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

FORM 10-K

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

FOR THE FISCAL YEAR ENDED June 30, 2021
OR

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

For the transition period from _______ to _______
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.)
525 William Penn Place **Suite 3300** **Pittsburgh, Pennsylvania**	**15219**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: **(412) 248-8000**
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Capital Stock, par value $1.25 per share	KMT	New York Stock Exchange
Preferred Stock Purchase Rights		New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None.**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒
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 ☒ 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 ☒ No ☐
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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	☒	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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.☒
Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of December 31, 2020, the aggregate market value of the registrant's Capital Stock held by non-affiliates of the registrant, estimated solely for the purposes of this Form 10-K, was approximately $1,867,500,000. For purposes of the foregoing calculation only, all directors and executive officers of the registrant and each person who may be deemed to own beneficially more than 5% of the registrant's Capital Stock have been deemed affiliates.

As of July 31, 2021, there were 83,615,430 shares of the Registrant's Capital Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE
Portions of the Proxy Statement for the 2021 Annual Meeting of Shareholders are incorporated by reference into Part III.

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FORWARD-LOOKING INFORMATION

Statements and financial discussion and analysis contained herein and in the documents incorporated by reference herein that are not historical facts are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). For example, statements about Kennametal's outlook for earnings, sales volumes, cash flow, and capital expenditures for its fiscal year 2022, its expectations regarding future growth and any statements regarding future operating or financial performance or events are forward-looking. We have also included forward-looking statements in this Annual Report on Form 10-K ("Annual Report") 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. Forward-looking statements are based on management's beliefs, assumptions and estimates using information available to us at the time the statements are made. These statements are not guarantees of future events or performance and are subject to various risks and uncertainties that are difficult to predict. 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: the pace of recovery from the COVID-19 pandemic and its effect on our business operations, financial results and financial position and on the industries in which we operate and the global economy generally and any resurgence of COVID-19 or emergence of COVID-19 variants; other downturns in the business cycle or the economy; our ability to achieve all anticipated benefits from 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; additional tax expenses or exposures; 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 this Annual Report. We can give no assurance that any goal or plan set forth in our forward-looking statements will 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

ITEM 1 - BUSINESS

OVERVIEW Kennametal Inc. (the Company) was founded based on a tungsten carbide technology breakthrough in 1938. The Company was incorporated in Pennsylvania in 1943 as a manufacturer of tungsten carbide metal cutting tooling and was listed on the New York Stock Exchange (NYSE) in 1967. With more than 80 years of materials expertise, the Company is a global industrial technology leader, helping customers across the aerospace, earthworks, energy, general engineering and transportation end markets manufacture with precision and efficiency. This expertise includes the development and application of tungsten carbides, ceramics, super-hard materials and solutions used in metal cutting and extreme wear applications to keep customers up and running longer against conditions such as corrosion and high temperatures.

Our standard and custom product offering spans metal cutting and wear applications including turning, milling, hole making, tooling systems and services, as well as specialized wear components and metallurgical powders. End users of the Company's metal cutting 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. The Company’s wear and metallurgical powders are used by producers and suppliers in equipment-intensive operations such as road construction, mining, quarrying, and oil and gas exploration, refining, production and supply.

Unless otherwise specified, any reference to a “year” refers to our fiscal year ending on June 30. Unless the context requires otherwise, the terms “we,” “our” and “us” refer to Kennametal Inc. and its subsidiaries.

BUSINESS SEGMENT REVIEW The Company operates in two segments: Metal Cutting and Infrastructure. The Company's reportable operating segments have been determined in accordance with the Company's 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. Sales and operating income by segment are presented in Management’s Discussion and Analysis of Financial Condition and Results of Operations set forth in Item 7 of this Annual Report (MD&A). Additional segment data is provided in Note 21 of our consolidated financial statements set forth in Item 8 of this Annual Report.

METAL CUTTING The Metal Cutting segment develops and manufactures high performance tooling and metal cutting products and services and offers an assortment of standard and custom metal cutting solutions to diverse end markets, including aerospace, general engineering, energy and transportation. The products include milling, hole making, turning, threading and toolmaking systems used in the manufacture of airframes, aero engines, trucks and automobiles, ships and various types of industrial equipment. We leverage advanced manufacturing capabilities in combination with varying levels of customization to solve our customers’ toughest challenges and deliver improved productivity for a wide range of applications. Metal Cutting markets its products under the Kennametal®, WIDIA®, WIDIA Hanita® and WIDIA GTD® brands through its direct sales force, a network of independent and national 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.

INFRASTRUCTURE Our Infrastructure segment produces engineered tungsten carbide and ceramic components, earth-cutting tools, and advanced metallurgical powders, primarily for the energy, earthworks and general engineering end markets. These wear-resistant products include compacts, nozzles, frac seats and custom components used in oil and gas and petrochemical industries; rod blanks and abrasive water jet nozzles for general industries; earth cutting tools and systems used in underground mining, trenching and foundation drilling and road milling; tungsten carbide powders for the oil and gas, aerospace and process industries; and ceramics used by the packaging industry for metallization of films and papers. We combine deep metallurgical and engineering expertise with advanced manufacturing capabilities to deliver solutions that drive improved productivity for our customers. Infrastructure markets its products primarily under the Kennametal® brand and sells through a direct sales force as well as through distributors.

INTERNATIONAL OPERATIONS During 2021, we generated 62 percent of our consolidated sales in markets outside of the United States of America (U.S.), with principal international operations in Western Europe, China and India. We also operate manufacturing and distribution facilities in Israel, Latin America and South Africa, while serving customers through sales offices, agents and distributors in Eastern Europe and other parts of the world. While geographic diversification helps to minimize the sales and earnings effect of demand changes in any one particular region, our international operations are subject to normal risks of doing business globally, including fluctuations in currency exchange rates and changes in social, political and economic environments.

Our international assets and sales are presented in Note 21 of the Company's consolidated financial statements, set forth in Item 8 of this Annual Report. Further information about the effects and risks of currency exchange rates are presented in the Quantitative and Qualitative Disclosures About Market Risk section, set forth in Item 7A of this Annual Report.

STRATEGY AND GENERAL DEVELOPMENT OF BUSINESS We continued to make progress on our growth and simplification/modernization initiatives in the following areas in fiscal 2021.

Growth

- Began repositioning the WIDIA product portfolio to target the Fit-for-Purpose tooling market, thereby increasing our served market by an estimated 40 percent.
- We launched 11 new product families; including KYK10™, our first new shapeable ceramic inserts for cast iron machining; ALUFLASH™ solid carbide endmills for aluminum and Stellite 21 AM™ powder for 3D printing.

Simplification/modernization

- Substantially completed the capital investment and restructuring from simplification/modernization, generating total savings of approximately $186 million.
- Completed six facility consolidations since fiscal 2017, delivering our footprint rationalization target.

Operational results in 2021 reflected the challenging macroeconomic environment caused by the Coronavirus Disease 2019 (COVID-19) pandemic. Sales in 2021 of $1,841.4 million decreased from $1,885.3 million in 2020, reflecting a 2 percent decrease of which 4 percent was due to organic sales decline, partially offset by 2 percent from favorable currency exchange effect.

ACQUISITIONS AND DIVESTITURES We continually evaluate new opportunities to expand existing product lines into new market areas, and to introduce new and/or complementary product offerings into new or existing areas where appropriate. In the near term, we expect to continue to grow our business and further enhance our market position through the investment opportunities that exist within our core businesses, though we may evaluate acquisition opportunities that have the potential to strengthen or expand our business.

RAW MATERIALS AND SUPPLIES Our major metallurgical raw materials consist of tungsten ore concentrates and scrap carbide, which are used to make tungsten oxide, as well as compounds and secondary materials such as cobalt. Although an adequate supply of these raw materials currently exists, our major sources for raw materials are located abroad and prices fluctuate at times. We exercise great care in selecting, purchasing and managing the availability of raw materials utilizing a mix of long-term supply agreements coupled with spot purchases. Additionally, our internal tungsten recycling capability provides us access to additional sources of tungsten, and therefore, helps to mitigate our reliance on third parties. We also purchase steel bars and forgings for making toolholders and other tool parts, as well as for producing mining tools, rotary cutting tools and accessories. We purchase products for use in manufacturing processes and for resale from thousands of suppliers located in the U.S. and abroad.

