
| Sales: | | | | | | | | |
| Industrial | \$ | 312,448 | \$ | 267,492 | \$ | 609,912 | \$ | 536,536 |
| Widia | | 47,744 | | 42,874 | | 92,987 | | 83,888 |
| Infrastructure | | 211,153 | | 177,207 | | 410,900 | | 344,289 |
| Total sales | \$ | 571,345 | \$ | 487,573 | \$ | 1,113,799 | \$ | 964,713 |
| Operating income (loss): | | | | | | | | |
| Industrial | \$ | 43,292 | \$ | 18,067 | \$ | 78,104 | \$ | 23,603 |
| Widia | | 856 | | (2,666) | | 918 | | (8,403) |
| Infrastructure | | 25,511 | | 10,274 | | 47,580 | | 2,687 |
| Corporate | | (1,485) | | (1,662) | | (1,952) | | (3,085) |
| Total operating income | | 68,174 | | 24,013 | | 124,650 | | 14,802 |
| Interest expense | | 7,231 | | 7,151 | | 14,379 | | 14,144 |
| Other expense, net | | 1,313 | | 726 | | 1,401 | | 844 |
| Income (loss) from continuing operations before income taxes | \$ | 59,630 | \$ | 16,136 | \$ | 108,870 | \$ | (186) |

INDUSTRIAL

For the three months ended December 31, 2017, Industrial sales increased 17 percent from the prior year quarter. General engineering sales experienced growth from global sales in the indirect channel and in the light and general engineering sector. Growth in transportation sales in Asia Pacific and EMEA to tier suppliers and OEMs were dampened by lower sales to OEMs in the Americas. Oil and gas drilling sales in the Americas continues to provide overall growth in energy, coupled with increases in power generation sales primarily in Asia Pacific. Conditions continue to be favorable in the aerospace sector, with global sales related to engine growth being supplemented by increasing demand related to frames in the Americas. The sales increases in Asia Pacific and EMEA were primarily driven by the transportation and general engineering end markets. The sales increase in the Americas was primarily driven by the performance in the general engineering, energy and aerospace and defense end markets.

For the three months ended December 31, 2017, Industrial operating income increased by \$25.2 million, driven primarily by organic sales growth, incremental restructuring benefits of approximately \$10 million, \$5.9 million less restructuring and related charges in the current quarter and higher productivity and fixed cost absorption, partially offset by higher compensation expense. Industrial operating margin was 13.9 percent compared with 6.8 percent in the prior year.

For the six months ended December 31, 2017, Industrial sales increased 14 percent from the prior year period. General engineering sales experienced growth from sales in the indirect channel across all regions and positive performance in the light and general engineering sector in EMEA and the Americas. Transportation sales to tier suppliers globally increased in the period as well as to OEMs in EMEA and Asia Pacific. This was offset slightly by lower sales to OEMs in the Americas. Oil and gas drilling sales in the Americas continue to provide overall growth in energy, coupled with increases in renewable power generation sales globally. Conditions continue to be favorable in the aerospace sector, with increasing global sales related to engine growth being supplemented by increasing demand related to frames in the Americas and EMEA. The sales increases in Asia Pacific and EMEA were primarily driven by the transportation and general engineering end markets. The sales increase in the Americas was primarily driven by the performance in the energy, general engineering and aerospace and defense end markets.

tem 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

For the six months ended December 31, 2017, Industrial operating income increased by \$54.5 million, driven primarily by organic sales growth, incremental restructuring benefits of approximately \$24 million and \$20.6 million less restructuring and related charges in the current quarter, partially offset by higher compensation expense and unfavorable mix. Industrial operating margin was 12.8 percent compared with 4.4 percent in the prior year period.

| | Three Months E | nded I | December 31, | Six Months En | ecember 31, | |
|---|----------------|--------|--------------|---------------|-------------|---------|
| (in thousands, except operating margin) | 2017 | | 2016 | 2017 | | 2016 |
| Sales | \$ 312,448 | \$ | 267,492 | \$ 609,912 | \$ | 536,536 |
| Operating income | 43,292 | | 18,067 | 78,104 | | 23,603 |
| Operating margin | 13.9% | | 6.8% | 12.8% | | 4.4% |

| In percentages | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
|---|--------------------------------------|---------------------------------------|
| Organic sales growth | 14 % | 12 % |
| Foreign currency exchange impact ⁽¹⁾ | 4 | 3 |
| Business days impact ⁽²⁾ | (1) | (1) |
| Divestiture impact ⁽³⁾ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ |
| Sales growth | 17 % | 14 % |

| | Constant Currency Regional Sales Growth | | | |
|--------------|---|---------------------------------------|--|--|
| | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 | | |
| Asia Pacific | 20% | 17% | | |
| EMEA | 11 | 9 | | |
| Americas | 11 | 10 | | |

| | Constant C End Market S | |
|-----------------------|--------------------------------------|---------------------------------------|
| | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
| Energy | 19% | 20% |
| Transportation | 14 | 11 |
| General engineering | 11 | 9 |
| Aerospace and defense | 9 | 8 |

