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 SEPTEMBER 30, 2018

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** **Pittsburgh, Pennsylvania**	**15219-2706**
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code: **(412) 248-8000**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES [X] NO [ ]

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). YES [X] NO [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [X]	Accelerated filer [ ]
Non-accelerated filer [ ]	Smaller reporting company [ ]
	Emerging growth company [ ]

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES [ ] NO [X]

Indicate the number of shares outstanding of each of the issuer’s classes of capital stock, as of the latest practicable date.

Title of Each Class	Outstanding at October 31, 2018
Capital Stock, par value $1.25 per share	82,102,785

KENNAMETAL INC.

FORM 10-Q

FOR THE THREE MONTHS ENDED SEPTEMBER 30, 2018

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 the economy; our ability to achieve anticipated benefits of our restructuring, simplification and modernization 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 September 30,	
(in thousands, except per share amounts)	2018	2017
Sales (Note 3)	$ 586,687	$ 542,454
Cost of goods sold	375,595	360,505
Gross profit	211,092	181,949
Operating expense	123,285	120,592
Restructuring and asset impairment charges (Note 7)	1,075	5,525
Amortization of intangibles	3,580	3,661
Operating income	83,152	52,171
Interest expense	8,097	7,149
Other income, net	(2,761)	(4,218)
Income before income taxes	77,816	49,240
Provision for income taxes	19,392	9,602
Net income	58,424	39,638
Less: Net income attributable to noncontrolling interests	1,725	455
Net income attributable to Kennametal	$ 56,699	$ 39,183
PER SHARE DATA ATTRIBUTABLE TO KENNAMETAL SHAREHOLDERS		
Basic earnings per share	$ 0.69	$ 0.48
Diluted earnings per share	$ 0.68	$ 0.48
Dividends per share	$ 0.20	$ 0.20
Basic weighted average shares outstanding	82,105	81,071
Diluted weighted average shares outstanding	83,194	82,123

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

	Three Months Ended September 30,	
(in thousands)	2018	2017
Net income	$ 58,424	$ 39,638
Other comprehensive (loss) income, net of tax		
Unrealized loss on derivatives designated and qualified as cash flow hedges	(262)	(619)
Reclassification of unrealized loss on derivatives designated and qualified as cash flow hedges	595	396
Unrecognized net pension and other postretirement benefit gain (loss)	318	(1,965)
Reclassification of net pension and other postretirement benefit loss	1,312	1,779
Foreign currency translation adjustments	(16,203)	19,868
Total other comprehensive (loss) income, net of tax	(14,240)	19,459
Total comprehensive income	44,184	59,097
Less: comprehensive income attributable to noncontrolling interests	493	739
Comprehensive income attributable to Kennametal Shareholders	$ 43,691	$ 58,358

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)	September 30, 2018	June 30, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 102,084	$ 556,153
Accounts receivable, less allowance for doubtful accounts of $12,134 and $11,807, respectively	386,685	401,290
Inventories (Note 10)	569,252	525,466
Other current assets	63,461	63,257
Total current assets	1,121,482	1,546,166
Property, plant and equipment:		
Land and buildings	349,244	351,953
Machinery and equipment	1,723,306	1,702,243
Less accumulated depreciation	(1,238,199)	(1,229,983)
Property, plant and equipment, net	834,351	824,213
Other assets:		
Goodwill (Note 17)	300,844	301,802
Other intangible assets, less accumulated amortization of $148,413 and $145,334, respectively (Note 17)	172,477	176,468
Deferred income taxes	16,714	17,015
Other	66,336	60,073
Total other assets	556,371	555,358
Total assets	$ 2,512,204	$ 2,925,737
LIABILITIES		
Current liabilities:		
Current maturities of long-term debt and capital leases (Note 11)	$ —	$ 399,266
Notes payable to banks	756	934
Accounts payable	220,887	221,903
Accrued income taxes	30,025	18,603
Accrued expenses	64,356	95,239
Other current liabilities	123,147	150,586
Total current liabilities	439,171	886,531
Long-term debt and capital leases, less current maturities (Note 11)	591,303	591,505
Deferred income taxes	27,389	26,991
Accrued pension and postretirement benefits	159,547	159,522
Accrued income taxes	6,265	6,249
Other liabilities	24,420	24,612
Total liabilities	1,248,095	1,695,410
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; 82,092 and 81,646 shares issued, respectively	102,615	102,058
Additional paid-in capital	517,349	511,909
Retained earnings	940,983	900,683
Accumulated other comprehensive loss	(333,333)	(320,325)
Total Kennametal Shareholders' Equity	1,227,614	1,194,325
Noncontrolling interests	36,495	36,002
Total equity	1,264,109	1,230,327
Total liabilities and equity	$ 2,512,204	$ 2,925,737

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

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

	Three Months Ended September 30,	
(in thousands)	2018	2017
OPERATING ACTIVITIES		
Net income	$ 58,424	$ 39,638
Adjustments for non-cash items:		
Depreciation	23,973	22,777
Amortization	3,580	3,661
Stock-based compensation expense	8,486	6,543
Restructuring and asset impairment charges (Note 7)	(288)	3,159
Deferred income tax provision	20	577
Other	257	1,368
Changes in certain assets and liabilities:		
Accounts receivable	9,009	626
Inventories	(48,597)	(19,704)
Accounts payable and accrued liabilities (Note 4)	(52,731)	(82,454)
Accrued income taxes	9,461	398
Accrued pension and postretirement benefits	(4,348)	(8,060)
Other	1,955	(8,203)
Net cash flow provided by (used for) operating activities	9,201	(39,674)
INVESTING ACTIVITIES		
Purchases of property, plant and equipment (Note 4)	(43,263)	(22,306)
Disposals of property, plant and equipment	833	426
Other	37	(67)
Net cash flow used for investing activities	(42,393)	(21,947)
FINANCING ACTIVITIES		
Net (decrease) increase in notes payable	(16)	423
Term debt repayments	(400,000)	(93)
Purchase of capital stock	(54)	(55)
Dividend reinvestment and the effect of employee benefit and stock plans	(2,436)	(3,969)
Cash dividends paid to Shareholders	(16,399)	(16,191)
Other	16	(320)
Net cash flow used for financing activities	(418,889)	(20,205)
Effect of exchange rate changes on cash and cash equivalents	(1,988)	1,894
CASH AND CASH EQUIVALENTS		
Net decrease in cash and cash equivalents	(454,069)	(79,932)
Cash and cash equivalents, beginning of period	556,153	190,629
Cash and cash equivalents, end of period	$ 102,084	$ 110,697

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

1. 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 2018 Annual Report on Form 10-K. The condensed consolidated balance sheet as of June 30, 2018 was derived from the audited balance sheet included in our 2018 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 three months ended September 30, 2018 and 2017 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 2019 is to the fiscal year ending June 30, 2019. 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.

2. NEW ACCOUNTING STANDARDS

Adopted
In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)," which requires an entity to recognize revenue in a manner that depicts the transfer of promised goods to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange. The standard also expands the disclosure requirements around contracts with customers. We adopted Topic 606 July 1, 2018 using the modified retrospective transition method applied to those contracts that were not completed as of that date. The adoption did not have a material impact on the condensed consolidated financial statements beyond the additional disclosure requirements. Refer to Notes 3 and 18 to the condensed consolidated financial statements for further details.

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)," which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice with respect to how these are classified in the statement of cash flows. We adopted this ASU July 1, 2018. Adoption of this guidance did not have a material effect on our condensed consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory," which clarifies that an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. We adopted this ASU July 1, 2018. Adoption of this guidance did not have a material effect on our condensed consolidated financial statements.

In March 2017, the FASB issued ASU No. 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. We adopted this ASU July 1, 2018, with the amendments applied on a retrospective basis. Refer to Note 9 to the condensed consolidated financial statements for further details.

In May 2017, the FASB issued ASU No. 2017-09, "Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting," which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. We adopted this ASU July 1, 2018. Adoption of this guidance did not have a material effect on our condensed consolidated financial statements.

Issued
In August 2018, the FASB issued ASU 2018-15, "Intangibles - Goodwill and Other - Internal-use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The standard requires implementation costs incurred by customers in cloud computing arrangements to be capitalized and amortized under the same premises of authoritative guidance for internal-use software. This standard is effective for Kennametal beginning July 1, 2020. We are in the process of assessing the impact the adoption of this guidance will have on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans - General: Disclosure Framework - Changes to Disclosure Requirements for Defined Benefit Plans." The standard modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. This standard is effective for Kennametal beginning July 1, 2021. We are in the process of assessing the impact the adoption of this guidance will have on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases: Topic 842," which replaces the existing guidance in ASC 840, Leases. The standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. This standard is effective for Kennametal beginning July 1, 2019. Currently, we are inventorying our leasing arrangements in order to determine the impact this ASU will have on our consolidated financial statements.

3. REVENUE RECOGNITION

Revenue Accounting Description and Policy
The Company's contracts with customers are comprised of purchase orders, and for larger customers, may also include long-term agreements. We account for a contract when it has approval and commitment from both parties, the rights of the parties and payment terms are identified, the contract has commercial substance and collectability of consideration is probable. These contracts with customers typically relate to the manufacturing of products, which represent single performance obligations that are satisfied when control of the product passes to the customer. The Company considers the timing of right to payment, transfer of risk and rewards, transfer of title, transfer of physical possession and customer acceptance when determining when control transfers to the customer. As a result, revenue is generally recognized at a point in time - either upon shipment or delivery - based on the specific shipping terms in the contract. The shipping terms vary across all businesses and depend on the product, the country of origin and the type of transportation. Shipping and handling activities are accounted for as activities to fulfill a promise to transfer a product to a customer and as such, costs incurred are recorded when the related revenue is recognized. Payment for products is due within a limited time period after shipment or delivery, typically within 30-90 calendar days of the respective invoice dates. The Company does not generally offer extended payment terms.

Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods. Amounts billed and due from our customers are classified as accounts receivable, less allowance for doubtful accounts on the condensed consolidated balance sheet. Certain contracts with customers, primarily distributor customers, have an element of variable consideration that is estimated when revenue is recognized under the contract. Variable consideration primarily includes volume incentive rebates, which are based on achieving a certain level of purchases and other performance criteria as established by our distributor programs. These rebates are estimated based on projected sales to the customer and accrued as a reduction of net sales as they are earned. The majority of our products are consumed by our customers or end users in the manufacture of their products. Historically, we have experienced very low levels of returned products and do not consider the effect of returned products to be material.

See "Note 18. Segment Data" for disaggregation of revenue by geography and end market.

Contract Balances
The Company records a contract asset when it has a right to payment from a customer that is conditioned on events that have occurred other than the passage of time. The Company also records a contract liability when customers prepay but the Company has not yet satisfied its performance obligation. The Company did not have any material remaining performance obligations, contract assets or liabilities as of September 30, 2018 and June 30, 2018.

Practical Expedient
The Company pays sales commissions related to certain contracts, which qualify as incremental costs of obtaining a contract. However, the Company applies the practical expedient that allows an entity to recognize incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that would have been recognized is one year or less. These costs are recorded within operating expense in our condensed consolidated statement of income.