RESEARCH AND DEVELOPMENT (R&D) Our R&D efforts focus on delivering innovations to our customers from both new product and process technology development. New product development provides solutions to our customers' manufacturing challenges and productivity requirements. New process technology is developed and implemented in-house as part of our simplification/modernization efforts to enhance product quality and efficiency at our plant sites. We use a disciplined framework, and have established "gates," or sequential tests to remove inefficiencies and accelerate commercial success. This framework is designed to accelerate and streamline development into a series of actions and decision points, integrating resource tasks to implement new and enhanced products and process technologies faster. It is designed to ensure a strong linkage between verified customer requirements and corporate strategy, and to enable us to gain the full benefits of our investment in development work.

We hold a number of patents and trademarks which, in the aggregate, are material to the operation of our businesses. The duration of our patent protection varies throughout the world by jurisdiction.

SEASONALITY Our business is affected by seasonal variations to varying degrees by traditional summer vacation shutdowns of customers' plants and holiday shutdowns that affect our sales levels during the first and second quarters of our fiscal year.

BACKLOG Our backlog of orders generally is not significant to our operations.

COMPETITION As one of the world’s leading producers of tooling and metal cutting products, specialty wear-resistant components and ceramics, earth cutting tools and advanced metallurgical powders, we maintain a leading competitive position in major markets worldwide. We actively compete in the sale of all our products with several large global competitors and with many smaller niche businesses offering various capabilities to customers around the world. While several of our competitors are divisions of larger corporations, our industry remains largely fragmented, containing several hundred fabricators, toolmakers and niche specialty coating businesses. Many of our competitors operate relatively small facilities, producing a limited selection of tools while buying cemented tungsten carbide components from original producers of cemented tungsten carbide products, including Kennametal. We also supply coating solutions and other engineered wear-resistant products to both larger corporations and smaller niche businesses. Given the fragmentation, opportunities for consolidation exist from both U.S.-based and internationally-based firms, as well as among thousands of industrial supply distributors.

The principal competitive differentiators in our businesses include customer focused support and application expertise, custom and standard product innovation, product performance and quality and our brand recognition. We derive competitive advantage from our premium brand positions, global presence, application expertise and ability to address unique customer needs with new and improved tools, innovative surface and wear-resistant solutions, highly engineered components, consistent quality, traditional and digital customer service and technical assistance capabilities, state-of-the-art manufacturing and multiple sales channels. With these strengths, we are able to sell products based on the value-added productivity we deliver to our customers, rather than competing solely on price.

REGULATION From time to time, we are a 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 assets. While we currently believe that the amount of ultimate liability, if any, we may face with respect to these actions will not materially affect our financial position, results of operations or liquidity, the ultimate outcome of any litigation is uncertain. Were an unfavorable outcome to occur or if protracted litigation were to ensue, the effect on us could be material.

Compliance with government laws and regulations pertaining to the discharge of materials or pollutants into the environment or otherwise relating to the protection of the environment did not have a material effect on our capital expenditures or competitive position for the years covered by this Annual Report, nor is such compliance expected to have a material effect on us in the future.

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 sites associated with our current or former operations.

We establish and maintain accruals for certain potential environmental obligations. At June 30, 2021 and 2020, the balances of these accruals were $14.7 million and $15.6 million, respectively. These accruals represent anticipated costs associated with the remediation of these issues and are generally not discounted.

The accruals we have established for environmental obligations represent our best current estimate of the probable and reasonably estimable costs of addressing 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 accruals currently appear to be sufficient to cover these environmental obligations, 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 recorded and unrecorded 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.

Among other environmental laws, we are subject to the Comprehensive Environmental Response Compensation and Liability Act of 1980, under which we have been identified by the USEPA or other third party as a PRP with respect to environmental remedial costs at certain sites. We have evaluated our claims and potential liability associated with these sites based upon the best information currently available to us. We believe our environmental accruals will be adequate to cover our portion of the environmental remedial costs at those sites where we have been designated a PRP, to the extent these expenses are probable and reasonably estimable.

HUMAN CAPITAL RESOURCES

Employee Profile

We employed 8,635 people at June 30, 2021, of which approximately 2,900 were located in the U.S. and 5,700 were located in other parts of the world, principally Germany, India and China. At June 30, 2021, approximately 2,200 of our employees were represented by labor unions. We consider our labor relations to be generally good.

Diversity and Inclusion

We value diversity in all forms and are fully committed to inclusion in the workplace.

In fiscal 2021, we developed a robust strategy and supporting infrastructure to elevate and advance diversity and inclusion (D&I) across our global organization and instill accountability for our performance. The enhanced D&I strategy focuses on four strategic pillars – awareness, acquisition, development and community. To drive action and accountability, each pillar is led by a senior Kennametal executive who is known as an accountability partner and is responsible for developing strategic initiatives in partnership with our People & Culture team. While the pandemic presented challenges to fully implementing the strategy in fiscal 2021, we made strides in each pillar.

Our new Global Inclusion Council, which consists of cross-functional global leaders, champions the strategic initiatives and provides guidance and support. Four regional inclusion councils covering the Americas, Asia Pacific, EMEA and India execute the strategies and provide a global perspective.

During the fiscal year, our senior leaders went through inclusive leadership training, with topics covering shared awareness, unconscious bias and accountability, to further strengthen their skillsets and underscore their commitment to D&I.

Number of Employees

	Female		Male		
As of June 30	Number	Percent	Number	Percent	Total
2021	1,485	17.2 %	7,150	82.8 %	8,635
2020	1,537	17.1 %	7,452	82.9 %	8,989

Women in Leadership Roles (in percentages)

As of June 30	Board of Directors	Executive	Leadership	Senior Management
2021	22.2 %	42.9 %	24.0 %	11.5 %
2020	22.2 %	30.0 %	26.1 %	10.6 %

Health and Safety

Safety, including the health of our employees, is one of our core values and a priority across our global operations. We are committed to developing a world-class health and safety culture to target zero injuries and illnesses. Our health and safety strategy is designed to focus all employees on proactively identifying, mitigating and eliminating high-risk conditions that could result in a serious injury or fatality. The strategy consists of three pillars – fatality and serious injury (FSI) prevention, incident prevention, and leadership development and compliance culture.

Our recordable cases and total recordable incident rate (TRIR) decreased to 0.37 in fiscal 2021 compared to 0.42 in fiscal 2020. In fiscal 2021, we achieved a 12 percent reduction in our TRIR compared to the prior fiscal year.

A primary goal in fiscal 2021 remained keeping our employees and their families safe from COVID-19 while meeting the needs of our customers. We enforced strict and comprehensive COVID-19 protocols and processes, including:

- Social distancing;
- Face coverings;
- Enhanced disinfecting and cleaning regimens;
- Quarantining and contact tracing;
- Limited site visitors;
- Work-from-home requirement for non-essential employees; and
- Restricted travel.

In March 2021, we launched the *Give 75% a Shot* campaign to encourage at least 75 percent of our employees to be vaccinated voluntarily. Where we are legally allowed to do so, employees at any location that reach the 75 percent target will be provided with an incentive in the form of award points that are part of our existing reward and recognition program. These points can be redeemed for merchandise or gift certificates of an employee’s choosing. At the end of fiscal 2021, 53 percent of eligible employees self-reported that they were in some stage of the vaccination process, while six of our sites had reached the 75 percent vaccination target. We will continue our efforts to encourage employees to get vaccinated in fiscal 2022.

Employee Development and Training

For the Company to grow, our employees must grow and develop continuously. We offer learning and development opportunities for all employees. In fiscal 2021, this included training for senior, mid-level and emerging leaders in role- and function-specific skills, such as project management, process improvement and sales effectiveness. We also offered our operational employees technical training through the Kennametal Knowledge Center.

Supporting our learning and development efforts is our new OneTeam learning management system. Available in multiple languages, OneTeam offers more than 2,800 online courses in an easy-to-use interface. Our employees completed 12,890 hours of training using the system in fiscal 2021.