WIDIA

For the three months ended December 31, 2017, Widia sales increased 11 percent from the prior year quarter. Widia organic sales growth continues to be positively impacted by the reorganization of distribution in Europe, growth in India related to higher demand trends, in addition to increasing demand in the U.S. energy markets and higher growth rates in emerging markets.

For the three months ended December 31, 2017, Widia operating income was \$0.9 million compared to an operating loss of \$2.7 million for the prior year quarter. The year-over-year change of \$3.5 million was driven primarily by \$1.8 million less restructuring and related charges and organic sales growth. Widia operating income margin was 1.8 percent compared with operating loss margin of 6.2 percent in the prior year quarter.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

For the six months ended December 31, 2017, Widia sales increased 11 percent from the prior year period. Widia organic sales growth continues to be positively impacted by the reorganization of distribution in Europe, growth in India related to higher demand trends, in addition to increasing demand in the U.S. energy markets and higher growth rates in emerging markets.

For the six months ended December 31, 2017, Widia operating income was \$0.9 million compared to an operating loss of \$8.4 million for the prior year period. The year-over-year change of \$9.3 million was driven primarily by \$4.0 million less restructuring and related charges, organic sales growth, higher productivity and fixed cost absorption and incremental restructuring benefits of approximately \$1 million. Widia operating income margin was 1.0 percent compared with operating loss margin of 10.0 percent in the prior year.

| | Three Months E | nded l | December 31, | | Six Months En | December 31, | |
|-------------------------|----------------|--------|--------------|----|---------------|--------------|---------|
| (in thousands) | 2017 | 2016 | | | 2017 | | 2016 |
| Sales | \$ 47,744 | \$ | 42,874 | \$ | 92,987 | \$ | 83,888 |
| Operating income (loss) | 856 | | (2,666) | | 918 | | (8,403) |
| Operating margin | 1.8% | | (6.2)% | | 1.0% | | (10.0)% |

| In percentages | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
|---|---|---------------------------------------|
| Organic sales growth | 9% | 9% |
| Foreign currency exchange impact ⁽¹⁾ | 2 | 2 |
| Business days impact ⁽²⁾ | _ | _ |
| Divestiture impact ⁽³⁾ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ |
| Sales growth | 11% | 11% |

| | Constant C Regional Sal | - |
|--------------|---|---------------------------------------|
| | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
| EMEA | 16% | 18% |
| Americas | 8 | 7 |
| Asia Pacific | 4 | 6 |

INFRASTRUCTURE

For the three months ended December 31, 2017, Infrastructure sales increased by 19 percent from the prior year quarter. The U.S. oil and gas market continues to stabilize, manifesting in high year-over-year growth in energy with average U.S. land rig counts up over 60 percent compared to the prior year quarter. In the earthworks market, underground mining continues to show signs of improvement, while construction sales improved in part due to stronger demand in road rehabilitation. The sales increase in Asia Pacific was driven primarily by the performance in the earthworks and general engineering end markets. Growth in the Americas was primarily driven by the oil and gas, general engineering and earthworks end markets.

For the three months ended December 31, 2017, Infrastructure operating income increased by \$15.2 million driven primarily by organic sales growth, incremental restructuring program benefits of approximately \$6 million, \$2.6 million less restructuring and related charges in the current period and favorable mix, partially offset by higher compensation expense, raw material costs and overtime costs. Infrastructure operating margin was 12.1 percent compared with 5.8 percent in the prior year quarter.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

For the six months ended December 31, 2017, Infrastructure sales increased by 19 percent from the prior year period. The U.S. oil and gas market continues to stabilize, manifesting in high year-over-year growth in energy with average U.S. land rig counts up over 75 percent compared to the prior year period. On a year-to-date basis, we are seeing improvements in all end markets, including underground mining and construction. The sales increase in Asia Pacific was driven primarily by the performance in the earthworks and general engineering end markets. Growth in the Americas was primarily driven by the oil and gas, earthworks and general engineering end markets. The sales increase in EMEA was primarily driven by performance in the earthworks end market.