4. SUPPLEMENTAL CASH FLOW DISCLOSURES

	Three Months Ended September 30,	
(in thousands)	2018	2017
Cash paid during the period for:		
Interest	$ 9,966	$ 7,060
Income taxes	9,911	8,627
Supplemental disclosure of non-cash information:		
Changes in accounts payable related to purchases of property, plant and equipment	(3,200)	8,300

During the current quarter, the Company revised its condensed consolidated statement of cash flow for the three months ended September 30, 2017 to correctly present the changes in accounts payable and accrued liabilities and in purchases of property, plant and equipment, resulting in an increase of $19.8 million to previously reported net cash flow used for operating activities and a corresponding decrease to previously reported net cash flow used for investing activities. Revisions of $25.7 million and $22.7 million will be made in future filings to the condensed consolidated statements of cash flow for the six months ended December 31, 2017 and the nine months ended March 31, 2018, respectively, with similar effects on the condensed consolidated statements of cash flow. The supplemental disclosure of non-cash information for changes in accounts payable related to purchases of property, plant and equipment for the three months ended September 30, 2017 was also revised accordingly, at an increase of $8.3 million. The amount of that disclosure will be revised in future filings for the six months ended December 31, 2017 and the nine months ended March 31, 2018 to depict increases of $14.2 million and $11.2 million, respectively. The Company has evaluated the correction and determined it was not material to the previously issued interim financial statements. The correction had no effect on the previously issued annual financial statements.

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 September 30, 2018, 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)]	$ —	$ 433	$ —	$ 433
Total assets at fair value	$ —	$ 433	$ —	$ 433
Liabilities:				
Derivatives [(1)]	$ —	$ 287	$ —	$ 287
Total liabilities at fair value	$ —	$ 287	$ —	$ 287

As of June 30, 2018, 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]	$ —	$ 1,665	$ —	$ 1,665
Total assets at fair value	$ —	$ 1,665	$ —	$ 1,665
Liabilities:				
Derivatives [1]	$ —	$ 207	$ —	$ 207
Total liabilities at fair value	$ —	$ 207	$ —	$ 207

[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 income, net.

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

(in thousands)	September 30, 2018	June 30, 2018
Derivatives designated as hedging instruments		
Other current assets - range forward contracts	$ 406	$ 799
Other current liabilities - range forward contracts	—	(5)
Other assets - range forward contracts	27	27
Total derivatives designated as hedging instruments	433	821
Derivatives not designated as hedging instruments		
Other current assets - currency forward contracts	—	839
Other current liabilities - currency forward contracts	(287)	(202)
Total derivatives not designated as hedging instruments	(287)	637
Total derivatives	$ 146	$ 1,458

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 income, net. Gains (losses) related to derivatives not designated as hedging instruments have been recognized as follows:

	Three Months Ended September 30,	
(in thousands)	2018	2017
Other income, net - currency forward contracts	$ 78	$ (116)

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) income and are recognized as a component of other income, 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 September 30, 2018 and June 30, 2018, was $60.2 million and $62.9 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 September 30, 2018, we expect to recognize into earnings $0.2 million of income on outstanding derivatives in the next 12 months.

The following represents losses related to cash flow hedges:

	Three Months Ended September 30,	
(in thousands)	2018	2017
Losses recognized in other comprehensive (loss) income, net	$ (262)	$ (619)
Losses reclassified from accumulated other comprehensive loss into other income, net	$ 532	$ 392

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 three months ended September 30, 2018 and 2017.

NET INVESTMENT HEDGES

As of September 30, 2018, 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. A gain of $0.1 million and a loss of $1.3 million were recorded as a component of foreign currency translation adjustments in other comprehensive (loss) income for the three months ended September 30, 2018 and 2017, respectively.

As of September 30, 2018, the foreign currency-denominated intercompany loans payable designated as net investment hedges consisted of:

Instrument	Notional (EUR in thousands)(2)	Notional (USD in thousands)(2)	Maturity
Foreign currency-denominated intercompany loan payable	€ 27,527	$ 31,891	June 26, 2022
Foreign currency-denominated intercompany loan payable	8,728	10,112	November 20, 2018
Foreign currency-denominated intercompany loan payable	2,019	2,339	October 11, 2019

(2) Includes principal and accrued interest.

7. RESTRUCTURING AND RELATED CHARGES

In the June quarter of fiscal 2018, we implemented and substantially completed restructuring actions to simplify the Industrial segment's cost structure by directing resources to more profitable business and increasing sales force productivity. We supplemented this with the rationalization of a small manufacturing facility in the Infrastructure segment which we expect to complete in fiscal 2019. Total restructuring and related charges since inception of $11.8 million have been recorded for this program through September 30, 2018.

We recorded restructuring and related charges of $1.1 million and $6.9 million for the three months ended September 30, 2018 and 2017, respectively. Of the 2017 amount, restructuring charges totaled $5.5 million. Restructuring-related charges of $1.3 million and $0.1 million were recorded in cost of goods sold and operating expense, respectively, for the three months ended September 30, 2017.

As of September 30, 2018, the total restructuring accrual is recorded in other current liabilities in our condensed consolidated balance sheet. As of June 30, 2018, $17.5 million and $0.1 million of the restructuring accrual is recorded in other current liabilities and other liabilities, respectively. The amount attributable to each segment is as follows:

(in thousands)	June 30, 2018	Expense	Asset Write-Down	Translation	Cash Expenditures	September 30, 2018
Industrial						
Severance	$ 7,967	$ 186	$ —	$ (8)	$ (499)	$ 7,646
Facilities	—	(9)	9	—	—	—
Other	—	8	—	—	2	10
Total Industrial	$ 7,967	$ 185	$ 9	$ (8)	$ (497)	$ 7,656
Widia						
Severance	$ 2,087	$ 38	$ —	$ (2)	$ (103)	$ 2,020
Facilities	—	—	—	—	—	—
Other	15	2	—	—	1	18
Total Widia	$ 2,102	$ 40	$ —	$ (2)	$ (102)	$ 2,038
Infrastructure						
Severance	$ 7,558	$ 1,085	$ —	$ (47)	$ (2,911)	$ 5,685
Facilities	—	(279)	279	—	—	—
Other	12	44	—	(1)	17	72
Total Infrastructure	$ 7,570	$ 850	$ 279	$ (48)	$ (2,894)	$ 5,757
Total	$ 17,639	$ 1,075	$ 288	$ (58)	$ (3,493)	$ 15,451

8. STOCK-BASED COMPENSATION

Stock Options

Changes in our stock options for the three months ended September 30, 2018 were as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic value (in thousands)
Options outstanding, June 30, 2018	989,992	$ 33.08		
Exercised	(107,880)	29.45		
Options outstanding, September 30, 2018	882,112	$ 33.53	4.9	$ 9,066
Options vested and expected to vest, September 30, 2018	882,112	$ 33.53	4.9	$ 9,066
Options exercisable, September 30, 2018	834,539	$ 34.35	4.7	$ 7,907

During the three months ended September 30, 2018 and 2017, compensation expense related to stock options was $0.1 million and $0.2 million, respectively. As of September 30, 2018, the total unrecognized compensation cost related to options outstanding was immaterial and is expected to be recognized over a weighted average period of 0.5 years.

Fair value of options vested during the three months ended September 30, 2018 and 2017 was $1.0 million and $1.6 million, respectively. The amount of cash received from the exercise of capital stock options during the three months ended September 30, 2018 was $3.1 million and was immaterial for the three months ended September 30, 2017. The total intrinsic value of options exercised during the three months ended September 30, 2018 was $1.4 million and was immaterial during the three months ended September 30, 2017.

Restricted Stock Units – Performance Vesting and Time Vesting
Changes in our performance vesting and time vesting restricted stock units for the three months ended September 30, 2018 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, 2018	409,297	$ 31.22	1,083,675	$ 30.47
Granted	147,769	37.74	419,069	37.79
Vested	(36,394)	31.13	(425,891)	31.73
Performance metric adjustments, net	41,196	29.06	—	—
Forfeited	(44,179)	31.04	(15,418)	32.21
Unvested, September 30, 2018	517,689	$ 32.93	1,061,435	$ 32.85

During the three months ended September 30, 2018 and 2017, compensation expense related to time vesting and performance vesting restricted stock units was $7.8 million and $6.0 million, respectively. As of September 30, 2018, the total unrecognized compensation cost related to unvested time vesting and performance vesting restricted stock units was $26.1 million and is expected to be recognized over a weighted average period of 2.3 years.

9. PENSION AND OTHER POSTRETIREMENT BENEFITS

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

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

	Three Months Ended September 30,	
(in thousands)	2018	2017
Service cost	$ 411	$ 404
Interest cost	7,990	7,657
Expected return on plan assets	(13,462)	(14,090)
Amortization of transition obligation	23	23
Amortization of prior service (credit) cost	(5)	173
Recognition of actuarial losses	1,695	1,710
Net periodic pension income	$ (3,348)	$ (4,123)

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

	Three Months Ended September 30,	
(in thousands)	2018	2017
Interest cost	$ 153	$ 157
Amortization of prior service credit	(22)	(6)
Recognition of actuarial loss	62	70
Net periodic other postretirement benefit cost	$ 193	$ 221

In accordance with ASU 2017-07, as described in Note 3, the service cost of $0.4 million for the three months ended September 30, 2018 and 2017 was reported as a component of cost of goods sold and operating expense. The other components of net periodic benefit income totaling a net benefit of $3.6 million for the three months ended September 30, 2018 were presented as a component of other income, net. For the three months ended September 30, 2017, we reclassified a net benefit of $3.0 million and $1.3 million from cost of goods sold and operating expense, respectively to other income, net.

10. INVENTORIES

We used the last-in, first-out (LIFO) method of valuing inventories for 39 percent and 40 percent of total inventories at September 30, 2018 and June 30, 2018, 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)	September 30, 2018	June 30, 2018
Finished goods	$ 299,121	$ 279,240
Work in process and powder blends	251,322	232,973
Raw materials	102,339	96,859
Inventories at current cost	652,782	609,072
Less: LIFO valuation	(83,530)	(83,606)
Total inventories	$ 569,252	$ 525,466

11. LONG-TERM DEBT

Our five-year, multi-currency, revolving credit facility, as amended and restated in June 2018 (Credit Agreement), provides for revolving credit loans of up to $700 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 September 30, 2018. We had no borrowings outstanding under the Credit Agreement as of September 30, 2018 and June 30, 2018. Borrowings under the Credit Agreement are guaranteed by our significant domestic subsidiaries. The Credit Agreement matures in June 2023.

Fixed rate debt had a fair market value of $592.2 million and $996.4 million at September 30, 2018 and June 30, 2018, respectively. The Level 2 fair value is determined based on the quoted market price of this debt as of September 30, 2018 and June 30, 2018, respectively.

On July 9, 2018, the Company completed the early redemption of its previously outstanding $400.0 million of 2.650 percent Senior Unsecured Notes due 2019.

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.

We establish and maintain reserves for certain potential environmental issues. At September 30, 2018 and June 30, 2018, the balances of these reserves were $12.6 million. These reserves represent anticipated costs associated with the remediation of these issues and are generally not discounted.

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 United States Environmental Protection Agency (USEPA), other governmental agencies and by the Potentially Responsible Party (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.

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 USEPA as a 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.

13. INCOME TAXES

The effective income tax rates for the three months ended September 30, 2018 and 2017 were 24.9 percent and 19.5 percent, respectively. The change is primarily due to (1) U.S. income in the prior year quarter not being tax-effected and current quarter U.S. income being tax-effected now that a valuation allowance is no longer recorded on U.S. deferred tax assets; (2) the reduction in the U.S. federal statutory tax rate, partially offset by the tax on global intangible low-taxed income (GILTI) associated with tax reform effective in fiscal 2019; and (3) an incremental charge in the current quarter to estimate the one-time tax that is imposed on our unremitted foreign earnings (toll tax).