We also initiated a comprehensive overhaul of our development programs, with the new approach focusing on the following:

- Individual development;
- Leadership development;
- Business- and operations-focused content;
- Sales-focused content; and
- Diversity and inclusion content.

Employee Engagement

We conducted an employee engagement survey in September 2020, achieving a 70 percent response rate. Our overall average engagement score was 64, with a percent favorable result of 55 percent. The latter was down six percentage points from our prior survey in 2018. We expected a lower score this year given the level of uncertainty and changes that we were experiencing from the COVID-19 pandemic.

As a follow-up to the survey, targeted action plans were put in place focusing on one or two important team engagement goals, and we conducted three short pulse surveys during fiscal 2021 to check on progress. In June 2021, we conducted a second full employee engagement survey to gauge overall progress in employee engagement. With a response rate of 74 percent, the June survey indicated that we continue to make progress in employee engagement, with the average engagement score increasing to 66, while our percent favorable increased to 58 percent.

AVAILABLE INFORMATION Our internet address is www.kennametal.com. On the SEC Filings page of our Website, which is accessible under the "About Us" tab, under Investor Relations, we post the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission (SEC): our annual reports on Form 10-K, our annual proxy statements, our annual conflict minerals disclosure and reports on Form SD, our annual reports on Form 11-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. The SEC Filings page of our Website also includes Forms 3, 4 and 5 filed pursuant to Section 16(a) of the Exchange Act. All filings posted on our SEC Filings page are available to be viewed on our Website free of charge. On the Corporate Governance page of our Website, which is accessible under the "About Us" tab, under Investor Relations, we post the following charters and guidelines: Audit Committee Charter, Compensation Committee Charter, Nominating/Corporate Governance Committee Charter, Kennametal Inc. Corporate Governance Guidelines and Kennametal Inc. Stock Ownership Guidelines. On the Ethics and Compliance page of our Website, which is under the "About Us" tab, we post our Code of Conduct. All charters and guidelines posted on our Website are available to be viewed free of charge. Information contained on our Website is not part of this Annual Report or our other filings with the SEC. Copies of this Annual Report and those items disclosed on the Corporate Governance and Ethics and Compliance pages of our Website are available without charge upon written request to: Investor Relations, Kennametal Inc., 525 William Penn Place, Suite 3300, Pittsburgh, Pennsylvania 15219-2706. The SEC maintains an internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers, including Kennametal that file electronically with the SEC.

RISK FACTORS

This section describes material risks to our business that are currently known to us. Our business, financial condition or results of operations may be materially affected by a number of factors. Our management regularly monitors the risks inherent in our business, with input from our Enterprise Risk Management process. In addition to real time monitoring, we periodically conduct a formal enterprise-wide risk assessment to identify factors and circumstances that might present significant risk to the Company. Many of these risks are discussed throughout this report. The risks below, however, are not exhaustive. We operate in a rapidly changing environment. Other risks that we currently believe to be immaterial could become material in the future. We are also subject to legal and regulatory changes. New factors could emerge, and it is not possible to predict the outcome of all such risk factors on our business, financial condition or results of operations. The following discussion details the material risk factors and uncertainties that we believe could cause Kennametal’s actual results to differ materially from those projected in any forward-looking statements.

Global Operational Risks:

Public health threats or outbreaks of communicable diseases could have a material adverse effect on our operations and financial results. We face risks related to public health threats or outbreaks of communicable diseases. A widespread healthcare crisis, such as an outbreak of a communicable disease could adversely affect the global economy and our business, our suppliers and our customers’ ability to conduct business for an indefinite period of time. For example, the ongoing global Coronavirus Disease 2019 (COVID-19) pandemic, has negatively affected the global economy, disrupted financial markets and international trade, resulted in increased unemployment levels and significantly affected global supply chains, all of which have and are expected to continue to affect our end markets. Federal, state, and local governments have implemented various mitigation measures at various times since the pandemic began, including travel restrictions, border closings, restrictions on public gatherings, shelter-in-place restrictions and limitations on non-essential business. Some jurisdictions have relaxed these measures, while others have not or have reinstated them as COVID-19 cases surge and variants emerge. Although we are considered an essential business in most jurisdictions, some of these actions have adversely affected the ability of our employees, contractors, suppliers, customers, and other business partners to conduct business activities, and could continue to do so for an indefinite period of time. It is not possible to accurately predict with any degree of certainty the impact COVID-19 will have on our operations going forward as the situation continues to remain fluid, including, but not limited to, the pace of the continued spread of the pandemic, the severity and ultimate duration of the pandemic, including any resurgences, mutations or variants, any governmental regulations or restrictions imposed in response to such, and the ultimate efficacy and distribution speed of approved vaccines and treatments. This could have a material adverse effect on our results of operations, financial condition, and liquidity. In particular, the continued spread of COVID-19 and variants and efforts to contain the virus could:

- continue to affect customer demand across our end markets and geographical regions;
- affect our ability to conduct business in certain jurisdictions in which we operate where nationwide, regional or local lockdowns are currently implemented or may be implemented in the future;
- cause us to experience an increase in costs as a result of the emergency measures we have taken, delayed payments from customers and uncollectible accounts;
- cause delays and disruptions in our supply chain resulting in disruptions in the commencement dates of certain planned projects;
- affect the availability of qualified personnel;
- affect our ability to fund operations and maintain covenant compliance;
- affect our access to financial markets;
- affect our ability to accurately forecast; and
- cause other unpredictable events.

The global situation surrounding COVID-19 remains uncertain. The COVID-19 pandemic has negatively affected our business operations, financial results and financial position and the industries in which we operate. The extent to which the COVID-19 pandemic may affect our business, operating results, financial condition, or liquidity in the future will depend on future developments, including the duration of the outbreak, the emergence of more contagious or virulent strains of the virus, travel restrictions, business and workforce disruptions, the availability, uptake and efficacy of vaccines, and the effectiveness of actions taken to contain and treat the disease.

Downturns in the business cycle could adversely affect our sales and profitability. Our business has historically been cyclical and subject to significant effect from economic downturns. Global economic downturns coupled with global financial and credit market disruptions have had a negative effect on our sales and profitability historically. These events could contribute to weak end markets, a sharp drop in demand for our products and services and higher costs of borrowing and/or diminished credit availability. Although we believe that the long-term prospects for our business remain positive, we are unable to predict the future course of industry variables or the strength and pace or sustainability of economic development.

Our international operations pose certain risks that may adversely affect sales and earnings. We have manufacturing operations and assets located outside of the U.S., including but not limited to those in Western Europe, Brazil, Canada, China, India, Israel and South Africa. We also sell our products to customers and distributors located outside of the U.S. During the year ended June 30, 2021, 62 percent of our consolidated sales were derived from non-U.S. markets. These international operations are subject to a number of special risks, in addition to the risks of our domestic operations, including currency exchange rate fluctuations, differing protections of intellectual property, trade barriers, exchange controls, regional economic uncertainty, overlap of different tax regimens, differing (and possibly more stringent) labor regulations, labor unrest, risk of governmental expropriation, domestic and foreign customs and tariffs, current and changing regulatory environments (including, but not limited to, the risks associated with the importation and exportation of products and raw materials), risk of failure of our foreign employees to comply with both U.S. and foreign laws, including antitrust laws, trade regulations and the Foreign Corrupt Practices Act, difficulty in obtaining distribution support, difficulty in staffing and managing widespread operations, differences in the availability and terms of financing, social and political instability and unrest and risks of increased taxes and/or adverse tax consequences. Also, in some foreign jurisdictions, we may be subject to laws limiting the right and ability of entities organized or operating therein to pay dividends or remit earnings to affiliated companies unless specified conditions are met. To the extent we are unable to effectively manage our international operations and these risks, our international sales may be adversely affected, we may be subject to additional and unanticipated costs, and we may be subject to litigation or regulatory action. As a consequence, our business, financial condition and results of operations could be seriously harmed.