For the six months ended December 31, 2017, Infrastructure operating income increased by \$44.9 million driven primarily by organic sales growth, incremental restructuring program benefits of approximately \$14 million, \$10.4 million less restructuring and related charges in the current period, favorable mix and higher fixed cost absorption and productivity, partially offset by higher raw material and overtime costs and higher compensation expense. Infrastructure operating margin was 11.6 percent compared with 0.8 percent in the prior year period.

| | Three Months Ended | | Inded D | December 31, | | Six Months En | ded De | ecember 31, |
|------------------|--------------------|---------|---------|--------------|----|---------------|--------|-------------|
| (in thousands) | | 2017 | | 2016 | | 2017 | | 2016 |
| Sales | \$ | 211,153 | \$ | 177,207 | \$ | 410,900 | \$ | 344,289 |
| Operating income | | 25,511 | | 10,274 | | 47,580 | | 2,687 |
| Operating margin | | 12.1% | ,) | 5.8% |) | 11.6% |) | 0.8% |

| In percentages | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
|---|--------------------------------------|---------------------------------------|
| Organic sales growth | 18 % | 19 % |
| Foreign currency exchange impact ⁽¹⁾ | 2 | 1 |
| Business days impact ⁽²⁾ | (1) | (1) |
| Divestiture impact ⁽³⁾ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ |
| Sales growth | 19 % | 19 % |

| | Constant C Regional Sal | |
|--------------|--------------------------------------|---------------------------------------|
| | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
| Asia Pacific | 24% | 22% |
| Americas | 20 | 20 |
| EMEA | 1 | 5 |

| | Constant C End Market S | - |
|---------------------|---|---------------------------------------|
| | Three Months Ended December 31, 2017 | Six Months Ended December 31, 2017 |
| Energy | 25% | 26% |
| General engineering | 20 | 15 |
| Earthworks | 11 | 12 |

CORPORATE

For the three months ended December 31, 2017, Corporate unallocated expense decreased \$0.2 million, or 10.6 percent, from the prior year quarter. For the six months ended December 31, 2017, Corporate unallocated expense decreased \$1.1 million, or 36.7 percent, from the prior year period.

| | Th | ree Months Ended De | cember 31, | Six Months End | ded December 31, |
|-------------------------------|----|---------------------|------------|----------------|------------------|
| (in thousands) | | 2017 | 2016 | 2017 | 2016 |
| Corporate unallocated expense | \$ | (1,485) \$ | (1,662) | \$ (1,952) | \$ (3,085) |

LIQUIDITY AND CAPITAL RESOURCES

Cash flow from operations is the primary source of funding for capital expenditures. Year to date December 31, 2017 cash flow provided by operating activities was \$66.8 million, primarily due to the net inflow from net income with adjustments for non-cash items, partially offset by a net outflow from changes in other assets and liabilities.

Our five-year, multi-currency, revolving credit facility, as amended and restated in April 2016 (Credit Agreement), is used to augment cash from operations and is an additional source of funds. The Credit Agreement provides for revolving credit loans of up to \$600.0 million for working capital, capital expenditures and general corporate purposes. The Credit Agreement allows for borrowings in U.S. dollars, euro, Canadian dollars, pound sterling and Japanese yen. Interest payable under the Credit Agreement is based upon the type of borrowing under the facility and may be (1) LIBOR plus an applicable margin, (2) the greater of the prime rate or the Federal Funds effective rate plus an applicable margin, or (3) fixed as negotiated by us. The Credit Agreement matures in April 2021. We had no borrowings outstanding on our Credit Agreement as of December 31, 2017.

The Credit Agreement requires us to comply with various restrictive and affirmative covenants, including two financial covenants: a maximum leverage ratio and a minimum consolidated interest coverage ratio (as those terms are defined in the Credit Agreement). We were in compliance with all such covenants as of December 31, 2017. For the six months ended December 31, 2017, average daily borrowings outstanding under the Credit Agreement were approximately \$1.9 million. Borrowings under the Credit Agreement are guaranteed by our significant domestic subsidiaries.

We consider substantially all of the unremitted earnings of our non-U.S. subsidiaries that have not previously been taxed in the U.S. to be permanently reinvested. As a result of TCJA, which among other provisions allows for a 100% dividends received deduction from controlled foreign subsidiaries, we will re-evaluate our assertion with respect to permanent reinvestment. As part of this evaluation, we will consider our global working capital and capital investment requirements, among other considerations including the potential tax liabilities that would be incurred if the non-U.S. subsidiaries distribute cash to the U.S. parent. If we determine that an entity should no longer remain subject to the permanent reinvestment assertion, we will accrue additional tax charges, including but not limited to state income taxes, withholding taxes and other relevant foreign taxes in the period the conclusion is determined. In accordance with SEC guidance in Staff Accounting Bulletin 118, we expect to complete our evaluation by December 22, 2018. We have not, nor do we anticipate the need to, repatriate funds to the U.S. to satisfy domestic liquidity needs arising in the ordinary course of business or associated with our domestic debt service requirements.