Tax Cuts and Jobs Act of 2017 (TCJA)
Three items from TCJA that effect the Company for fiscal 2019 are the reduction in the statutory tax rate, the toll tax and GILTI. At this time, the Company does not anticipate a material impact to the fiscal 2019 condensed consolidated financial statements from the base erosion anti-abuse tax (BEAT) or a deduction for foreign-derived intangible income (FDII). In accordance with the SEC Staff Accounting Bulletin 118 (SAB 118), we have accounted for the impacts of TCJA provisions first effective in fiscal 2018 to the extent a reasonable estimate could be made during the three months ended September 30, 2018. We will continue to refine our estimates throughout the measurement period, which will not extend beyond December 22, 2018.

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

During the three months ended September 30, 2018, we revised our estimate of the toll tax charge primarily related to regulations issued by the U.S. Treasury and the Internal Revenue Service during the quarter. The adjustment resulted in an additional $1.0 million charge, increasing the total toll tax charge to $81.9 million as of September 30, 2018. We estimate a cash payment of $4.5 million associated with the toll charge, which will be paid over a period of eight years. The toll tax charge, in addition to the revaluation of U.S. net deferred taxes, is preliminary and subject to finalization of our 2018 U.S. federal income tax return, applying any additional regulatory guidance issued after September 30, 2018 and changes in the interpretations and assumptions of existing guidance.

We consider substantially all of the unremitted earnings of our non-U.S. subsidiaries to be permanently reinvested. As a result of TCJA, we are in the process of re-evaluating our permanent reinvestment assertion in certain jurisdictions. The unremitted earnings and profits of our non-U.S. subsidiaries and affiliates have been subject to U.S. federal income tax, but may remain subject to foreign currency adjustments and state and foreign taxes if repatriated. In accordance with SAB 118, we expect to complete our evaluation by December 22, 2018.

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 by 1.1 million shares for the three months ended September 30, 2018 and 2017 due solely to the dilutive effect of unexercised capital stock options, unvested performance awards and unvested restricted stock units. Unexercised capital stock options, performance awards and restricted stock units of 0.3 million and 0.8 million shares for the three months ended September 30, 2018 and 2017, respectively, 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.

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 September 30, 2018 and 2017 is as follows:

	Kennametal Shareholders' Equity					
(in thousands)	Capital stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Non-controlling interests	Total equity
Balance as of June 30, 2018	$ 102,058	$ 511,909	$ 900,683	$ (320,325)	$ 36,002	$ 1,230,327
Net income	—	—	56,699	—	1,725	58,424
Other comprehensive income	—	—	—	(13,008)	(1,232)	(14,240)
Dividend reinvestment	2	52	—	—	—	54
Capital stock issued under employee benefit and stock plans(3)	557	5,440	—	—	—	5,997
Purchase of capital stock	(2)	(52)	—	—	—	(54)
Cash dividends	—	—	(16,399)	—	—	(16,399)
Balance as of September 30, 2018	$ 102,615	$ 517,349	$ 940,983	$ (333,333)	$ 36,495	$ 1,264,109

	Kennametal Shareholders' Equity					
(in thousands)	Capital stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive 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	—	—	39,183	—	455	39,638
Other comprehensive (loss) income	—	—	—	19,175	284	19,459
Dividend reinvestment	2	53	—	—	—	55
Capital stock issued under employee benefit and stock plans(3)	376	2,143	—	—	—	2,519
Purchase of capital stock	(2)	(53)	—	—	—	(55)
Cash dividends	—	—	(16,191)	—	—	(16,191)
Balance as of September 30, 2017	$ 101,208	$ 476,690	$ 788,599	$ (304,517)	$ 36,098	$ 1,098,078

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

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

16. ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of, and changes in, accumulated other comprehensive loss (AOCL) were as follows, net of tax, for the three months ended September 30, 2018:

(in thousands)	Postretirement benefit plans	Currency translation adjustment	Derivatives	Total
Attributable to Kennametal:				
Balance, June 30, 2018	$ (187,755)	$ (127,347)	$ (5,223)	$ (320,325)
Other comprehensive income (loss) before reclassifications	318	(14,971)	(262)	(14,915)
Amounts reclassified from AOCL	1,312	—	595	1,907
Net current period other comprehensive income (loss)	1,630	(14,971)	333	(13,008)
AOCL, September 30, 2018	$ (186,125)	$ (142,318)	$ (4,890)	$ (333,333)
Attributable to noncontrolling interests:				
Balance, June 30, 2018	$ —	$ (2,913)	$ —	$ (2,913)
Other comprehensive loss before reclassifications	—	(1,232)	—	(1,232)
Net current period other comprehensive loss	—	(1,232)	—	(1,232)
AOCL, September 30, 2018	$ —	$ (4,145)	$ —	$ (4,145)

The components of, and changes in, AOCL were as follows, net of tax, for the three months ended September 30, 2017:

(in thousands)	Postretirement benefit plans	Currency translation adjustment	Derivatives	Total
Attributable to Kennametal:				
Balance, June 30, 2017	$ (189,038)	$ (126,606)	$ (8,048)	$ (323,692)
Other comprehensive income (loss) before reclassifications	(1,965)	19,584	(619)	17,000
Amounts reclassified from AOCL	1,779	—	396	2,175
Net current period other comprehensive income (loss)	(186)	19,584	(223)	19,175
AOCL, September 30, 2017	$ (189,224)	$ (107,022)	$ (8,271)	$ (304,517)
Attributable to noncontrolling interests:				
Balance, June 30, 2017	$ —	$ (2,164)	$ —	$ (2,164)
Other comprehensive income before reclassifications	—	284	—	284
Net current period other comprehensive income	—	284	—	284
AOCL, September 30, 2017	$ —	$ (1,880)	$ —	$ (1,880)

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

Reclassifications out of AOCL for the three months ended September 30, 2018 and 2017 consisted of the following:

	Three Months Ended September 30,		
(in thousands)	2018	2017	Affected line item in the Income Statement
Gains and losses on cash flow hedges:			
Forward starting interest rate swaps	$ 588	$ 566	Interest expense
Currency exchange contracts	200	(170)	Other income, net
Total before tax	788	396	
Tax impact	(193)	—	Provision for income taxes
Net of tax	$ 595	$ 396	
Postretirement benefit plans:			
Amortization of transition obligations	$ 23	$ 23	Other income, net
Amortization of prior service (credit) cost	(27)	167	Other income, net
Recognition of actuarial losses	1,757	1,780	Other income, net
Total before tax	1,753	1,970	
Tax impact	(441)	(191)	Provision for income taxes
Net of tax	$ 1,312	$ 1,779	

The amount of income tax allocated to each component of other comprehensive income for the three months ended September 30, 2018 and 2017 were as follows:

	2018			2017		
(in thousands)	Pre-tax	Tax impact	Net of tax	Pre-tax	Tax impact	Net of tax
Unrealized loss on derivatives designated and qualified as cash flow hedges	$ (347)	$ 85	$ (262)	$ (619)	$ —	$ (619)
Reclassification of unrealized loss on derivatives designated and qualified as cash flow hedges	788	(193)	595	396	—	396
Unrecognized net pension and other postretirement benefit gain (loss)	412	(94)	318	(2,600)	635	(1,965)
Reclassification of net pension and other postretirement benefit loss	1,753	(441)	1,312	1,970	(191)	1,779
Foreign currency translation adjustments	(16,270)	67	(16,203)	20,445	(577)	19,868
Other comprehensive (loss) income	$ (13,664)	$ (576)	$ (14,240)	$ 19,592	$ (133)	$ 19,459

17. GOODWILL AND OTHER INTANGIBLE ASSETS

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

(in thousands)	Industrial	Widia	Infrastructure	Total
Gross goodwill	$ 411,458	$ 41,186	$ 633,211	$ 1,085,855
Accumulated impairment losses	(137,204)	(13,638)	(633,211)	(784,053)
Balance as of June 30, 2018	$ 274,254	$ 27,548	$ —	$ 301,802
Activity for the three months ended September 30, 2018:				
Change in gross goodwill due to translation	(570)	(388)	—	(958)
Gross goodwill	410,888	40,798	633,211	1,084,897
Accumulated impairment losses	(137,204)	(13,638)	(633,211)	(784,053)
Balance as of September 30, 2018	$ 273,684	$ 27,160	$ —	$ 300,844

The components of our other intangible assets were as follows:

		September 30, 2018		June 30, 2018	
(in thousands)	Estimated Useful Life (in years)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Contract-based	3 to 15	$ 7,063	$ (7,045)	$ 7,061	$ (7,036)
Technology-based and other	4 to 20	46,593	(31,213)	46,666	(30,923)
Customer-related	10 to 21	205,558	(87,484)	206,162	(85,301)
Unpatented technology	10 to 30	31,697	(13,644)	31,854	(13,096)
Trademarks	5 to 20	12,428	(9,027)	12,450	(8,978)
Trademarks	Indefinite	17,551	—	17,609	—
Total		$ 320,890	$ (148,413)	$ 321,802	$ (145,334)

18. SEGMENT DATA

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, among other things, executive retirement plans, our Board of Directors and strategic initiatives to our reportable operating segments. These costs are instead reported 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, and 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 September 30,	
(in thousands)	2018	2017
Sales:		
Industrial	$ 320,559	$ 297,464
Widia	48,672	45,243
Infrastructure	217,456	199,747
Total sales	$ 586,687	$ 542,454
Operating income (loss):		
Industrial	$ 58,542	$ 32,039
Widia	2,093	(320)
Infrastructure	23,860	20,390
Corporate	(1,343)	62
Total operating income	83,152	52,171
Interest expense	8,097	7,149
Other income, net	(2,761)	(4,218)
Income from continuing operations before income taxes	$ 77,816	$ 49,240

The following table presents Kennametal's revenue disaggregated by geography:

	Three Months Ended							
	September 30, 2018				September 30, 2017			
(in thousands)	Industrial	Widia	Infrastructure	Total Kennametal	Industrial	Widia	Infrastructure	Total Kennametal
Americas	39%	45%	65%	49%	39%	48%	63%	48%
EMEA	40	24	15	29	41	24	17	31
Asia Pacific	21	31	20	22	20	28	20	21

The following tables presents Kennametal's revenue disaggregated by end market:

	Three Months Ended September 30, 2018			
(in thousands)	Industrial	Widia	Infrastructure	Total Kennametal
General engineering	43%	100%	32%	44%
Transportation	35	—	—	19
Aerospace and defense	13	—	—	7
Energy	9	—	34	17
Earthworks	—	—	34	13

	Three Months Ended September 30, 2017			
(in thousands)	Industrial	Widia	Infrastructure	Total Kennametal
General engineering	42%	100%	32%	43%
Transportation	37	—	—	20
Aerospace and defense	12	—	—	7
Energy	9	—	31	16
Earthworks	—	—	37	14

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.

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

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. We provide the definitions of these non-GAAP financial measures at the end of the MD&A section as well as details on the use and derivation of these financial measures.

Operating results for the first quarter of fiscal year 2019 were strong. The continued progress on our strategic initiatives of growth and simplification/modernization, coupled with the ongoing strength of our end markets delivered significant year-over-year improvement in the business. Sales increased 8 percent, reflecting sales growth in all segments and regions. End market demand remains strong and we continue to capitalize on healthy market conditions while also remaining focused on strategically investing in our simplification/modernization initiative where we can improve our customer service and increase productivity. We are balancing the strong level of demand while executing our operational improvement strategy. Operating margin improved significantly to 14.2 percent from 9.6 percent in the prior year quarter reflecting improvement in both gross margin and operating expense as a percentage of sales.

Our sales of $586.7 million for the quarter ended September 30, 2018 increased 8 percent compared to sales for the quarter ended September 30, 2017, driven by organic sales growth of 10 percent, partially offset by unfavorable currency exchange impact of 2 percent.