Additional tax expense or exposures could affect our financial condition and results of operations. We are subject to various taxes in the U.S. and numerous other jurisdictions. Our future results of operations could be adversely affected by changes in our effective tax rate as a result of a change in the mix of earnings between U.S. and non-U.S. jurisdictions or among jurisdictions with differing statutory tax rates, changes in tax laws or treaties or in their application or interpretation, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings indefinitely reinvested in certain non-U.S. jurisdictions, and the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures.

Implementation of tariffs and changes to or uncertainties related to tariffs and trade agreements could adversely affect our business. The U.S. government has imposed tariffs on certain foreign goods from a variety of countries and regions, most notably China, that it perceives as engaging in unfair trade practices, and previously raised the possibility of imposing significant, additional tariff increases or expanding the tariffs to capture other types of goods from other countries. In response, many of these foreign governments have imposed retaliatory tariffs on goods that their countries import from the U.S. Uncertainties with respect to tariffs, trade agreements or any potential trade wars could negatively affect the global economy and could affect demand for our products and could have a material adverse effect on our financial condition, results of operations and cash flows. Changes in tariffs and trade barriers could also result in adverse changes in the cost and availability of our raw materials, and our ability to manufacture globally to support global sales which could lead to increased costs that we may not be able to effectively pass on to customers, each of which could materially adversely affect our operating margins, results of operations and cash flows.

Natural disasters or other global or regional catastrophic events could disrupt our operations and adversely affect results. Despite our concerted effort to minimize risk to our production capabilities and corporate information systems and to reduce the effect of unforeseen interruptions to us through business continuity planning, we still may be exposed to interruptions due to catastrophe, natural disaster, pandemic, terrorism or acts of war, which are beyond our control. Disruptions to our facilities or systems, or to those of our key suppliers, could also interrupt operational processes and adversely affect our ability to manufacture our products and provide services and support to our customers. As a result, our business, our results of operations, financial position, cash flows and stock price could be adversely affected.

Changes in the regulatory environment, including environmental, health and safety regulations, could subject us to increased compliance and manufacturing costs, which could have a material adverse effect on our business.

Health and Safety Regulations. Certain of our products contain hard metals, including tungsten and cobalt. Hard metal dust is being studied for potential adverse health effects by organizations in several regions throughout the world, including the U.S., Europe and Japan. Future studies on the health effects of hard metals may result in our products being classified as hazardous to human health, which could lead to new regulations in countries in which we operate that may restrict or prohibit the use of, and/or exposure to, hard metal dust. New regulation of hard metals could require us to change our operations, and these changes could affect the quality of our products and materially increase our costs.

Environmental Regulations. We are subject to various environmental laws, and any violation of, or our liabilities under, these laws could adversely affect us. Our operations necessitate the use and handling of hazardous materials and, as a result, we are subject to various federal, state, local and foreign laws, regulations and ordinances relating to the protection of the environment, including those governing discharges to air and water, handling and disposal practices for solid and hazardous wastes, the cleanup of contaminated sites and the maintenance of a safe workplace. These laws impose penalties, fines and other sanctions for noncompliance and liability for response costs, property damages and personal injury resulting from past and current spills, disposals or other releases of, or exposure to, hazardous materials. We could incur substantial costs as a result of noncompliance with or liability for cleanup or other costs or damages under these laws. We may be subject to more stringent environmental laws in the future. If more stringent environmental laws are enacted in the future, these laws could have a material adverse effect on our business, financial condition and results of operations.

Regulations affecting the mining and drilling industries, utilities industry or the use of fossil fuels. Some of our principal customers are mining and drilling companies that supply coal, oil, gas or other fuels as a source of energy to utility companies or for transportation. The operations of these mining and drilling companies are geographically diverse and are subject to or affected by a wide array of regulations in the jurisdictions where they operate. As a result of changes in regulations and laws relating to these industries, including, without limitation, actions to limit or reduce greenhouse gas emissions from the use of fossil fuels, our customers' operations could be disrupted or curtailed by governmental authorities. The high cost of compliance with these regulations may also induce customers to discontinue or limit their operations and may discourage companies from developing new opportunities. As a result of these factors, demand for our mining- and drilling-related products could be substantially affected by regulations adversely affecting the mining and drilling industries or altering the fuel choices of utilities or in transportation. Our principal customers also include transportation original equipment manufacturers and tier suppliers engaged in the production of internal combustion engines. As a result of breakthrough technologies, changing consumer preferences or regulations designed to limit or reduce greenhouse gas emissions from the use of fossil fuels in transportation, demand for our products could be negatively affected.

Product liability claims could have a material adverse effect on our business. The sale of metal cutting, mining, highway construction and other tools and related products as well as engineered components and advanced materials entails an inherent risk of product liability claims. We cannot give any assurances that the coverage limits of our insurance policies will be adequate or that our policies will cover any particular loss. Insurance can be expensive, and we may not always be able to purchase insurance on commercially acceptable terms, if at all. Claims brought against us that are not covered by insurance or that result in recoveries in excess of our insurance coverage could have a material adverse effect on our business, financial condition and results of operations.

Business Strategy Risks:

Our restructuring efforts may not have the intended effects. We are implementing restructuring and other actions to reduce structural costs, improve operational efficiency and position the Company for long-term profitable growth. However, there is no assurance that these efforts, or that any other actions that we have taken or may take in the future, will be sufficient to counter any future economic or industry disruptions. We cannot provide assurance that we will not incur additional restructuring charges or impairment charges, or that we will achieve all of the anticipated benefits from the restructuring actions we have taken, are taking now, or plan to take in the future. If we are unable to effectively restructure our operations in light of evolving market conditions, it could have a material adverse effect on our business, financial condition, results of operations and cash flows

We may not be able to complete, manage or integrate acquisitions successfully. We have acquired companies in the past and we may continue to evaluate acquisition opportunities that have the potential strengthen or expand our business. We can give no assurances, however, that any acquisition opportunities will arise or if they do, that they will be consummated, or that additional financing, if needed, will be available on satisfactory terms. In addition, acquisitions involve inherent risks that the businesses acquired will not perform in accordance with our expectations. We may not be able to achieve the synergies and other benefits we expect from the integration of acquisitions as successfully or rapidly as projected, if at all. Our failure to consummate an acquisition or effectively integrate newly acquired operations could prevent us from realizing our expected strategic growth and rate of return on an acquired business and could have a material and adverse effect on our results of operations and financial condition.

Impairment of goodwill and other intangible assets with indefinite lives could result in a negative effect on our financial condition and results of operations. At June 30, 2021, goodwill and other indefinite-lived intangible assets totaled $289.4 million, or 11 percent of our total assets. Goodwill results from acquisitions, representing the excess of cost over the fair value of the net tangible and other identifiable intangible assets we have acquired. We assess at least annually whether there has been impairment in the value of our goodwill and indefinite-lived intangible asset. If future operating performance at one or more of our reporting units were to fall significantly below current levels, we could record, under current applicable accounting rules, a non-cash impairment charge for goodwill or other intangible asset impairment. Any determination requiring the impairment of a significant portion of goodwill or other intangible assets would negatively affect our financial condition and results of operations.

Our continued success depends on our ability to protect and defend our intellectual property. Our future success depends in part upon our ability to protect and defend our intellectual property. We rely principally on nondisclosure agreements and other contractual arrangements and trade secret laws and, to a lesser extent, trademark and patent laws, to protect our intellectual property. However, these measures may be inadequate to protect our intellectual property from infringement by others or prevent misappropriation of our proprietary rights. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as do U.S. laws. If one of our patents is infringed upon by a third party, we may need to devote significant time and financial resources to defend our rights with respect to such patent. We may not be successful in defending our patents. Similarly, while we do not knowingly infringe on the patents, copyrights or other intellectual property rights of others, we may be required to spend a significant amount of time and financial resources to resolve any infringement claims against us, and we may not be successful in defending our position or negotiating alternative remedies. Our inability to protect our proprietary information and enforce or defend our intellectual property rights in proceedings initiated by us or brought against us could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to retain our qualified management and employees, our business may be negatively affected. Our ability to provide high quality products and services depends in part on our ability to retain our skilled personnel in the areas of management, product engineering, servicing and sales. Competition for such personnel is intense, and our competitors can be expected to attempt to hire our management and skilled employees from time to time. In addition, our restructuring activities and strategies for growth have placed, and are expected to continue to place, increased demands on our management's skills and resources. If we are unable to retain our management team and professional personnel, our customer relationships and level of technical expertise could be negatively affected, which may materially and adversely affect our business.