During the three months ended December 31, 2017, we recorded a \$77 million provisional tax charge as a result of a new U.S. tax law in the Tax Cuts and Jobs Act of 2017's provision requiring a one-time transition tax on previously untaxed accumulated earnings and profits of certain non-U.S. companies. The toll tax charge consumed our entire U.S. federal net operating loss carryforward and other credit carryforwards, which represent a significant portion of our previously available deferred tax assets, and was offset by the release of the valuation allowance associated with these assets. As a result, we do not expect to make a cash payment associated with the toll charge.

At December 31, 2017, cash and cash equivalents were \$159.9 million, Total Kennametal Shareholders' equity was \$1,126.4 million and total debt was \$697.1 million. Our current senior credit ratings are at investment grade levels. We believe that our current financial position, liquidity and credit ratings provide access to the capital markets. We believe that we have sufficient resources available to meet cash requirements for the next 12 months. We continue to closely monitor our liquidity position and the condition of the capital markets, as well as the counterparty risk of our credit providers.

There have been no material changes in our contractual obligations and commitments since June 30, 2017.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

Cash Flow Provided by Operating Activities

During the six months ended December 31, 2017, cash flow provided by operating activities was \$66.8 million, compared to \$48.7 million for the prior year period. Cash flow provided by operating activities for the current year period consisted of net income and non-cash items amounting to an inflow of \$161.1 million and changes in certain assets and liabilities netting to an outflow of \$94.3 million. Contributing to the changes in certain assets and liabilities were a decrease of accounts payable and accrued liabilities of \$66.6 million, a decrease in accrued pension and postretirement benefits of \$13.8 million and an increase in inventories of \$9.1 million due in part to increasing volumes.

During the six months ended December 31, 2016, cash flow provided by operating activities consisted of net loss and non-cash items amounting to an inflow of \$53.7 million, and changes in certain assets and liabilities netting to an outflow of \$5.0 million. Contributing to the changes in certain assets and liabilities were a decrease in accrued pension and postretirement benefits of \$11.3 million and a net decrease of accounts payable and accrued liabilities of \$5.5 million primarily driven by lower accrued compensation. Partially offsetting these cash outflows was a decrease in accounts receivable of \$20.4 million due to lower sales volume.

Cash Flow Used for Investing Activities

Cash flow used for investing activities was \$84.1 million for the six months ended December 31, 2017, compared to \$67.0 million for the prior year period. During the current year period, cash flow used for investing activities included capital expenditures, net of \$84.4 million, which consisted primarily of equipment upgrades.

For the six months ended December 31, 2016, cash flow used for investing activities included capital expenditures, net of \$67.1 million, which consisted primarily of equipment upgrades.

Cash Flow Used for Financing Activities

Cash flow used for financing activities was \$17.3 million for the six months ended December 31, 2017 compared to \$36.8 million in the prior year period. During the current year period, cash flow used for financing activities included \$32.5 million of cash dividends paid to Shareholders, partially offset by \$15.0 million of dividend reinvestment and the effect of employee benefit and stock plans.

For the six months ended December 31, 2016, cash flow used for financing activities included \$32.0 million of cash dividends paid to Shareholders and a \$6.6 million payment on the remaining contingent consideration related to a prior acquisition. These cash outflows were partially offset by \$1.3 million of dividend reinvestment and the effect of employee benefit and stock plans and \$0.6 million net increase in borrowings.

FINANCIAL CONDITION

Working capital was \$720.8 million at December 31, 2017, an increase of \$68.3 million from \$652.4 million at June 30, 2017. The increase in working capital was primarily driven by a decrease in accounts payable of \$25.1 million, a decrease in accrued expenses of \$21.1 million driven by payroll timing and lower accrued vacation pay, an increase in inventories of \$19.8 million due in part to increasing volumes, a decrease in other current liabilities of \$19.3 million due primarily to restructuring payments and bonus payments, and increase in other current assets of \$12.9 million due in part to reclassification of tax assets from deferred income taxes to other current assets related to out of period adjustment and an increase in accounts receivable of \$12.5 million due in part to increasing volumes. Partially offsetting these items was a decrease in cash and cash equivalents of \$30.7 million and an increase in accrued income taxes of \$11.2 million due primarily to increased taxable income in taxpaying jurisdictions. Currency exchange rate effects increased working capital by a total of \$16.3 million, the impact of which is included in the aforementioned changes.