Operating income was $83.2 million, compared to $52.2 million in the prior year quarter. The increase in operating income reflects organic sales growth, $5.8 million less restructuring and related charges in the current period and incremental simplification/modernization benefits, partially offset by higher raw material costs and temporary manufacturing inefficiencies in certain locations in part due to strong market demand coupled with modernization efforts in progress. Price realization continued to outpace raw material cost inflation. The Industrial, Infrastructure and Widia segments had operating margins of 18.3 percent, 11.0 percent and 4.3 percent, respectively.

In association with our simplification/modernization initiative, we recorded $1 million of pre-tax restructuring and related charges in the current quarter and pre-tax benefits from cost savings initiatives were approximately $2 million. Annualized run-rate pre-tax savings of approximately $10 million are expected to be achieved in connection with these simplification/modernization programs. While our simplification/modernization efforts are driving improved results, incrementally higher results of these programs are anticipated to accrue to the Company over the next few years.

We reported current quarter earnings per diluted share of $0.68, which include a $0.01 per share charge related to adjustments made to the provisional toll tax associated with U.S. tax reform and $0.01 per share of restructuring and related charges. The earnings per diluted share of $0.48 in the prior year quarter included $0.07 per share of restructuring and related charges.

We had a net cash inflow from operating activities of $9.2 million during the three months ended September 30, 2018 compared to $39.7 million net cash outflow during the prior year quarter. The year-over-year change is due primarily to changes in working capital and increased cash flow from operations before changes in certain other assets and liabilities, partially offset by higher working capital. Capital expenditures were $43.3 million and $22.3 million during the three months ended September 30, 2018 and 2017, respectively, with the increase due in part to higher spending for modernization.

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 $9.7 million for the three months ended September 30, 2018.

RESULTS OF CONTINUING OPERATIONS

SALES

Sales for the three months ended September 30, 2018 were $586.7 million, an increase of $44.2 million or 8 percent, from $542.5 million in the prior year quarter. The increase in sales was driven by a 10 percent organic sales growth, partially offset by a 2 percent unfavorable currency exchange impact.

	Three Months Ended September 30, 2018	
(in percentages)	As Reported	Constant Currency
End market sales growth (decline):		
Aerospace and defense	17%	18%
Energy	14	14
General engineering	9	11
Transportation	4	7
Earthworks	(1)	—
Regional sales growth:		
Asia Pacific	11%	14%
Americas	10	12
Europe, the Middle East and Africa (EMEA)	3	5

GROSS PROFIT

Gross profit for the three months ended September 30, 2018 was $211.1 million, an increase of $29.1 million from $181.9 million in the prior year quarter. The increase was primarily due to organic sales growth, favorable mix and simplification/modernization benefits, partially offset by higher raw material costs, temporary manufacturing inefficiencies in certain locations in part due to strong market demand coupled with modernization efforts in progress and unfavorable foreign currency exchange impact of $3.8 million. The gross profit margin for the three months ended September 30, 2018 was 36.0 percent, as compared to 33.5 percent in the prior year quarter.

OPERATING EXPENSE

Operating expense for the three months ended September 30, 2018 was $123.3 million compared to $120.6 million for the three months ended September 30, 2017. The increase was primarily due to higher employment expenses, partially offset by incremental restructuring simplification benefits of approximately $2 million and favorable currency exchange impact of $1.5 million.

RESTRUCTURING AND RELATED CHARGES AND ASSET IMPAIRMENT CHARGES

In the June quarter of fiscal 2018, we implemented and substantially completed restructuring actions to simplify the Industrial segment's cost structure by directing resources to more profitable business and increasing sales force productivity. We supplemented this with the rationalization of a small manufacturing facility in the Infrastructure segment which we expect to complete in fiscal 2019. These actions are currently anticipated to deliver annual ongoing pre-tax savings of approximately $10 million and are anticipated to be mostly cash expenditures. Total restructuring and related charges since inception of $11.8 million have been recorded for this program through September 30, 2018.

We recorded restructuring and related charges of $1.1 million and $6.9 million for the three months ended September 30, 2018 and 2017, respectively. Of the 2017 amount, restructuring charges totaled $5.5 million. Restructuring-related charges of $1.3 million and $0.1 million were recorded in cost of goods sold and operating expense, respectively, for the three months ended September 30, 2017.

INTEREST EXPENSE

Interest expense for the three months ended September 30, 2018 increased to $8.1 million compared to $7.1 million for the three months ended September 30, 2017 primarily due to the incremental interest expense associated with the $300.0 million of 4.625 percent Senior Unsecured Notes due 2028 issued in June 2018. On July 9, 2018, the Company completed the early redemption of its previously outstanding $400.0 million of 2.650 percent Senior Unsecured Notes due 2019.

OTHER INCOME, NET

Other income for the three months ended September 30, 2018 decreased to $2.8 million compared to $4.2 million for the three months ended September 30, 2017 primarily due to lower pension income in the current quarter and lower foreign currency transaction gains.

INCOME TAXES

The effective income tax rates for the three months ended September 30, 2018 and 2017 were 24.9 percent and 19.5 percent, respectively. The change is primarily due to (1) U.S. income in the prior year quarter not being tax-effected and current quarter U.S. income being tax-effected now that a valuation allowance is no longer recorded on U.S. deferred tax assets; (2) the reduction in the U.S. federal statutory tax rate, partially offset by the tax on global intangible low-taxed income (GILTI) associated with tax reform effective in fiscal 2019; and (3) an incremental charge in the current quarter to estimate the one-time tax that is imposed on our unremitted foreign earnings (toll tax).

See Note 13 in our condensed consolidated financial statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q.

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 September 30,	
(in thousands)	2018	2017
Sales:		
Industrial	$ 320,559	$ 297,464
Widia	48,672	45,243
Infrastructure	217,456	199,747
Total sales	$ 586,687	$ 542,454
Operating income (loss):		
Industrial	$ 58,542	$ 32,039
Widia	2,093	(320)
Infrastructure	23,860	20,390
Corporate	(1,343)	62
Total operating income	83,152	52,171
Interest expense	8,097	7,149
Other income, net	(2,761)	(4,218)
Income from continuing operations before income taxes	$ 77,816	$ 49,240

INDUSTRIAL

(in thousands, except operating margin)	Three Months Ended September 30, 2018	2017
Sales	$ 320,559	$ 297,464
Operating income	58,542	32,039
Operating margin	18.3%	10.8%

(in percentages)	Three Months Ended September 30, 2018
Organic sales growth	10%
Foreign currency exchange impact[1]	(2)
Sales growth	8%

	Three Months Ended September 30, 2018	
(in percentages)	As Reported	Constant Currency
Regional sales growth:		
Americas	10%	13%
Asia Pacific	10	12
EMEA	4	7
End market sales growth:		
Aerospace and defense	17%	18%
General engineering	9	10
Transportation	4	7
Energy	4	5

For the three months ended September 30, 2018, Industrial sales increased 8 percent from the prior year quarter. Sales in aerospace benefited from higher demand for engines and frames globally. General engineering sales experienced growth from strength in the indirect channel and a more robust light and general engineering sector. Sales to transportation suppliers increased globally in the period. Energy growth was driven primarily by oil and gas drilling in the Americas. Sales increased broadly in the Americas across all end markets, most notably in general engineering and aerospace and defense. The sales increase in Asia Pacific was primarily driven by the performance in the transportation and general engineering end markets. The sales increase in EMEA was primarily driven by the performance in the general engineering, transportation and aerospace and defense end markets.

For the three months ended September 30, 2018, Industrial operating income increased by $26.5 million, driven primarily by organic sales growth, favorable mix, $3.8 million less restructuring and related charges in the current quarter and incremental modernization and simplification restructuring benefits of approximately $2 million, partially offset by temporary manufacturing inefficiencies in certain locations in part due to strong market demand coupled with modernization efforts in progress, in addition to higher raw material costs.

WIDIA

(in thousands)	Three Months Ended September 30, 2018	2017
Sales	$ 48,672	$ 45,243
Operating income (loss)	2,093	(320)
Operating margin	4.3%	(0.7)%

(in percentages)	Three Months Ended September 30, 2018
Organic sales growth	11%
Foreign currency exchange impact[(1)]	(3)
Sales growth	8%

	Three Months Ended September 30, 2018	
(in percentages)	As Reported	Constant Currency
Regional sales growth:		
Asia Pacific	19%	24%
EMEA	7	11
Americas	1	2

For the three months ended September 30, 2018, Widia sales increased 8 percent from the prior year quarter. Strong sales in Asia Pacific were mainly driven by accelerating results in India, followed by EMEA growth due primarily to increases in Western Europe. In the Americas we continued to make steady progress in establishing an effective distribution network and have exited portions of our portfolio in order to improve profitability.

For the three months ended September 30, 2018, Widia operating income was $2.1 million compared to an operating loss of $0.3 million in the prior year quarter. The year-over-year change of $2.4 million was driven primarily by organic sales growth and $0.8 million less restructuring and related charges in the current quarter.

INFRASTRUCTURE

	Three Months Ended September 30,	
(in thousands)	2018	2017
Sales	$ 217,456	$ 199,747
Operating income	23,860	20,390
Operating margin	11.0%	10.2%

(in percentages)	Three Months Ended September 30, 2018
Organic sales growth	10%
Foreign currency exchange impact[(1)]	(1)
Sales growth	9%

	Three Months Ended September 30, 2018	
(in percentages)	As Reported	Constant Currency
Regional sales growth (decline):		
Americas	12%	12%
Asia Pacific	11	13
EMEA	(3)	(2)
End market sales growth (decline):		
Energy	18%	18%
General engineering	12	13
Earthworks	(1)	—

For the three months ended September 30, 2018, Infrastructure sales increased by 9 percent from the prior year quarter. Favorability in the energy end market was driven by increases oil and gas activity in the U.S. and in process industries, the former of which was driven by an increase in rig activity year-over-year. Strong growth in general engineering was driven primarily by more robust activity in the general economy overall, particularly in the Americas. Earthworks end market was flat year-over-year due to softness in mining in the Americas and EMEA, offset by growth in Asia Pacific. The sales increase in Asia Pacific was driven primarily by the performance in the earthworks end market, while growth in the Americas was mostly due to the energy and general engineering end markets. The sales decrease in EMEA was due mostly to earthworks.

For the three months ended September 30, 2018, Infrastructure operating income increased by $3.5 million driven primarily by organic sales growth, favorable mix and $1.2 million less restructuring and related charges in the current quarter, partially offset by higher raw material costs.

CORPORATE

	Three Months Ended September 30,	
(in thousands)	2018	2017
Corporate (expense) income	$ (1,343)	$ 62

The year-over-year change of $1.4 million was primarily driven by higher employment expenses.

LIQUIDITY AND CAPITAL RESOURCES

Cash flow from operations is the primary source of funding for capital expenditures. For the three months ended September 30, 2018, cash flow provided by operating activities was $9.2 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 June 2018 (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 $700.0 million for working capital, capital expenditures and general corporate purposes. The Credit Agreement allows for borrowings in U.S. dollars, euros, Canadian dollars, pounds 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 June 2023.

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 September 30, 2018. For the three months ended September 30, 2018, average daily borrowings outstanding under the Credit Agreement were approximately $10.0 million. We had no borrowings outstanding under the Credit Agreement as of September 30, 2018 and and June 30, 2018. 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 to be permanently reinvested. As a result of Tax Cuts and Jobs Act of 2017 (TCJA), we are in the process of re-evaluating our permanent reinvestment assertion in certain jurisdictions. The unremitted earnings and profits of our non-U.S. subsidiaries and affiliates have been subject to U.S. federal income tax, but may remain subject to foreign currency adjustments and state and foreign taxes if repatriated. In accordance with SAB 118, we expect to complete our evaluation by December 22, 2018.