Any interruption of our workforce, including interruptions due to our restructuring initiatives, unionization efforts, changes in labor relations or shortages of appropriately skilled individuals could affect our business.

We operate in a highly competitive environment. Our domestic and foreign operations are subject to significant competitive pressures. We compete directly and indirectly with other manufacturers and suppliers of metal cutting tools, engineered components and advanced materials. Some of our competitors are larger than we are and may have greater access to financial resources or be less leveraged than us. In addition, the industry in which our products are used is a large, fragmented industry that is highly competitive.

Cybersecurity Risks:

Failure of, or a breach in security of, our information technology systems could adversely affect our business. We rely on information technology infrastructure to achieve our business objectives. Any disruption of our infrastructure could negatively affect our ability to record or process orders, manufacture and ship in a timely manner, or otherwise carry on business in the normal course. Any disruption could cause us to lose customers or revenue and could require us to incur significant expense to remediate.

Increased global information technology threats, vulnerabilities, and a rise in sophisticated and targeted international computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. A security breach of our information technology systems could interrupt or damage our operations or harm our reputation. In addition, we could be subject to liability if confidential information relating to customers, employees, vendors and the extended supply chain or other parties is misappropriated from our computer system. We do not believe we have been the target of a material successful cyber attack. While we have dedicated increased resources to fortify our security measures, our systems may be vulnerable to physical break-ins, computer viruses, human error, programming errors or similar disruptive problems. Therefore, we cannot assure that our system improvements will be sufficient to prevent or limit the damage from any cyber attack or network disruption.

Raw Material Risks:

Our future operating results may be affected by fluctuations in the prices and availability of raw materials. The raw materials we use for our products include tungsten ore concentrates and scrap carbide, which are used to make tungsten oxide, as well as compounds and secondary materials such as cobalt. A significant portion of our raw materials is supplied by sources outside of the U.S. The raw materials extraction industry is highly cyclical and at times pricing and supply can be volatile due to a number of factors beyond our control, including natural disasters, pandemics or public health issues, general economic and political conditions, labor costs, competition, import duties, tariffs and currency exchange rate fluctuations. This volatility can significantly affect our raw material costs. In an environment of increasing raw material prices, competitive conditions can affect how much of these price increases we can recover in the form of higher sales prices for our products. To the extent we are unable to pass on any raw material price increases to our customers, our profitability could be adversely affected. Furthermore, restrictions in the supply of tungsten, cobalt and other raw materials could adversely affect our operating results. If the prices for our raw materials increase or we are unable to secure adequate supplies of raw materials on favorable terms, our profitability could be impaired. If the prices for our raw materials decrease, we could face product pricing challenges.

Capital and Credit-Related Risks:

Restrictions contained in our revolving credit facility and other debt agreements may limit our ability to incur additional indebtedness. Our existing revolving credit facility and other debt agreements (each a "Debt Facility" and collectively, "Debt Facilities") contain restrictive covenants, including restrictions on our ability to incur indebtedness. These restrictions could limit our ability to effectuate future acquisitions, limit our ability to pay dividends, limit our ability to make capital expenditures or restrict our financial flexibility. Our revolving credit facility contains covenants requiring us to achieve certain financial and operating results and maintain compliance with specified financial ratios. Our ability to meet the financial covenants or requirements in our revolving credit facility may be affected by events beyond our control, and we may not be able to satisfy such covenants and requirements. A breach of these covenants or our inability to comply with the financial ratios, tests or other restrictions contained in a Debt Facility could result in an event of default under one or more of our other Debt Facilities. Upon the occurrence of an event of default under a Debt Facility, and the expiration of any grace periods, the lenders could elect to declare all amounts outstanding under one or more of our other Debt Facilities, together with accrued interest, to be immediately due and payable. If this were to occur, our assets may not be sufficient to fully repay the amounts due under our Debt Facilities or our other indebtedness.

ITEM 1B – UNRESOLVED STAFF COMMENTS

None.

ITEM 2 – PROPERTIES

Our principal executive offices are located at 525 William Penn Place, Suite 3300, Pittsburgh, Pennsylvania, 15219. Our corporate and technology center is located at 1600 Technology Way, P.O. Box 231, Latrobe, Pennsylvania, 15650. A summary of our principal manufacturing facilities and other materially important properties is as follows:

			Primary Segment	
Location	**Owned/Leased**	**Principal Products**	**MC(1)**	**INF(2)**
United States:				
Gurley, Alabama	Owned	Metallurgical Powders		X
Huntsville, Alabama	Owned	Metallurgical Powders		X
Rogers, Arkansas	Owned/Leased	Carbide Products, Pelletizing Die Plates and Downhole Drilling Carbide Components		X
Goshen, Indiana	Leased	Powders; Welding Rods, Wires and Machines		X
New Albany, Indiana	Leased	High Wear Coating for Steel Parts		X
Greenfield, Massachusetts	Owned	High-Speed Steel Taps	X	
Traverse City, Michigan	Owned	Wear Parts		X
Fallon, Nevada	Owned	Metallurgical Powders		X
Asheboro, North Carolina	Owned	Carbide Round Tools	X	
Henderson, North Carolina	Owned	Metallurgical Powders		X
Roanoke Rapids, North Carolina	Owned	Metal Cutting Inserts	X	
Cleveland, Ohio	Leased	Distribution	X	
Orwell, Ohio	Owned	Metal Cutting Inserts	X	
Solon, Ohio	Owned	Metal Cutting Toolholders	X	

Location	Owned/Leased	Principal Products	Primary Segment MC[1]	INF[2]
Whitehouse, Ohio	Owned/Leased	Metal Cutting Inserts and Round Tools	X	
Bedford, Pennsylvania	Owned/Leased	Mining and Construction Tools, Wear Parts and Distribution		X
La Vergne, Tennessee	Owned	Metal Cutting Inserts	X	
New Market, Virginia	Owned	Metal Cutting Toolholders	X	
International:				
La Paz, Bolivia	Owned	Tungsten Concentrate		X
Indaiatuba, Brazil	Leased	Metal Cutting Carbide Drills and Toolholders	X	
Belleville, Canada	Owned	Casting Components, Coatings and Powder Metallurgy Components		X
Victoria, Canada	Owned	Wear Parts		X
Fengpu, China	Owned	Intermetallic Composite Ceramic Powders and Parts		X
Shanghai, China	Owned	Powders, Welding Rods and Wires and Cast Components		X
Shanghai, China	Leased	Distribution	X	
Tianjin, China	Owned	Metal Cutting Inserts, Carbide Round Tools and Metallurgical Powders	X	X
Xuzhou, China	Leased	Mining Tools		X
Ebermannstadt, Germany	Owned	Metal Cutting Inserts	X	
Essen, Germany	Owned/Leased	Metal Cutting Inserts	X	
Königsee, Germany	Leased	Metal Cutting Carbide Drills	X	
Mistelgau, Germany	Owned	Wear Parts and Metallurgical Powders		X
Nabburg, Germany	Owned	Metal Cutting Toolholders and Metal Cutting Round Tools, Drills and Mills	X	
Schongau, Germany	Owned	Ceramic Vaporizer Boats		X
Vohenstrauss, Germany	Owned	Metal Cutting Carbide Drills	X	
Bangalore, India	Owned	Metal Cutting Inserts, Toolholders and Wear Parts	X	X
Shlomi, Israel	Owned	High-Speed Steel and Carbide Round Tools	X	
Zory, Poland	Leased	Metal Cutting Carbide Drills	X	
Boksburg, South Africa	Leased	Mining and Construction Conicals		X
Barcelona, Spain	Leased	Metal Cutting Tools	X	
Kingswinford, United Kingdom	Leased	Distribution	X	
Newport, United Kingdom	Owned	Intermetallic Composite Powders		X

(1) Metal Cutting segment

(2) Infrastructure segment

We also have a network of customer service centers located throughout North America, Europe, India, Asia Pacific and Latin America, a significant portion of which are leased. The majority of our research and development efforts are conducted at our technology center located in Latrobe, Pennsylvania, U.S., as well as at our facilities in Rogers, Arkansas, U.S.; Fürth, Germany and Bangalore, India.