Property, plant and equipment, net increased \$35.3 million from \$744.4 million at June 30, 2017 to \$779.7 million at December 31, 2017, primarily due to capital additions of \$73.7 million and a positive currency exchange impact of \$12.0 million during the current period. This increase was partially offset by depreciation expense of \$46.1 million, impairment related to restructuring programs of \$2.3 million and disposal of \$0.8 million.

At December 31, 2017, other assets were \$567.8 million, an increase of \$10.6 million from \$557.2 million at June 30, 2017. The primary drivers for the increase were an increase in other assets of \$17.9 million primarily due to an increase in pension plan assets and an increase in goodwill of \$4.8 million due to favorable currency exchange effects. This increase was partially offset by a \$6.7 million decrease in deferred income taxes primarily due to out of period adjustment related to tax assets recorded on intra-entity inventory transfers, partially offset by release of the valuation allowance on U.S. deferred tax assets, in addition to a \$6.0 million decrease in other intangible assets, which was due primarily to amortization expense.

Long-term debt and capital leases increased by \$0.7 million to \$695.7 million at December 31, 2017 from \$695.0 million at June 30, 2017.

Kennametal Shareholders' equity was \$1,126.4 million at December 31, 2017, an increase of \$109.1 million from \$1,017.3 million at June 30, 2017. The increase was primarily due to net income attributable to Kennametal of \$80.8 million, favorable currency exchange of \$32.6 million, capital stock issued under employee benefit and stock plans of \$26.9 million and reclassification of net pension and other postretirement benefit loss of \$3.3 million, partially offset by cash dividends paid to Shareholders of \$32.5 million and unrecognized net pension and other postretirement benefit loss of \$2.6 million.

ENVIRONMENTAL MATTERS

The operation of our business has exposed us to certain liabilities and compliance costs related to environmental matters. We are involved in various environmental cleanup and remediation activities at certain of our locations.

Superfund Sites Among other environmental laws, we are subject to the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), under which we have been designated by the United States Environmental Protection Agency (USEPA) as a Potentially Responsible Party (PRP) with respect to environmental remedial costs at certain Superfund sites. We have evaluated our claims and liabilities associated with these Superfund sites based upon best currently available information. We believe our environmental accruals are adequate to cover our portion of the environmental remedial costs at the Superfund sites where we have been designated a PRP, to the extent these expenses are probable and reasonably estimable.

Other Environmental Matters We establish and maintain reserves for other potential environmental issues. At December 31, 2017 and June 30, 2017, the balances of these reserves were \$12.7 million and \$12.4 million, respectively. These reserves represent anticipated costs associated with the remediation of these issues.

The reserves we have established for environmental liabilities represent our best current estimate of the costs of addressing all identified environmental situations, based on our review of currently available evidence, and taking into consideration our prior experience in remediation and that of other companies, as well as public information released by the USEPA, other governmental agencies, and by the PRP groups in which we are participating. Although the reserves currently appear to be sufficient to cover these environmental liabilities, there are uncertainties associated with environmental liabilities, and we can give no assurance that our estimate of any environmental liability will not increase or decrease in the future. The reserved and unreserved liabilities for all environmental concerns could change substantially due to factors such as the nature and extent of contamination, changes in remedial requirements, technological changes, discovery of new information, the financial strength of other PRPs, the identification of new PRPs and the involvement of and direction taken by the government on these matters.

We maintain a Corporate Environmental Health and Safety (EHS) Department, to monitor compliance with environmental regulations and to oversee remediation activities. In addition, we have designated EHS analysts who are responsible for each of our global manufacturing facilities. Our financial management team periodically meets with members of the Corporate EHS Department and the Corporate Legal Department to review and evaluate the status of environmental projects and contingencies. On a quarterly basis, we review financial provisions and reserves for environmental contingencies and adjust these reserves when appropriate.

DISCUSSION OF CRITICAL ACCOUNTING POLICIES

Effective July 1, 2017 with the adoption of new Financial Accounting Standards Board (FASB) guidance on subsequent measurement of inventory, non-LIFO inventories are now stated at the lower of cost or net realizable value. LIFO inventories continue to be stated at the lower of cost or market.

There have been no other changes to our critical accounting policies since June 30, 2017.