During the three months ended September 30, 2018, we revised our estimate of the toll tax charge primarily related to regulations issued by the U.S. Treasury and the Internal Revenue Service during the quarter. The adjustment resulted in an additional $1.0 million charge, increasing the total toll tax charge to $81.9 million as of September 30, 2018. We estimate a cash payment of $4.5 million associated with the toll charge, which will be paid over a period of eight years. The toll tax charge, in addition to the revaluation of U.S. net deferred taxes, is preliminary and subject to finalization of our 2018 U.S. federal income tax return, applying any additional regulatory guidance issued after September 30, 2018 and changes in the interpretations and assumptions of existing guidance.

At September 30, 2018, cash and cash equivalents were $102.1 million, Total Kennametal Shareholders' equity was $1,227.6 million and total debt was $592.1 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.

Beyond the completion of the early redemption on July 9, 2018 of our previously outstanding $400.0 million of 2.650 percent Senior Unsecured Notes due 2019, there have been no material changes in our contractual obligations and commitments since June 30, 2018.

Cash Flow Provided by (Used for) Operating Activities
During the three months ended September 30, 2018, cash flow provided by operating activities was $9.2 million, compared to cash flow used for operating activities of $39.7 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 $94.5 million and changes in certain assets and liabilities netting to an outflow of $85.3 million. Contributing to the changes in certain assets and liabilities were a decrease in accounts payable and accrued liabilities of $52.7 million, an increase in inventories of $48.6 million due in part to increasing demand and raw material price increases and a decrease in accrued pension and postretirement benefits of $4.3 million. Partially offsetting these cash outflows was an increase in accrued income taxes of $9.5 million and a decrease in accounts receivable of $9.0 million.

During the three months ended September 30, 2017, cash flow used for operating activities consisted of changes in certain assets and liabilities netting to an outflow of $117.4 million and net income and non-cash items amounting to an inflow of $77.7 million. Contributing to the changes in certain assets and liabilities were a decrease of accounts payable and accrued liabilities of $82.5 million, an increase in inventories of $19.7 million due in part to increasing volumes and a decrease in accrued pension and postretirement benefits of $8.1 million.

Cash Flow Used for Investing Activities
Cash flow used for investing activities was $42.4 million for the three months ended September 30, 2018, compared to $21.9 million for the prior year period. During the current year period, cash flow used for investing activities included capital expenditures, net of $42.4 million, which consisted primarily of equipment upgrades and modernization initiatives.

For the three months ended September 30, 2017, cash flow used for investing activities included capital expenditures, net of $21.9 million, which consisted primarily of equipment upgrades.

Cash Flow Used for Financing Activities
Cash flow used for financing activities was $418.9 million for the three months ended September 30, 2018 compared to $20.2 million in the prior year period. During the current year period, cash flow used for financing activities included $400 million of term debt repayments from the early extinguishment of our 2.650 percent Senior Unsecured Notes, $16.4 million of cash dividends paid to Shareholders and $2.4 million of dividend reinvestment and the effect of employee benefit and stock plans.

For the three months ended September 30, 2017, cash flow used for financing activities included $16.2 million of cash dividends paid to Shareholders and $4.0 million of dividend reinvestment and the effect of employee benefit and stock plans.

FINANCIAL CONDITION

Working capital was $682.3 million at September 30, 2018, an increase of $22.7 million from $659.6 million at June 30, 2018. The increase in working capital was primarily driven by a decrease in current maturities of long-term debt and capital leases of $399.3 million due to the early redemption of our $400 million of 2.650 percent Senior Unsecured Notes, an increase in inventories of $43.8 million due primarily to increasing demand and raw material price increases, a decrease in accrued expenses of $30.9 million primarily due to payroll timing and lower accrued vacation pay and a decrease in other current liabilities of $27.4 million primarily due to bonus and restructuring payments. Partially offsetting these items was a decrease in cash and cash equivalents of $454.1 million, a decrease in accounts receivable of $14.6 million and an increase in accrued income taxes of $11.4 million due primarily to increased taxable income in taxpaying jurisdictions. Currency exchange rate effects decreased working capital by a total of $10.8 million, the impact of which is included in the aforementioned changes.

Property, plant and equipment, net increased $10.1 million from $824.2 million at June 30, 2018 to $834.4 million at September 30, 2018, primarily due to capital additions of $40.1 million, partially offset by depreciation expense of $24.0 million, a negative currency exchange impact of $5.6 million and disposals of $0.8 million.

At September 30, 2018, other assets were $556.4 million, an increase of $1.0 million from $555.4 million at June 30, 2018. The primary driver for the increase was an increase in other assets of $6.3 million primarily due to an increase in pension plan assets. This increase was partially offset by a $4.0 million decrease in other intangible assets, which was due to amortization expense of $3.6 million and unfavorable currency exchange effects of $0.4. million, and a decrease in goodwill of $1.0 million due to unfavorable currency exchange effects.

Kennametal Shareholders' equity was $1,227.6 million at September 30, 2018, an increase of $33.3 million from $1,194.3 million at June 30, 2018. The increase was primarily due to net income attributable to Kennametal of $56.7 million and capital stock issued under employee benefit and stock plans of $6.0 million, partially offset by cash dividends paid to Shareholders of $16.4 million and unfavorable currency exchange of $15.0 million.

DISCUSSION OF CRITICAL ACCOUNTING POLICIES

Effective July 1, 2018 with the adoption of Financial Accounting Standards Board (FASB) guidance on revenue from contracts with customers, our critical accounting policy for revenue recognition has been modified. 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 our revenue accounting policy.

There have been no other changes to our critical accounting policies since June 30, 2018.

NEW ACCOUNTING STANDARDS

See Note 2 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, below are the definitions of the non-GAAP financial measures we use in this report and the reconciliation of these measures 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 (decline) 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 (decline) Constant currency regional sales growth (decline) 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 (decline) 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 (decline) at the consolidated and segment levels.

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

Three Months Ended September 30, 2018	Industrial	Widia	Infrastructure	Total
Organic sales growth	10%	11%	10%	10%
Foreign currency exchange impact[1]	(2)	(3)	(1)	(2)
Sales growth	8%	8%	9%	8%

Reconciliations of constant currency end market sales growth to end market sales growth (decline)[2], are as follows:

Industrial

Three Months Ended September 30, 2018	General engineering	Transportation	Aerospace and defense	Energy
Constant currency end market sales growth	10%	7%	18%	5%
Foreign currency exchange impact[1]	(1)	(3)	(1)	(1)
End market sales growth[2]	9%	4%	17%	4%

Infrastructure

Three Months Ended September 30, 2018	Energy	Earthworks	General engineering
Constant currency end market sales growth	18%	—%	13%
Foreign currency exchange impact[1]	—	(1)	(1)
End market sales growth (decline)[2]	18%	(1)%	12%

Total

Three Months Ended September 30, 2018	General engineering	Transportation	Aerospace and defense	Energy	Earthworks
Constant currency end market sales growth	11%	7%	18%	14%	—%
Foreign currency exchange impact[1]	(2)	(3)	(1)	—	(1)
End market sales growth (decline)[2]	9%	4%	17%	14%	(1)%

Reconciliations of constant currency regional sales growth (decline) to reported regional sales growth (decline)[3], are as follows:

Industrial	Three Months Ended September 30, 2018		
	Americas	EMEA	Asia Pacific
Constant currency regional sales growth	13%	7%	12%
Foreign currency exchange impact[1]	(3)	(3)	(2)
Regional sales growth[3]	10%	4%	10%

Widia	Three Months Ended September 30, 2018		
	Americas	EMEA	Asia Pacific
Constant currency regional sales growth	2%	11%	24%
Foreign currency exchange impact[1]	(1)	(4)	(5)
Regional sales growth[3]	1%	7%	19%

Infrastructure	Three Months Ended September 30, 2018		
	Americas	EMEA	Asia Pacific
Constant currency regional sales growth (decline)	12%	(2)%	13%
Foreign currency exchange impact[1]	—	(1)	(2)
Regional sales growth (decline)[3]	12%	(3)%	11%

Total	Three Months Ended September 30, 2018		
	Americas	EMEA	Asia Pacific
Constant currency regional sales growth	12%	5%	14%
Foreign currency exchange impact[1]	(2)	(2)	(3)
Regional sales growth[3]	10%	3%	11%

[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.
[2] Aggregate sales for all end markets sum to the sales amount presented on Kennametal's financial statements.
[3] Aggregate sales for all regions sum to the sales amount presented on Kennametal's financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes to our market risk exposures since June 30, 2018.

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 September 30, 2018 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

Period	Total Number of Shares Purchased [(1)]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs [(2)]
July 1 through July 31, 2018	—	$ —	—	10,100,100
August 1 through August 31, 2018	121,957	37.88	—	10,100,100
September 1 through September 30, 2018	—	—	—	10,100,100
Total	121,957	$ 37.88	—	

(1) During the current period, 1,305 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 120,652 shares of restricted stock to Kennametal, upon vesting, to satisfy tax withholding requirements.

(2) 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.

UNREGISTERED SALES OF EQUITY SECURITIES

None.

Table of Contents

ITEM 6. EXHIBITS

(10)	**Material Contracts**	
(10.1)	Separation Agreement for Jan Kees van Gaalen	Exhibit 10.1 to the Form 8-K filed September 13, 2018 (File No. 001-05318) is incorporated herein by reference.
(10.2)	Form of Officer's Employment Agreement with President and CEO Christopher Rossi	Filed herewith.
(31)	**Rule 13a-14(a)/15d-14(a) Certifications**	
(31.1)	Certification executed by Christopher Rossi, President and Chief Executive Officer of Kennametal Inc.	Filed herewith.
(31.2)	Certification executed by Damon J. Audia, 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 Damon J. Audia, 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:	November 6, 2018	By:	/s/ Patrick S. Watson
			Patrick S. Watson Vice President Finance and Corporate Controller

Exhibit 10.2

Officer's Employment Agreement

As Amended and Restated

THIS EMPLOYMENT AGREEMENT (the "Agreement"), is made and entered into as of this 1st day of November, 2018, by and between KENNAMETAL INC., (hereinafter referred to as "Kennametal" or the "Corporation"), a corporation organized under the laws of the Commonwealth of Pennsylvania, and Christopher Rossi, an individual (hereinafter referred to as "Employee").

WITNESSETH:

WHEREAS, Employee acknowledges that by reason of his or her employment by Kennametal, it is anticipated that Employee will work with, add to, create, have access to and be entrusted with trade secrets and confidential information belonging to Kennametal, which are of a technical nature or business nature or pertain to future developments, the disclosure of which trade secrets or confidential information to outsiders would be highly detrimental to the interests of Kennametal; and

WHEREAS, in order to have the benefit of Employee's assistance, Kennametal is desirous of employing or continuing the employment of Employee; and

WHEREAS, in order to protect Kennametal's legitimate business interests, Employee agrees to be employed by Kennametal subject to all terms and conditions of this Agreement, including its post-employment restrictions; and

WHEREAS, to the extent Employee and Kennametal were parties to an earlier Employment Agreement, this Agreement amends, restates, and supersedes such earlier agreements and serves as consideration for Employee's covenants contained herein.

NOW, THEREFORE, Kennametal and Employee, each intending to be legally bound hereby, do mutually covenant and agree as follows:

1. (a) Subject to the terms and conditions set forth herein, Kennametal hereby agrees to employ Employee as of the date hereof. Employee hereby accepts such employment and agrees to devote his or her full time and attention to the business and affairs of Kennametal, in such capacity or capacities and to perform to the best of his or her ability such services as shall be determined from time to time by the Board of Directors of Kennametal until the termination of his or her employment hereunder. Employee may not engage, directly or indirectly, in any other business, investment, or activity that interferes with Employee's performance under this Agreement.