We use all of our significant properties in the businesses of powder metallurgy, tools, tooling systems, engineered components and advanced materials. Our production capacity is adequate for our present needs. We believe that our properties have been adequately maintained, are generally in good condition and are suitable for our business as presently conducted.

ITEM 3 - LEGAL PROCEEDINGS

The information set forth in Part I, Item 1, of this Annual Report under the caption “Regulation” is incorporated by reference into this Item 3. 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 assets. Although we currently believe that the amount of ultimate liability, if any, we may face with respect to these actions will not materially affect our financial position, results of operations or liquidity, the ultimate outcome of any litigation is uncertain. Were an unfavorable outcome to occur or if protracted litigation were to ensue, the effect on us could be material.

ITEM 4 - MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Incorporated by reference into this Part I is the information set forth in Part III, Item 10 of this Annual Report under the caption “Information About Our Executive Officers.”

PART II

ITEM 5 - MARKET FOR THE REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our capital stock is traded on the New York Stock Exchange under the symbol "KMT." The number of shareholders of record as of July 31, 2021 was 1,378.

The information incorporated by reference into Part III, Item 12 of this Annual Report from our 2021 Proxy Statement under the heading “Equity Compensation Plans – Equity Compensation Plan Information” is hereby incorporated by reference into this Item 5.

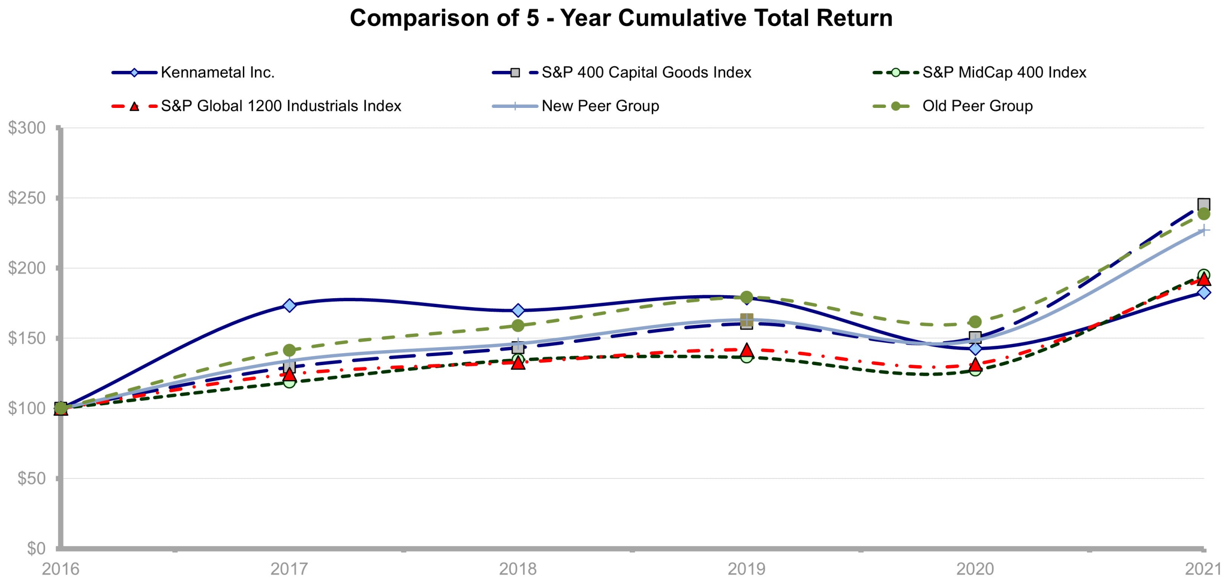
PERFORMANCE GRAPH

The following graph compares cumulative total shareholder return on our capital stock with the cumulative total shareholder return on the common stock of the companies in the Standard & Poor’s Mid-Cap 400 Market Index (S&P Midcap 400), the Standard & Poor’s 400 Capital Goods (S&P 400 Capital Goods), the Standard & Poor's Global 1200 Industrials Index (S&P Global 1200 Industrials) and the peer groups of companies determined by us (New Peer Group and Old Peer Group) for the period from June 30, 2016 to June 30, 2021.

In fiscal 2021, we established a New Peer Group in order to align with how we evaluate our executive compensation, and we believe this group is representative of Kennametal's peers. We have included both this New Peer Group as well as the Old Peer Group in the comparisons below.

The New Peer Group consists of the following companies: Altra Industrial Motion Corp.; Barnes Group Inc.; Colfax Corporation; Crane Co.; Curtiss-Wright Corporation; EnPro Industries, Inc.; Flowserve Corporation; Graco Inc.; ITT Inc.; Lincoln Electric Holdings, Inc.; Nordson Corporation; Rexnord Corporation; Simpson Manufacturing Co., Inc.; SPX Corporation; SPX FLOW, Inc.; The Timken Company; Watts Water Technologies, Inc.; and Woodward, Inc.

The Old Peer Group consists of the following companies: Allegheny Technologies Incorporated; Barnes Group Inc.; Carpenter Technology Corporation; Crane Co.; Donaldson Company, Inc.; Flowserve Corporation; Graco Inc.; Harsco Corporation; IDEX Corporation; ITT Inc.; Lincoln Electric Holdings, Inc.; The Manitowoc Company, Inc.; Nordson Corporation; Rexnord Corporation; Sandvik AB, Corp.; SPX Corporation; SPX FLOW, Inc.; The Timken Company; and Woodward, Inc.



Assumes $100 Invested on July 1, 2016 and All Dividends Reinvested

	2016	2017	2018	2019	2020	2021
Kennametal	$ 100.00	$ 173.42	$ 169.78	$ 178.75	$ 142.64	$ 182.60
New Peer Group Index	100.00	133.94	146.21	163.23	148.70	227.23
Old Peer Group Index	100.00	141.39	159.04	179.30	161.69	238.64
S&P Midcap 400	100.00	118.57	134.58	136.41	127.28	195.03
S&P 400 Capital Goods	100.00	129.35	143.25	160.41	150.49	245.40
S&P Global 1200 Industrials	100.00	124.41	132.77	141.78	131.59	192.41

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]
April 1 through April 30, 2021	1,074	$	40.53	—	10,100,100
May 1 through May 31, 2021	1,090		37.84	—	10,100,100
June 1 through June 30, 2021	83		38.13	—	10,100,100
Total	2,247	$	39.14	—	

(1) During the fourth quarter of 2021, 1,090 shares were purchased on the open market on behalf of Kennametal to fund the Company’s dividend reinvestment program. Employees also delivered 1,157 shares of restricted stock to Kennametal, upon vesting, to satisfy tax withholding requirements.

(2) On July 25, 2013, the Company publicly announced an open-ended, amended repurchase program for up to 17 million shares of its outstanding common stock outside of the Company's dividend reinvestment program. The program was terminated when on July 27, 2021, the Board of Directors of the Company approved a share repurchase program authorizing the Company to purchase up to $200 million of the Company's common stock over a three-year period.

UNREGISTERED SALES OF EQUITY SECURITIES

None.

ITEM 7 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in connection with the consolidated financial statements of Kennametal Inc. and the related financial statement notes included in Item 8 of this Annual Report. Unless otherwise specified, any reference to a “year” is to our fiscal year ended June 30. Additionally, when used in this Annual Report, unless the context requires otherwise, the terms “we,” “our” and “us” refer to Kennametal Inc. and its subsidiaries.