NEW ACCOUNTING STANDARDS

See Note 3 to our condensed consolidated financial statements set forth in Part I Item 1 of this Quarterly Report on Form 10-Q for a description of new accounting standards.

RECONCILIATION OF FINANCIAL MEASURES NOT DEFINED BY U.S. GAAP In accordance with the SEC's Regulation G, the following provides definitions of the non-GAAP financial measures we use in this report and the reconciliation to the most closely related GAAP financial measure. We believe that these measures provide useful perspective on underlying business trends and results and provide a supplemental measure of year-over-year results. The non-GAAP financial measures described below are used by management in making operating decisions, allocating financial resources and for business strategy purposes. These measures may be useful to investors as they provide supplemental information about business performance and provide investors a view of our business results through the eyes of management. These non-GAAP financial measures are not intended to be considered by the user in place of the related GAAP financial measure, but rather as supplemental information to our business results. These non-GAAP financial measures may not be the same as similar measures used by other companies due to possible differences in method and in the items or events being adjusted.

Organic sales growth Organic sales growth is a non-GAAP financial measure of sales growth (which is the most directly comparable GAAP measure) excluding the impacts of acquisitions, divestitures, business days and foreign currency exchange from year-over-year comparisons. We believe this measure provides investors with a supplemental understanding of underlying sales trends by providing sales growth on a consistent basis. Also, we report organic sales growth at the consolidated and segment levels.

Constant currency end market sales growth Constant currency end market sales growth is a non-GAAP financial measure of sales growth (which is the most directly comparable GAAP measure) by end market excluding the impacts of acquisitions, divestitures and foreign currency exchange from year-over-year comparisons. We note that, unlike organic sales growth, constant currency end market sales growth does not exclude the impact of business days. We believe this measure provides investors with a supplemental understanding of underlying end market trends by providing end market sales growth on a consistent basis. Also, we report constant currency end market sales growth at the consolidated and segment levels. Widia sales are reported only in the general engineering end market. Therefore, we do not provide constant currency end market sales growth for the Widia segment and, thus, do not include a reconciliation for that metric.

Constant currency regional sales growth Constant currency regional sales growth is a non-GAAP financial measure of sales growth (which is the most directly comparable GAAP measure) by region excluding the impacts of acquisitions, divestitures and foreign currency exchange from year-over-year comparisons. We note that, unlike organic sales growth, constant currency regional sales growth does not exclude the impact of business days. We believe this measure provides investors with a supplemental understanding of underlying regional trends by providing regional sales growth on a consistent basis. Also, we report constant currency regional sales growth at the consolidated and segment levels.

Reconciliations of organic sales growth to sales growth are as follows:

| Three Months Ended December 31, 2017 | Industrial | Widia | Infrastructure | Total |
|---|------------|-------|----------------|-------|
| Organic sales growth | 14% | 9% | 18% | 15% |
| Foreign currency exchange impact ⁽¹⁾ | 4 | 2 | 2 | 3 |
| Business days impact ⁽²⁾ | (1) | _ | (1) | (1) |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ |
| Sales growth | 17% | 11% | 19% | 17% |

| Six Months Ended December 31, 2017 | Industrial | Widia | Infrastructure | Total |
|---|--------------|-------|----------------|-------|
| Organic sales growth | 12% | 9% | 19% | 14% |
| Foreign currency exchange impact ⁽¹⁾ | 3 | 2 | 1 | 2 |
| Business days impact ⁽²⁾ | (1) | _ | (1) | (1) |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ |
| Sales growth | 14% | 11% | 19% | 15% |

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

Reconciliations of constant currency end market sales growth to end market sales growth⁽⁵⁾, are as follows:

Industrial

| | General | | Aerospace and | |
|---|-------------|----------------|---------------|--------|
| Three Months Ended December 31, 2017 | engineering | Transportation | defense | Energy |
| Constant currency end market sales growth | 11% | 14% | 9% | 19% |
| Foreign currency exchange impact ⁽¹⁾ | 4 | 4 | 2 | 3 |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 15% | 18% | 11% | 22% |

Infrastructure

| | | | General |
|---|--------|------------|-------------|
| Three Months Ended December 31, 2017 | Energy | Earthworks | engineering |
| Constant currency end market sales growth | 25% | 11% | 20% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 2 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 26% | 13% | 22% |

Total

| Thurs Marsha Fadad Danashay 21, 2017 | General | Turnensentation | Aerospace and | E | Eastles saules |
|---|-------------|-----------------|---------------|--------|----------------|
| Three Months Ended December 31, 2017 | engineering | Transportation | defense | Energy | Earthworks |
| Constant currency end market sales growth | 12% | 14% | 9% | 23% | 11% |
| Foreign currency exchange impact ⁽¹⁾ | 3 | 4 | 2 | 2 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 15% | 18% | 11% | 25% | 13% |