   (b) Employee's base salary, the size of bonus awards, if any, granted to him or her and other emoluments for his or her services, if any, shall be determined by the Board of Directors or its Compensation Committee, as appropriate, from time to time in their sole discretion.

(c) Kennametal and Employee mutually commit to a duty of good faith and fair dealing. While employed by Kennametal, Employee owes Kennametal, its affiliates, and their subsidiaries a fiduciary duty of loyalty, fidelity, and allegiance to act at all times in the best interests of Kennametal and its designated representatives, and to refrain from any act or omission that would, directly or indirectly, injure Kennametal's business, marketing interests, legal affairs, or reputation.

2. In addition to the compensation set forth or contemplated elsewhere herein, Employee shall be entitled to participate in all employee benefit plans, programs and arrangements as and to the extent provided to other similarly situated executives of Kennametal, subject to the terms and conditions of this Agreement and the terms and conditions from time to time of such plans, programs and arrangements. Nothing herein contained shall be deemed to limit or prevent Employee, during his or her employment hereunder, from being reimbursed by Kennametal for reasonable out-of-pocket business expenditures incurred for travel, lodging, meals, entertainment or any other business expenses when submitted to Kennametal for reimbursement in a timely fashion in accordance with the policies of Kennametal applicable to the executives of Kennametal.

3. Employee's employment may be terminated with or without any reason by either party hereto at any time by giving the other party prior written notice thereof, provided, however, that any termination on the part of Kennametal shall occur only if specifically authorized by its Board of Directors; provided, further, that termination by Kennametal for Cause (as hereinafter defined) shall be made by written notice which states that it is a termination for Cause; and provided, further, that termination by Employee shall be on not less than 30 days prior written notice to Kennametal.

4. (a) In the event that Employee's employment is involuntarily terminated by Kennametal prior to a Change-in-Control (as hereinafter defined) and other than for Cause (subject to Section 15), Employee will receive, as severance pay, in addition to all amounts due him or her at the Date of Termination (as hereinafter defined), an amount equal to two (2) times Employee's base salary at the annual rate in effect on the Date of Termination, less applicable withholdings. Subject to Section 17, such severance shall be paid in a lump sum on the first day of the seventh month following the Date of Termination. Notwithstanding the foregoing, this Section 4(a) shall not apply in the event Section 4(c) applies, and Kennametal may cause the forfeiture and recoupment of any such severance payments if Kennametal reasonably determines that Employee has violated any provision of this Agreement.

(b) In the event that Employee's employment is terminated (i) due to the death of the Employee or (ii) by Employee (x) following a Change-in-Control without Good Reason (as such term in defined in Section 4(h)) or (y) prior to a Change-in-Control for any reason, Employee will not be entitled to receive any severance pay in addition to the amounts, if any, due him or her at the Date of Termination (as hereinafter defined).

(c) In the event the Employee's employment is terminated by Employee for Good Reason or involuntarily by Kennametal (or its successor) other than for Cause or Disability pursuant to Section 5 within the six (6) month period preceding a Change-in-Control in anticipation of such Change-in-Control and the Change-in-Control actually occurs, or within twenty-four (24) months following a Change-in-Control, subject to Section 15, Employee will receive as severance pay (in addition to all other amounts due him or her at the Date of Termination) an amount equal to two (2) times Employee's base salary at the annual rate in effect on the Date of Termination and two (2) times the Employee's target bonus for the fiscal year in which the termination occurred, less applicable withholdings. Subject to the provisions of Sections 16 and 17, such severance pay shall be paid by delivery of a cashier's or certified check to the Employee on the 65th day following the Date of Termination, provided that the Employee has executed and not revoked a general release of claims, which release has become effective and irrevocable within such time period. In addition to the severance payments provided for in this Section 4(c), Employee also will receive the same or equivalent medical, dental, disability and group insurance benefits as were provided to the Employee at the Date of Termination, which benefits shall be provided to Employee for a two (2) year period commencing on the Date of Termination or, if earlier, the date the Employee becomes eligible for comparable benefits under a similar plan, policy or arrangement. Notwithstanding the foregoing, in the event this Section 4(c) applies, Section 4(a) above, shall not apply, and Kennametal may cause the forfeiture and recoupment of any such severance payments if Kennametal reasonably determines that Employee has violated any provision of this Agreement.

(d) The medical, dental, disability and group insurance benefits to be provided under Section 4(c) will be provided as follows:

(i) Life insurance benefits and disability benefits shall be provided through the reimbursement of Employee's premiums upon conversion to an individual policy.

(ii) The first eighteen (18) months of medical and dental insurance coverage will be available through the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"). Provided the Employee timely elects COBRA continuation coverage, the Employee shall continue to participate in all medical and dental insurance plans he or she was participating in on the Date of Termination, and the Corporation shall pay the applicable premium. To the extent that Employee had dependent coverage immediately prior to the Date of Termination, such continuation of benefits for Employee shall also cover Employee's dependents for so long as Employee is receiving benefits under this Section 4(d) and such dependents remain eligible. The COBRA continuation period for medical and dental insurance under this Section 4(d) shall be deemed to run concurrent with the continuation period federally mandated by COBRA, or any other legally mandated and applicable federal, state, or local coverage period.

(iii) Following the conclusion of the COBRA continuation period, the Corporation will provide coverage for the remainder of the two (2) year period as follows:

(a) If the relevant medical plan is self-insured (within the meaning of Section 105(h) of the Internal Revenue Code of 1986, as amended (the "Code")), and such plan permits coverage for the Employee, then the Corporation will continue to provide coverage during the two (2) year period and will annually impute income to the Employee for the fair market value of the premium.

(b) If, however, the plan does not permit the continued participation following the end of the COBRA continuation period as contemplated above, then the Corporation will reimburse Employee for the actual cost to Employee of a comparable individual medical or dental insurance policy obtained by Employee on a monthly basis on the first regularly scheduled payroll date each month during the remainder of the period.

(iv) Reimbursements to the Employee pursuant to the provisions of this Section 4(d) will be available only to the extent that (a) such expense is actually incurred for any particular calendar year and reasonably substantiated; (b) reimbursement shall be made no later than the end of the calendar year following the year in which such expense is incurred by the Employee; (c) no reimbursement provided for any expense incurred in one taxable year will affect the amount available in another taxable year; and (d) the right to this reimbursement is not subject to liquidation or exchange for another benefit. Notwithstanding the foregoing, no reimbursement will be provided for any expense incurred following the two (2) year period contemplated by this Agreement.

(e) In the event of a termination of employment under the circumstances above described in Section 4(c), Employee shall have no duty to seek any other employment after termination of Employee's employment with Kennametal and Kennametal hereby waives and agrees not to raise or use any defense based on the position that Employee had a duty to mitigate or reduce the amounts due him or her hereunder by seeking other employment whether suitable or unsuitable and should Employee obtain other employment, then the only effect of such on the obligations of Kennametal hereunder shall be that Kennametal shall be entitled to credit against any payments which would otherwise be made for medical, dental, disability or group insurance pursuant to the benefit provisions set forth in the second paragraph of Section 4(c) hereof, any comparable payments to which Employee is entitled under the employee benefit plans maintained by Employee’s other employer or employers in connection with services to such employer or employers after termination of his or her employment with Kennametal.

(f) The term "Change-in-Control" shall mean a change in control of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A promulgated under the Securities Exchange Act of 1934 as in effect on the date hereof (the "1934 Act"), or if Item 6(e) is no longer in effect, any regulations issued by the Securities and Exchange Commission (“SEC”) pursuant to the 1934 Act which serve similar purposes; provided that, without limitation, such a Change in Control shall be deemed to have occurred upon the occurrence of any one of the following events:

(i) a Business Combination has been completed, excluding any such Business Combination that constitutes a Merger of Equals;

(ii) the Corporation shall sell all or substantially all of its operating properties and assets to another person, group of associated persons or corporation(s) or other entity(ies), excluding any Affiliate of the Corporation, and excluding any such sale that constitutes a Merger of Equals; or

(iii) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) is or becomes a beneficial owner, directly or indirectly, of securities of the Corporation representing 25% or more of either (A) the then outstanding Capital Stock of the Corporation, or (B) the combined voting power of the Corporation's then outstanding voting securities entitled to vote generally in the election of directors; provided that, the following acquisitions shall not constitute a Change in Control: (1) any acquisition of securities of the Corporation directly from the Corporation; (2) any acquisition securities of the Corporation by the Corporation; (3) any acquisition securities of the Corporation by any employee benefit plan (or related trust) sponsored or maintained by the Corporation or any Affiliate of the Corporation; or (4) any acquisition securities of the Corporation by any corporation pursuant to a transaction that constitutes a Merger of Equals.

For purposes of this definition the terms “Affiliate”, “Capital Stock”, “Merger of Equals” and “Business Combination” shall have the meaning ascribed thereto in the Kennametal Inc. 2016 Stock and Incentive Plan.

(g) For purposes of this Agreement "Date of Termination" shall mean:

(i) if Employee’s employment is terminated due to his or her death or retirement, the date of death or retirement, respectively;

(ii) if Employee's employment ends due to termination by Kennametal, the date on which the termination becomes effective as stated in the written notice of termination given to the Employee;

(iii) if Employee’s employment ends due to resignation by Employee, the date on which Kennametal determines the resignation to be effective or the date stated in the written notice of resignation given to Kennametal, whichever is earlier; or

(iv) For purposes of this Agreement, the Employee will be considered to have experienced a termination of employment only if the Employee has separated from service with the Corporation and all of its controlled group members within the meaning of Section 409A of the Code and the regulations and other guidance promulgated thereunder ("Section 409A"). For purposes hereof, the determination of controlled group members shall be made pursuant to the provisions of Section 414(b) and 414(c) of the Code; provided that the language "at least 50 percent" shall be used instead of "at least 80 percent" in each place it appears in Section 1563(a)(1), (2) and (3) of the Code and Treas. Reg. § 1.414(c)-2. Whether the Employee has separated from service will be determined based on all of the facts and circumstances and in accordance with the guidance issued under Section 409A.

(h) The term "Good Reason" for termination by the Employee shall mean the occurrence of any of the following at or after a Change-in-Control:

(i) without the Employee's express written consent, the material diminution of responsibilities or the assignment to the Employee of any duties materially and substantially inconsistent with his or her positions, duties, responsibilities and status with Kennametal immediately prior to a Change-in-Control, or a material change in his or her reporting responsibilities, titles or offices as in effect immediately prior to a Change-in-Control, or any removal of the Employee from or any failure to re-elect the Employee to any of such positions, except in connection with the termination of the Employee's employment due to Cause (as hereinafter defined) or as a result of the Employee’s death;

(ii) a material reduction by Kennametal in the Employee's base salary as in effect immediately prior to any Change-in-Control;

(iii) a failure by Kennametal to continue to provide incentive compensation, under the rules by which incentives are provided, on a basis not materially less favorable to that provided by Kennametal immediately prior to any Change-in-Control;

(iv) a material reduction in the overall level of employee benefits, including any benefit or compensation plan, stock option plan, retirement plan, life insurance plan, health and accident plan or disability plan in which Employee is actively participating immediately prior to a Change-in-Control (provided, however, that there shall not be deemed to be any such failure if Kennametal substitutes for the discontinued plan, a plan providing Employee with substantially similar benefits) or the taking of any action by Kennametal which would adversely affect Employee's participation in or materially reduce Employee's overall level of benefits under such plans or deprive Employee of any material fringe benefits enjoyed by Employee immediately prior to a Change-in-Control;

(v) the breach of this Agreement caused by the failure of Kennametal to obtain the assumption of this Agreement by any successor as contemplated in Section 11 hereof; and

(vi) the relocation of the Employee to a facility or a location more than 50 miles from the Employee's then present location, without the Employee's prior written consent.