OVERVIEW Kennametal Inc. was founded based on a tungsten carbide technology breakthrough in 1938. The Company was incorporated in Pennsylvania in 1943 as a manufacturer of tungsten carbide metal cutting tooling, and was listed on the New York Stock Exchange (NYSE) in 1967. With more than 80 years of materials expertise, the Company is a global industrial technology leader, helping customers across the aerospace, earthworks, energy, general engineering and transportation industries manufacture with precision and efficiency. This expertise includes the development and application of tungsten carbides, ceramics, super-hard materials and solutions used in metal cutting and extreme wear applications to keep customers up and running longer against conditions such as corrosion and high temperatures.

Our standard and custom product offering spans metal cutting and wear applications including turning, milling, hole making, tooling systems and services, as well as specialized wear components and metallurgical powders. End users of the Company's metal cutting 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. The Company’s wear and metallurgical powders are used by producers and suppliers in equipment-intensive operations such as road construction, mining, quarrying, and oil and gas exploration, refining, production and supply.

Throughout Management's Discussion and Analysis of Financial Condition and Results of Operations (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 (decline), constant currency regional sales growth (decline) and constant currency end market sales growth (decline). The explanation at the end of the MD&A provides the definition of these non-GAAP financial measures as well as details on their use and a reconciliation to the most directly comparable GAAP financial measures.

Our sales of $1,841.4 million for the year ended June 30, 2021 decreased 2 percent year-over-year, reflecting 4 percent organic sales decline and a 2 percent favorable currency exchange effect. Despite the challenging macro-economic environment due to the COVID-19 pandemic, the Company continued to have success with sequential sales improvement each quarter throughout the year.

Operating income was $102.2 million in 2021 compared to $22.3 million in the prior year. The increase in operating income was primarily due to incremental simplification/modernization benefits of $85.0 million, lower raw material costs and $40.4 million of pre-tax restructuring and related charges compared to $83.3 million in the prior year, partially offset by increased variable compensation expense, organic sales decline and associated volume-related manufacturing inefficiencies and unfavorable geographical and product mix. Operating margin in 2021 was 5.5 percent compared to 1.2 percent in the prior year. In 2021, the Metal Cutting and Infrastructure segments had operating margins of 4.0 percent and 8.6 percent, respectively.

On March 11, 2020, the World Health Organization declared the Coronavirus Disease 2019 (COVID-19) a pandemic bringing significant uncertainty in our end markets and operations. Since then, national, regional and local governments have taken steps at various times since the pandemic began to limit the spread of the virus through stay-at-home, social distancing, and various other orders and guidelines. Although some jurisdictions have relaxed these measures, others have not or have reinstated them as COVID-19 cases surge and variants emerge. The imposition of these measures has created significant operating constraints on our business. Throughout the pandemic, based on the guidance provided by the U.S. Centers for Disease Control and other relevant authorities, we have deployed safety protocols and processes to keep our employees safe while continuing to serve our customers. To date, we have not experienced a material disruption in our supply chain. The extent to which the COVID-19 pandemic may continue to affect our business, operating results or financial condition in the future will depend on future developments, including the duration of the outbreak, the emergence of more contagious or virulent strains of the virus, travel restrictions, business and workforce disruptions, the availability, update and efficacy of vaccines and the effectiveness of other actions taken to contain and treat the disease.

The Company's cost structure benefited from our simplification/modernization initiative including the FY21 Restructuring Actions which have resulted in annualized savings of $68.0 million and pre-tax charges of $82.2 million inception to date. We recorded $40.4 million of pre-tax restructuring and related charges in 2021. Total benefits from our simplification/modernization efforts, including restructuring initiatives, were approximately $85.0 million in 2021, and we achieved total savings from simplification/modernization of approximately $186.0 million since inception. At the end of fiscal 2021 we consider the capital investment and restructuring from simplification/modernization to be substantially complete.

We reported earnings per diluted share (EPS) of $0.65 for fiscal 2021. EPS for the year was unfavorably affected by restructuring and related charges of $0.40 per share, effects from the early extinguishment of debt of $0.08 per share and partial annuitization of the Canadian pension plans of $0.02 per share, partially offset by a discrete tax benefit of $0.11 per share. Loss per diluted share in the prior year of $0.07 was unfavorably affected by restructuring and related charges of $0.88 per share, goodwill and other intangible asset impairment charges of $0.33 per share and loss on divestiture of $0.06 per share, partially offset by discrete benefits from Swiss tax reform of $0.17 per share, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) of $0.08 per share and other tax matters of $0.01 per share.

We generated cash flow from operating activities of $235.7 million in 2021 compared to $223.7 million during the prior year. Capital expenditures were $127.3 million and $244.2 million during 2021 and 2020, respectively, primarily related to our simplification/modernization initiatives. The Company returned $66.7 million and $66.3 million to shareholders through dividends during 2021 and 2020, respectively.

In connection with of the Company's focus on organizational efficiency, commercial excellence and growing its metal cutting businesses, effective July 1, 2020, Kennametal combined its former Industrial and Widia business segments to form one Metal Cutting business segment. The Infrastructure segment remains unchanged. Segment results have been retrospectively restated to reflect the change in reportable segments.

For a discussion related to the results of operations, changes in financial condition and liquidity and capital resources for fiscal 2020 compared to fiscal 2019 refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our fiscal 2020 Form 10-K, which was filed with the United States Securities and Exchange Commission on August 20, 2020.

RESULTS OF CONTINUING OPERATIONS

SALES Sales in 2021 were $1,841.4 million, a 2 percent decrease from $1,885.3 million in 2020. The decrease was primarily due to organic sales decline of 4 percent and a 2 percent favorable currency exchange effect.

	2021	
(in percentages)	As Reported	Constant Currency
End market sales (decline) growth:		
Energy	(10)%	(11)%
Transportation	7	4
General engineering	1	(1)
Aerospace	(33)	(34)
Earthworks	(1)	(3)
Regional sales (decline) growth:		
Americas	(9)%	(9)%
Europe, the Middle East and Africa (EMEA)	2	(3)
Asia Pacific	10	6

GROSS PROFIT Gross profit increased $23.0 million to $552.5 million in 2021 from $529.5 million in 2020. This increase was primarily due to incremental simplification/modernization benefits, partially offset by an organic sales decline and unfavorable labor and fixed cost absorption due to lower volumes. The gross profit margin for 2021 was 30.0 percent compared to 28.1 percent in 2020.

OPERATING EXPENSE Operating expense in 2021 was $407.2 million, an increase of $18.8 million, or 4.8 percent, from $388.4 million in 2020. The increase was primarily due to higher incentive compensation expense and unfavorable currency exchange effect of approximately $8.5 million, partially offset by incremental restructuring simplification benefits.

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 $39.5 million and $38.7 million for 2021 and 2020, respectively.

RESTRUCTURING AND RELATED CHARGES AND ASSET IMPAIRMENT CHARGES

FY20 Restructuring Actions

In the June quarter of fiscal 2019, we implemented, and in fiscal 2020 substantially completed, the FY20 Restructuring Actions associated with our simplification/modernization initiative to reduce structural costs, improve operational efficiency and position us for long-term profitable growth. Total restructuring and related charges since inception of $54.8 million were recorded for this program through June 30, 2021, consisting of: $46.6 million in Metal Cutting and $8.3 million in Infrastructure.

FY21 Restructuring Actions

In the September quarter of fiscal 2020, we announced the initiation of restructuring actions in Germany associated with our simplification/modernization initiative to reduce structural costs. Subsequently, we agreed with local employee representatives to downsize our Essen, Germany operations instead of the previously proposed closure. During the fourth quarter of fiscal 2020, we also announced the acceleration of our other structural cost reduction plans. The estimated annualized savings of the FY21 Restructuring Actions are $75 million and the expected pre-tax charges are approximately $90 million. The majority of the remaining charges related to the FY21 Restructuring Actions are expected to be in the Metal Cutting segment.

Total restructuring and related charges since inception of $82.2 million were recorded for this program through June 30, 2021, consisting of: $74.5 million in Metal Cutting and $7.7 million in Infrastructure. Inception to date, we have achieved annualized savings of approximately $68.0 million.

Annual Restructuring Charges

During 2021, we recorded restructuring and related charges of $40.4 million, which consisted of $35.6 million in Metal Cutting and $4.8 million in Infrastructure. Of this amount, restructuring charges totaled $29.6 million, of which $0.5 million was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of $10.8 million were recorded in cost of goods sold.