Industrial

| | General | | Aerospace and | |
|---|-------------|----------------|---------------|--------|
| Six Months Ended December 31, 2017 | engineering | Transportation | defense | Energy |
| Constant currency end market sales growth | 9% | 11% | 8% | 20% |
| Foreign currency exchange impact ⁽¹⁾ | 3 | 2 | 2 | 3 |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 12% | 13% | 10% | 23% |

Infrastructure

| | | | General |
|---|--------|------------|-------------|
| Six Months Ended December 31, 2017 | Energy | Earthworks | engineering |
| Constant currency end market sales growth | 26% | 12% | 15% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 2 | 1 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 27% | 14% | 16% |

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

| ٦ | [otal |
|---|-------|
| | uuu |

| | General | | Aerospace and | | |
|---|-------------|----------------|---------------|--------|------------|
| Six Months Ended December 31, 2017 | engineering | Transportation | defense | Energy | Earthworks |
| Constant currency end market sales growth | 10% | 11% | 8% | 24% | 12% |
| Foreign currency exchange impact ⁽¹⁾ | 2 | 2 | 2 | 2 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ | _ | _ |
| End market sales growth ⁽⁵⁾ | 12% | 13% | 10% | 26% | 14% |

Reconciliations of constant currency regional sales growth to reported regional sales growth⁽⁶⁾, are as follows:

Industrial

| Three Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
|---|----------|--------------|--------------|
| Constant currency regional sales growth | 11% | 11% | 20% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 8 | 3 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 12% | 19% | 23% |

Widia

| Three Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
|---|----------|------|--------------|
| Constant currency regional sales growth | 8% | 16% | 4% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 6 | 3 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 9% | 22% | 7% |

Infrastructure

| Three Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
|---|----------|------|--------------|
| Constant currency regional sales growth | 20% | 1% | 24% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 5 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 21% | 6% | 26% |

Total

| Three Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
|---|----------|------|--------------|
| Constant currency regional sales growth | 15% | 9% | 19% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 7 | 3 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 16% | 16% | 22% |

Industrial

Acquisition impact⁽⁴⁾ Regional sales growth(6)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (CONTINUED)

| Six Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
|---|--------------|--------|--------------|
| Constant currency regional sales growth | 10% | 9% | 17% |
| Foreign currency exchange impact ⁽¹⁾ | - | 6 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 10% | 15% | 19% |
| Total Pr | | | |
| Widia | | E) (E) | A . D .C. |
| Six Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
| Constant currency regional sales growth | 7% | 18% | 6% |
| Foreign currency exchange impact ⁽¹⁾ | _ | 4 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | | |
| Regional sales growth ⁽⁶⁾ | 7% | 22% | 8% |
| | | | |
| Infrastructure | | | |
| Six Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
| Constant currency regional sales growth | 20% | 5% | 22% |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 6 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |
| Acquisition impact ⁽⁴⁾ | _ | _ | _ |
| Regional sales growth ⁽⁶⁾ | 21% | 11% | 24% |
| Total | | | |
| Six Months Ended December 31, 2017 | Americas | EMEA | Asia Pacific |
| Constant currency regional sales growth | 14% | 9% | 17% |
| | | | |
| Foreign currency exchange impact ⁽¹⁾ | 1 | 5 | 2 |
| Divestiture impact ⁽³⁾ | _ | _ | _ |

⁽¹⁾ Foreign currency exchange impact is calculated by dividing the difference between current period sales at prior period foreign exchange rates and prior period sales by prior period sales.

15%

14%

19%

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes to our market risk exposures since June 30, 2017.

⁽²⁾ Business days impact is calculated by dividing the year-over-year change in weighted average working days (based on mix of sales by country) by prior period weighted average working days.

⁽³⁾ Divestiture impact is calculated by dividing prior period sales attributable to divested businesses by prior period sales

⁽⁴⁾ Acquisition impact is calculated by dividing current period sales attributable to acquired businesses by prior period sales.

⁽⁵⁾ Aggregate sales for all end markets sum to the sales amount presented on Kennametal's financial statements (6) Aggregate sales for all regions sum to the sales amount presented on Kennametal's financial statements.