Notwithstanding the forgoing, in order for the Employee to terminate for Good Reason: (a) the Employee must give written notice to Kennametal of the Employee's intention to terminate employment for Good Reason within sixty (60) days after the event or omission which constitutes Good Reason, and any failure to give such written notice within such period will result in a waiver by the Employee of his or her right to terminate for Good Reason as a result of such act or omission, (b) the event must remain uncorrected by the Kennametal for thirty (30) days following such notice (the "Notice Period"), and (C) such termination must occur within sixty (60) days after the expiration of the Notice Period.

5. In the event that Employee (a) shall be guilty of malfeasance, willful misconduct or gross negligence in the performance of the services contemplated by this Agreement, or (b) shall not make his or her services available to Kennametal on a full time basis in accordance with Section 1 hereof for any reason (including Disability (as hereinafter defined)) other than arising from Employee's incapacity due to physical or mental illness or injury which does not constitute Disability (as hereinafter defined) and other than by reason of the fact Employee’s employment has been terminated under the circumstances described in Section 4(a), or (c) shall breach the provisions of Section 8 hereof (the matters described in items (a), (b) and (c) above are collectively referred to as "Cause"), Kennametal shall have the right, exercised by resolution adopted by a majority of its Board of Directors, to terminate Employee’s employment for Cause by giving prior written notice to Employee of its election so to do. In that event, Employee's employment shall be deemed terminated for Cause, Employee shall not be entitled to the benefits set forth in Section 4 which shall not be paid or payable and Kennametal shall only have the obligation to pay Employee the unpaid portion of Employee's base salary for the period from the last period from which Employee was paid to the Date of Termination; provided, however, that if Employee's employment is terminated as a result of the Employee's Disability, the benefits set forth in Section 4 shall not be paid or payable but Employee shall be entitled to receive all benefits to which Employee is entitled under Kennametal’s plans then in effect as a result of Employee’s Disability. For purposes of this Agreement "Disability" shall mean such incapacity due to physical or mental illness or injury which results in the Employee’s being absent from his or her principal office at Kennametal's offices for the entire portion of 180 consecutive business days. Prior to a Change-in-Control, a decision by the Board of Directors of Kennametal that "Cause" exists shall be in the discretion of the Board of Directors and shall be final and binding upon the Employee and his or her rights hereunder. After a Change-in-Control, "Cause" shall not be deemed to include opposition by Employee to such a Change-in-Control or any matter incidental thereto and any determination by the Board of Directors that "Cause" existed shall not be final or binding upon the Employee or his or her rights hereunder or entitled to any deference in any court or other tribunal.

6. Employee understands and agrees that, except to the extent Employee is entitled to the benefits provided in Section 4(c) hereof, in the event Employee resigns or his or her employment is terminated for any reason other than death or Disability prior to his or her "Retirement Date" (as hereinafter defined), he or she will forfeit any interest he or she may have in any Kennametal retirement plan (except to the extent vested by actual service to date of separation as per the plan provisions), and all other benefits dependent upon continuing service. The term "Retirement Date" shall mean the first day of the month following the day on which Employee attains his or her sixty-fifth birthday, or at Employee’s request, any other day that Kennametal’s Board of Directors may approve in writing.

7. Nothing herein contained shall affect the right of Employee to participate in and receive benefits under and in accordance with the then current provisions of any employee benefit plan, program or arrangement of Kennametal and all payments hereunder shall be in addition to any benefits received thereunder (including long term disability payments).

8. Non-Competition Agreement. During the period of employment of Employee by Kennametal and for two (2) years thereafter, Employee will not, in any geographic area in which Kennametal is offering its services and products, without the prior written consent of Kennametal:

(a) directly or indirectly engage in, or

(b) assist or have an active interest in (whether as proprietor, partner, investor, shareholder, officer, director or any type of principal whatsoever), or

(c) enter the employ of, or act as agent for, or advisor or consultant to, any person, firm, partnership, association, corporation or business organization, entity or enterprise which is or is about to become directly or indirectly engaged in, any business which is competitive with any business of Kennametal or any subsidiary or affiliate thereof in which Employee is or was engaged; provided, however, that the foregoing provisions of this Section 8 are not intended to prohibit and shall not prohibit Employee from purchasing, for investment, not in excess of 1% of any class of stock or other corporate security of any company which is registered pursuant to Section 12 of the Securities Exchange Act of 1934.

Non-Solicitation Agreement. During the period of employment of Employee by Kennametal and for one year thereafter, Employee will not, without the prior written consent of Kennametal (i) solicit or attempt to hire or assist any other person in any solicitation or attempt to hire any employee of Kennametal, its subsidiaries or affiliates, or (ii) encourage any such employee to terminate his or her employment with Kennametal, its subsidiaries or affiliates.

Employee acknowledges that the breach by him or her of the provisions of this Section 8 would cause irreparable injury to Kennametal, acknowledges and agrees that remedies at law for any such breach will be inadequate and consents and agrees that Kennametal shall be entitled, without the necessity of proof of actual damage, to injunctive relief in any proceedings which may be brought to enforce the provisions of this Section 8. Employee specifically agrees that the limitations as to periods of time and geographic area, as well as all other restrictions on his or her activities specified in Section 8, are reasonable and necessary for the protection of Kennametal, its employees and its affiliates. Employee acknowledges and warrants that he or she will be fully able to earn an adequate livelihood for himself/herself and his or her dependents if this Section 8 should be specifically enforced against her and that such enforcement will not impair her ability to obtain employment commensurate with his or her abilities and fully acceptable to him or her.

If the scope of any restriction contained in this Section 8 is too broad to permit enforcement of such restriction to its full extent, then such restriction shall be enforced to the maximum extent permitted by law and Employee and Kennametal hereby consent and agree that such scope may be judicially modified in any proceeding brought to enforce such restriction.

9. (a) Employee acknowledges and agrees that in the course of his or her employment by Kennametal, Employee may work with, add to, create or acquire trade secrets and confidential information ("Confidential Information") which could include, in whole or in part, information:

(i) of a technical nature such as, but not limited to, Kennametal's manuals, methods, know-how, formulae, shapes, designs, compositions, processes, applications, ideas, improvements, discoveries, inventions, research and development projects, equipment, apparatus, appliances, computer programs, software, systems documentation, special hardware, software development and similar items; or

(ii) of a business nature such as, but not limited to, information about business plans, sources of supply, cost, purchasing, profits, markets, sales, sales volume, sales methods, sales proposals, identity of customers and prospective customers, identity of customers' key purchasing personnel, amount or kind of customers' purchases and other information about customers; or

(iii) pertaining to future developments such as, but not limited to, research and development or future marketing or merchandising.

Employee further acknowledges and agrees that (i) all Confidential Information is the property of Kennametal; (ii) the unauthorized use, misappropriation or disclosure of any Confidential Information would constitute a breach of trust and could cause irreparable injury to Kennametal; and (iii) it is essential to the protection of Kennametal’s goodwill and to the maintenance of its competitive position that all Confidential Information be kept secret and that Employee not disclose any Confidential Information to others or use any Confidential Information to the detriment of Kennametal.

Employee agrees to hold and safeguard all Confidential Information in trust for Kennametal, its successors and assigns and Employee shall not (except as required in the performance of Employee's duties or as otherwise set forth herein), use or disclose or make available to anyone for use outside Kennametal's organization at any time, either during employment with Kennametal or subsequent thereto, any of the Confidential Information, whether or not developed by Employee, without the prior written consent of Kennametal.

Notwithstanding the foregoing, nothing in this Agreement prohibits or interferes with Employee’s right or Kennametal’s right to: (i) initiate communications directly with or report or disclose possible violations of law or regulation to any governmental agency or other governmental entity, legislative body, or to any self-regulatory organization, including but not limited to the Department of Justice, the SEC, the Internal Revenue Service, the Occupational Safety and Health Administration, the Equal Employment Opportunity Commission (“EEOC”), or Congress (collectively, “Governmental Authorities”), and such reports or disclosures do not require prior notice to, or authorization from, Kennametal; or (ii) participate, cooperate, or testify in any action, investigation or proceeding or provide information or respond to any inquiry from any Governmental Authorities, and such communications do not require prior notice to, or authorization from Kennametal. However, with respect to such communications, reports, participation, cooperation or testimony to the Governmental Authorities, as set forth in clauses (i) and (ii) of this paragraph, Employee may not disclose privileged communications with Kennametal’s counsel.

To the extent permitted by law, upon receipt of a subpoena, court order or other legal process compelling the disclosure of any information, Employee will promptly give advance written notice to Kennametal so as to provide Kennametal ample opportunity to protect its interests in confidentiality to the fullest extent possible, unless the subpoena, court order or other legal process pertains to an action described above in clauses (i) or (ii) of the immediately preceding paragraph, in which event no such notice is required. Notwithstanding any confidentiality and non-disclosure obligations Employee may have, he or she is hereby advised as follows pursuant to the Defend Trade Secrets Act: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit alleging retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

Employee understands that nothing contained in this Agreement shall prevent Employee from filing a charge of discrimination with or cooperating or participating in an investigation or proceeding conducted by the EEOC or a similar state agency, and nothing in this Agreement limits Employee's right to receive an award for information provided to the SEC or other Governmental Authorities.

(b) Employee agrees that:

(i) he or she will promptly and fully disclose to Kennametal or such officer or other agent as may be designated by Kennametal any and all inventions made or conceived by Employee (whether made solely by Employee or jointly with others) during employment with Kennametal (1) which are along the line of the business, work or investigations of Kennametal, or (2) which result from or are suggested by any work which Employee may do for or on behalf of Kennametal; and

(ii) he or she will assist Kennametal and its nominees during and subsequent to such employment in every proper way (entirely at its or their expense) to obtain for its or their own benefit patents for such inventions in any and all countries; the said inventions, without further consideration other than such salary as from time to time may be paid to him or her by Kennametal as compensation for his or her services in any capacity, shall be and remain the sole and exclusive property of Kennametal or its nominee whether patented or not; and

(iii) he or she will keep and maintain adequate and current written records of all such inventions, in the form of but not necessarily limited to notes, sketches, drawings, or reports relating thereto, which records shall be and remain the property of and available to Kennametal at all times.

(c) Employee agrees that, promptly upon termination of his or her employment, he or she will disclose to Kennametal, or to such officer or other agent as may be designated by Kennametal, all inventions which have been partly or wholly conceived, invented or developed by for which applications for patents have not been made and shall thereafter execute all such instruments of the character hereinbefore referred to, and will take such steps as may be necessary to secure and assign to Kennametal the exclusive rights in and to such inventions and any patents that may be issued thereon any expense therefor to be borne by Kennametal.

(d) Employee agrees that he or she will not at any time aid in attacking the patentability, scope, or validity of any invention to which the provisions of subparagraphs (b) and (c), above, apply.

10. In the event that (a) Employee institutes any legal action to enforce his or her rights under, or to recover damages for breach of this Agreement, or (b) Kennametal institutes any action to avoid making any payments due to Employee under this Agreement, Employee, if he or she is the prevailing party, shall be entitled to recover from Kennametal any actual expenses for attorney's fees and other disbursements incurred by him or her in relation thereto.

11. Kennametal has the right to assign this Agreement, but Employee does not. This Agreement inures to the benefit of the successors and assigns of Kennametal, which are intended third party beneficiaries of this Agreement. In the event of a merger, consolidation, sale of assets or other business combination in which Kennametal is not the surviving company, this Agreement will be assigned to the surviving or successor company, and any such successor company will be deemed to be substituted for all purposes as Kennametal hereunder.

12. This Agreement constitutes the entire agreement between the parties hereto and supersedes all prior agreements and understandings, whether oral or written, among the parties with respect to the subject matter hereof. This Agreement may not be amended orally, but only by an instrument in writing signed by each of the parties to this Agreement; provided, however, the Corporation may, solely to the extent necessary to comply with Section 409A, modify the terms of this Agreement if it is determined that such terms would subject any payments or benefits hereunder to the additional tax and/or interest assessed under Section 409A. References to sections of statutes, including the Code, contained herein shall mean and include such provisions that succeed such sections to the extent that such successor provisions provide the results intended by the parties under this Agreement.

13. The invalidity or unenforceability of any provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision were omitted.

14. Any pronoun and any variation thereof used in this Agreement shall be deemed to refer to the masculine, feminine, neuter, singular or plural, as the identity of the parties hereto may require.

15. Kennametal shall be entitled as a condition to paying any severance pay or providing any benefits hereunder upon a termination of the Employee's employment to require the Employee to deliver on or before the making of any severance payment or providing of any benefit a release in a form required by Kennametal, substantially similar to that which is set forth in Exhibit A attached hereto. Unless otherwise required by applicable law, the release must be executed and become effective and irrevocable within thirty (30) days of the Employee's Date of Termination.

16. (a) For purposes of this Section 16:

(i) "Accounting Firm" means the accounting firm of national recognized standing selected by the Corporation promptly upon a Change-of-Control;

(ii) "Agreement Payment" shall mean a Payment paid or payable pursuant to this Agreement (disregarding this Section 16);

(iii) "Net After Tax Receipts" shall mean the Present Value of a Payment net of all taxes imposed on the Employee with respect thereto under Sections 1 and 4999 of the Code determined by applying the highest marginal rate under Section 1 of the Code applicable to the Employee's taxable income for such year;

(iv) a "Payment" shall mean any payment or distribution by the Corporation or its subsidiaries and affiliates in the nature of compensation to or for the benefit of the Employee, whether paid or payable pursuant to this Agreement or otherwise;

(v) "Present Value" shall mean such value determined in accordance with Section 280G(d)(4) of the Code; and

(vi) "Reduced Amount" shall mean the greatest aggregate amount of Payments, if any, which (x) is less than the sum of all Payments and (y) results in aggregate Net After Tax Receipts which are greater than the Net After Tax Receipts which would result if the aggregate Payments were made.

(b) Anything in this Agreement to the contrary notwithstanding, in the event that the Accounting Firm shall determine that receipt of all Payments would subject the Employee to tax under Section 4999 of the Code, it shall determine whether some amount of Payments would meet the definition of a "Reduced Amount." If the Accounting Firm determines that there is a Reduced Amount, the aggregate Agreement Payments shall be reduced to such Reduced Amount; provided, however, that if the Reduced Amount exceeds the aggregate Agreement Payments, the aggregate Payments shall, after the reduction of all Agreement Payments, be reduced (but not below zero) in the amount of such excess. The total reduction to the Agreement Payments and such other Payments required under this Section 16 necessary to achieve the “Reduced Amount” shall be made against Agreement Payments and such other Payments that are exempt or otherwise excepted from Section 409A (but excluding stock options and other stock rights). All determinations to be made by the Accounting Firm under this Section 16 shall be binding upon the Corporation and the Employee and shall be made within five (5) days of a Change-of-Control and, in addition, the subsequent occurrence of any event that requires the Corporation to make payments to the Employee under Section 4(c) this Agreement. No later than two (2) business days following the making of any such determination by the Accounting Firm, the Corporation shall pay to or distribute for the benefit of the Employee such Payments when and as due to the Employee under this Agreement or any other Agreement. The Corporation or its successor shall be responsible for the fees, costs and expenses of the Accounting Firm.

(c) While it is the intention of the Corporation and the Employee to reduce the amounts payable or distributable to the Employee hereunder only if the aggregate Net After Tax Receipts to the Employee would thereby be increased, as a result of the uncertainty in the application of Section 4999 of the Code at the time of the initial determination by the Accounting Firm hereunder, it is possible that amounts will have been paid or distributed by the Corporation to or for the benefit of the Employee pursuant to this Agreement which should not have been so paid or distributed ("Overpayments") or that additional amounts which will not have been paid or distributed by the Corporation to or for the benefit of the Employee pursuant to this Agreement could have been so paid or distributed (an "Underpayment"), in each case, consistent with the calculation of the Reduced Amount hereunder. In the event that the Accounting Firm, based either upon the assertion of a deficiency by the Internal Revenue Service against the Corporation or the Employee which the Accounting Firm believes has a high probability of success or controlling precedent or other substantial authority, determines that an Overpayment has been made, any such Overpayment paid or distributed by the Corporation to or for the benefit of the Employee shall be treated for all purposes as a loan *ab initio* to the Employee which the Employee shall repay to the Corporation together with interest at the applicable federal rate provided for in Section 7872(f)(2) of the Code; provided, however, that no such loan shall be deemed to have been made and no amount shall be payable by the Employee to the Corporation if and to the extent such deemed loan and payment would not either reduce the amount on which the Employee is subject to tax under Section 1 and Section 4999 of the Code or generate a refund of such taxes. In the event that the Accounting Firm, based upon controlling precedent or other substantial authority, makes a final determination that an Underpayment has occurred, any such Underpayment shall be promptly paid by the Corporation to or for the benefit of the Employee together with interest at the applicable federal rate provided for in Section 7872(f)(2) of the Code.

17. (a) The provisions of this Agreement will be administered, interpreted and construed in a manner intended to comply with Section 409A, or any exception thereto (or disregarded to the extent such provision cannot be so administered, interpreted, or construed).

(b) For purposes of Section 409A, each severance payment, including each individual installment payment, shall be treated as a separate payment. Each payment under this Agreement is intended to be excepted from Section 409A to the maximum extent provided under Section 409A as follows: (i) each payment made within the applicable 2½ month period specified in Treas. Reg. § 1.409A-1(b)(4) is intended to be excepted under the short-term deferral exception as specified in Treas. Reg. § 1.409A-1(b)(4); (ii) post-termination medical benefits are intended to be excepted under the medical benefits exceptions as specified in Treas. Reg. § 1.409A-1(b)(9)(v)(B); and (iii) to the extent payments are made as a result of an involuntary separation, each payment that is not otherwise excepted under the short-term deferral exception or medical benefits exception is intended to be excepted under the involuntary pay exception as specified in Treas. Reg. § 1.409A-1(b)(9)(iii).

(c) With respect to payments subject to Section 409A (and not excepted therefrom), if any, it is intended that each payment is paid on a permissible distribution event and at a specified time consistent with Section 409A. The Corporation reserves the right to accelerate and/or defer any payment to the extent permitted and consistent with Section 409A. Notwithstanding any provision of this Agreement to the contrary, to the extent that a payment hereunder is subject to Section 409A (and not excepted therefrom) and payable on account of a termination of employment, such payment shall be delayed for a period of six months after the date of termination (or, if earlier, the date of the Employee's death) if the Employee is a "specified employee" (as defined in Section 409A and determined in accordance with the procedures established by the Corporation). Any payment that would otherwise have been due or owing during such 6-month period will be paid on the first business day of the seventh month following the Employee's date of termination (or, if earlier, the date of the Employee's death). The Employee shall have no right to designate the date of any payment under this Agreement. Notwithstanding any provision of this Agreement to the contrary, Employee acknowledges and agrees that the Corporation shall not be liable for, and nothing provided or contained in this Agreement will be construed to obligate or cause the Corporation to be liable for, any tax, interest or penalties imposed on Employee related to or arising with respect to any violation of Section 409A.

18. This Agreement shall be governed by the laws of the Commonwealth of Pennsylvania.

WITNESS the due execution hereto as of the day and year first above written.

KENNAMETAL INC.

By: _____________
Michelle R. Keating
Vice President, Secretary and
General Counsel

Employee:

____
Christopher Rossi
President and Chief Executive Officer

Exhibit A

FORM OF RELEASE
[to be updated at the time of execution
in accordance with then existing law]

TO:

DATE:

For good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound, you hereby release, remise, quitclaim and discharge completely and forever Kennametal Inc. and its directors, officers, employees, subsidiaries and affiliates (collectively, the "Company") from any and all claims, causes of action or rights which you have or may have, whether arising by virtue of contract or of applicable state laws or federal laws, and whether such claims, causes of action or rights are known or unknown, including but not limited to claims relating in any way to compensation and benefits and related to or resulting from your employment with the Company or its termination, claims arising under any public policy or any statutory, tort or common law, or any provision of state, federal or local law including, but not limited to, the Pennsylvania Human Relations Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, Sections 1981-1988 of Title 42 of the U. S. Code, Older Workers' Benefit Protection Act, Family and Medical Leave Act, the Fair Labor Standards Act, Pennsylvania Wage Payment and Collection laws, the Age Discrimination in Employment Act of 1967, the Employee Retirement Income Security Act of 1974, all as amended; *provided, however*, that this Release shall not release, raise, quitclaim or discharge any claims, causes of action or rights which you may have: (i) under that certain Officer's Employment Agreement dated as of [________] [__], 20[__] between the undersigned and Kennametal Inc. (the "Employment Agreement"); (ii) to any unreimbursed expense account or similar out-of-pocket reimbursement amounts owing the undersigned; or (iii) under the bylaws or any agreement of Kennametal Inc. or any subsidiary thereof applicable to you or the applicable state corporate statutes to indemnification for having served as an officer, director and/or employee of Kennametal Inc. and/or its subsidiaries or as a fiduciary of any employee benefit plan applicable to former employees generally.

You hereby agree to immediately return all of the Company's equipment, documents and property, agree to forever waive your right to receive on your or any other person's behalf any monies, benefits, or damages from the Company other than those provided herein or in the Employment Agreement. You also agree to maintain the confidentiality of this Release and not reveal the terms set forth herein to anyone other than your accountant, attorney or spouse.

By signing below, you acknowledge your continuing obligations under the Employment Agreement including, but not limited to, Sections 8-10 thereof.

Your failure to abide by any of the above stated obligations will result in irreparable harm to the Company and entitle the Company to require you to specifically perform your obligations under this Release, recover any damages that may flow from this Agreement and obtain appropriate injunctive relief. Should you file a claim or charge against the Company, you agree that the Company may present this Agreement for purposes of having your claim or charge dismissed.

Any severance payments due to you under the Employment Agreement are conditioned on your execution and non-revocation of this Release.

You should carefully consider the matters outlined in this letter. If, after due deliberation and consultation with lawyers or such professional advisors as you deem appropriate, the above is agreeable to you, please sign the attached copy of this letter and return the original to the Company for my files. Please retain a copy for your own records.

You may take up to twenty-one (21) days to consider this Release. Should you accept this severance offer by signing your name below, you will then have seven (7) days to reconsider your decision. If you choose to revoke your acceptance of this offer you must do so by writing to the Company within the seven (7) day revocation period. No severance payments will be made to you until the seven (7) day revocation period has expired.

AGREED TO AND ACCEPTED BY:

____

Dated:_____________________

Exhibit 31.1

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(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:

   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: November 6, 2018

/s/ Christopher Rossi

Christopher Rossi
President and Chief Executive Officer

Exhibit 31.2

I, Damon J. Audia, 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:

   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: November 6, 2018

/s/ Damon J. Audia

Damon J. Audia
Vice President and Chief Financial Officer

Exhibit 32.1

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 September 30, 2018, 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

November 6, 2018

/s/ Damon J. Audia
Damon J. Audia
Vice President and Chief Financial Officer

November 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.