Table of Contents

ITEM 4. CONTROLS AND PROCEDURES

As of the end of the period covered by this Quarterly Report on Form 10-Q, the Company's management evaluated, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)). The Company's disclosure controls were designed to provide a reasonable assurance that information required to be disclosed in reports that we file or submit under the Securities Exchange Act of 1934, as amended (Exchange Act), is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. However, the controls have been designed to provide reasonable assurance of achieving the controls' stated goals. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective to provide reasonable assurance at December 31, 2017 to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (i) accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure and (ii) recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission.

There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we are party to legal claims and proceedings that arise in the ordinary course of business, which may relate to our operations or assets, including real, tangible or intellectual property. Although certain of these types of actions are currently pending, we do not believe that any individual proceeding is material or that our pending legal proceedings in the aggregate are material to Kennametal. See "Note 12. Environmental Matters" for a discussion of our exposure to certain environmental liabilities.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

ISSUER PURCHASES OF EQUITY SECURITIES

| | | | Total Number of | Maximum Number |
|--------------------------------------|----------------------|----------------|---------------------|--------------------|
| | | | Shares Purchased as | of Shares that May |
| | | | Part of Publicly | Yet Be Purchased |
| | Total Number of | Average Price | Announced Plans or | Under the Plans or |
| Period | Shares Purchased (1) | Paid per Share | Programs | Programs (2) |
| October 1 through October 31, 2017 | _ | \$ _ | _ | 10,100,100 |
| November 1 through November 30, 2017 | 1,321 | 45.48 | _ | 10,100,100 |
| December 1 through December 31, 2017 | 3,679 | 46.54 | _ | 10,100,100 |
| Total | 5,000 | \$ 46.26 | _ | |

During the current period, 1,202 shares were purchased on the open market on behalf of Kennametal to fund the Company's dividend reinvestment program. Also, during the current period employees delivered 3,798 shares of restricted stock to Kennametal, upon vesting, to satisfy tax withholding requirements.

UNREGISTERED SALES OF EQUITY SECURITIES

None.

On July 25, 2013, the Company publicly announced an amended repurchase program for up to 17 million shares of its outstanding capital stock outside of the Company's dividend reinvestment program.

ITEM 6. EXHIBITS

| | (10) | Material Contracts | |
|---|-----------|--|---|
| | (10.1) | Separation Agreement for Charles M. Byrnes | Exhibit 10.1 of the Form 8-K filed January 31, 2018 (File No. 001-05318) is incorporated herein by reference. |
| | (31) | Rule 13a-14(a)/15d-14(a) Certifications | |
| | (31.1) | <u>Certification executed by Christopher Rossi, President and Chief Executive</u> <u>Officer of Kennametal Inc.</u> | Filed herewith. |
| (31.2) Certification executed by Jan Kees van Gaalen, Vice President and Chief Financial Officer of Kennametal Inc. | | * | Filed herewith. |
| | (32) | Section 1350 Certifications | |
| | (32.1) | Certification Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by Christopher Rossi, President and Chief Executive Officer of Kennametal Inc., and Jan Kees van Gaalen, Vice President and Chief Financial Officer of Kennametal Inc. | Filed herewith. |
| | (101) | XBRL | |
| | (101.INS) | XBRL Instance Document | Filed herewith. |
| | (101.SCH) | XBRL Taxonomy Extension Schema Document | Filed herewith. |
| | (101.CAL) | XBRL Taxonomy Extension Calculation Linkbase Document | Filed herewith. |
| | (101.DEF) | XBRL Taxonomy Definition Linkbase | Filed herewith. |
| | (101.LAB) | XBRL Taxonomy Extension Label Linkbase Document | Filed herewith. |
| | (101.PRE) | XBRL Taxonomy Extension Presentation Linkbase Document | Filed herewith. |
| | | | |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

KENNAMETAL INC.

Date: February 6, 2018 By: /s/ Patrick S. Watson

Patrick S. Watson

Vice President Finance and Corporate Controller

I, Christopher Rossi, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Kennametal Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report:
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(f)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 6, 2018 /s/ Christopher Rossi

Christopher Rossi

President and Chief Executive Officer

I, Jan Kees van Gaalen, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Kennametal Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d -15(f)) for the registrant and have:
 - Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the c) effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most d) recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the 5. registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are a) reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 6, 2018 /s/ Jan Kees van Gaalen

Jan Kees van Gaalen

Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Kennametal Inc. (the "Corporation") on Form 10-Q for the period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Corporation certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- 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 financial condition and result of operations of the Corporation.

/s/ Christopher Rossi

Christopher Rossi President and Chief Executive Officer

February 6, 2018

/s/ Jan Kees van Gaalen
Jan Kees van Gaalen
Vice President and Chief Financial Officer

February 6, 2018

*This certification is made solely for purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.