During 2020, we recorded restructuring and related charges of $83.3 million. Of this amount, restructuring charges totaled $69.2 million, of which $0.9 million was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of $14.1 million were recorded in cost of goods sold.

LOSS ON DIVESTITURE During the year ended June 30, 2020, we completed the sale of certain assets of the non-core specialty alloys and metals business within the Infrastructure segment located in New Castle, Pennsylvania to Advanced Metallurgical Group N.V. for an aggregate price of $24.0 million.

The net book value of these assets at closing was $29.5 million, and the pre-tax loss on divestiture recognized during the year ended June 30, 2020 was $6.5 million. Transaction proceeds were primarily used for capital expenditures related to our simplification/modernization efforts.

AMORTIZATION OF INTANGIBLES Amortization expense was $14.0 million and $13.8 million in 2021 and 2020, respectively.

INTEREST EXPENSE Interest expense in 2021 was $46.4 million, an increase of $11.2 million, compared to $35.2 million in 2020. The increase was primarily due to the early extinguishment of the $300.0 million of 3.875 percent Senior Unsecured Notes due 2022 (the 2022 Senior Notes). See Note 11 "Long-Term Debt" in the consolidated financial statements for further details. The portion of our debt subject to variable rates of interest was less than 1 percent at June 30, 2021 and 45.7 percent at June 30, 2020 due to $500.0 million of borrowings outstanding under the Credit Agreement in the prior year. There were no borrowings outstanding under the Credit Agreement as of June 30, 2021.

OTHER INCOME, NET In 2021, other income, net was $8.9 million, a decrease of $6.0 million from $14.9 million in 2020. The decrease was primarily due to lower net periodic pension income in fiscal 2021, including the partial annuitization of our Canadian defined benefit pension plans and lower interest income.

INCOME TAXES The effective tax rate for 2021 was 9.7 percent compared to 357.5 percent for 2020. Current year items driving the year-over-year change in the tax rate include (i) tax benefits from a provision to return adjustment related to our fiscal 2020 U.S. income tax return that included an election pursuant to Global Intangible Low-Taxed Income (GILTI) tax regulations issued during the current year, and (ii) the recognition of a stranded deferred tax balance in accumulated other comprehensive loss associated with the forward starting interest rate swaps that were terminated during fiscal 2021 when the 2022 Senior Notes were extinguished. Prior year items driving the year-over-year change include: (i) the effects of higher restructuring and related charges compared to the current year, (ii) goodwill and other intangible asset impairment charges, (iii) a $14.5 million benefit for the one-time effect of Swiss tax reform and (iv) a $6.9 million tax benefit associated with the CARES Act. See Note 13 of our consolidated financial statements set forth in Item 8 of this Annual Report for a more comprehensive discussion about Swiss tax reform and the CARES Act.

As of June 30, 2021, we have $26.3 million of U.S. net deferred tax assets. Within this amount is $57.0 million related to net operating loss, tax credit, and other carryforwards that can be used to offset future U.S. taxable income. Certain of these carryforwards will expire if they are not used within a specified timeframe. At this time, we consider it more likely than not that we will have sufficient U.S. taxable income in the future that will allow us to realize these net deferred tax assets. However, it is possible that some or all of these tax attributes could ultimately expire unused, especially if our end markets do not continue to recover from the COVID-19 global pandemic. Therefore, if we are unable to generate sufficient U.S. taxable income from our operations, a valuation allowance to reduce the U.S. net deferred tax assets may be required, which would materially increase income tax expense in the period in which the valuation allowance is recorded.

In 2012, we received an assessment from the Italian tax authority that denied certain tax deductions primarily related to our 2008 tax return. Attempts at negotiating a reasonable settlement with the tax authority were unsuccessful; and as a result, we decided to litigate the matter. While the outcome of the litigation is still pending, the tax authority served notice in the September quarter of fiscal 2020 requiring payment in the amount of €36.0 million. Accordingly, we requested and were granted a stay and are not currently required to make a payment in connection with this assessment. We continue to believe that the assessment is baseless and accordingly, no income tax liability has been recorded in connection with this assessment in any period. However, if the Italian tax authority were to be successful in litigation, settlement of the amount alleged by the Italian tax authority would result in an increase to income tax expense for as much as €36.0 million, or $43.0 million, of which penalties and interest is €21.0 million, or $25.0 million.

NET INCOME (LOSS) ATTRIBUTABLE TO KENNAMETAL Net income attributable to Kennametal was $54.4 million, or $0.65 earnings per diluted share (EPS) in 2021, compared to net loss attributable to Kennametal of $5.7 million, or $0.07 loss per share in 2020. The increase is a result of the factors previously discussed.

BUSINESS SEGMENT REVIEW We operate in two reportable operating segments consisting of Metal Cutting and Infrastructure. Corporate expenses that are not allocated are reported in Corporate. Segment determination is based upon internal organizational structure, the manner in which we organize segments for making operating decisions and assessing performance and the availability of separate financial results. See Note 21 of our consolidated financial statements set forth in Item 8 of this Annual Report.

Our sales and operating income by segment are as follows:

(in thousands)		2021		2020
Sales:				
Metal Cutting	$	1,150,746	$	1,178,053
Infrastructure		690,695		707,252
Total sales	$	1,841,441	$	1,885,305
Operating income:				
Metal Cutting	$	45,855	$	985
Infrastructure		59,461		23,113
Corporate		(3,148)		(1,846)
Total operating income		102,168		22,252
Interest expense		46,375		35,154
Other income, net		(8,867)		(14,862)
Income before income taxes	$	64,660	$	1,960

METAL CUTTING

(in thousands)		2021		2020
Sales	$	1,150,746	$	1,178,053
Operating income		45,855		985
Operating margin		4.0 %		0.1 %

(in percentages)	2021
Organic sales decline	(4)%
Foreign currency exchange effect	2
Sales decline	(2)%

	2021	
(in percentages)	As Reported	Constant Currency
End market sales growth (decline):		
Transportation	7%	4%
General engineering	1	(1)
Aerospace	(33)	(34)
Energy	(10)	(12)
Regional sales growth (decline):		
EMEA	2%	(3)%
Americas	(11)	(10)
Asia Pacific	6	3

In 2021, Metal Cutting sales of $1,150.7 million decreased by $27.3 million, or 2 percent, from 2020. Aerospace end market sales declined in all regions due to a significant reduction in airplane manufacturing. Energy sales decreased primarily due to a decline in oil and gas drilling in the Americas, partially offset by strength in wind power generation in China. Sales in our general engineering end market declined in all regions except for Asia Pacific. The general engineering end market was impacted by lower manufacturing activity related to the COVID-19 pandemic. Transportation end market sales increased in the Americas and EMEA due to improving automotive manufacturing levels. On a regional basis, the sales increase in Asia Pacific was driven by the general engineering and energy end markets, partially offset by a decline in the aerospace end market. The sales decline in EMEA was primarily due to the aerospace end market, partially offset by an increase in the transportation end market. The sales decrease in the Americas was driven by declines in the aerospace, energy, and general engineering end markets, partially offset by an increase in sales in the transportation end market.

In 2021, Metal Cutting operating income was $45.9 million, a $44.9 million increase from 2020. The increase was primarily driven by incremental simplification/modernization benefits, no goodwill and other intangible asset impairment charges in the current year, lower restructuring and related charges of $38.1 million and lower raw material costs, partially offset by organic sales decline, unfavorable labor and fixed cost absorption due to lower volumes, an increase in variable compensation and unfavorable product mix.

INFRASTRUCTURE

(in thousands)	2021	2020
Sales	$ 690,695	$ 707,252
Operating income	59,461	23,113
Operating margin	8.6 %	3.3 %

(in percentages)	2021
Organic sales decline	(3)%
Foreign currency exchange effect	2
Divestiture effect	(1)
Sales decline	(2)%

	2021	
(in percentages)	As Reported	Constant Currency
End market sales (decline) growth:		
Energy	(10)%	(11)%
General engineering	2	—
Earthworks	(1)	(3)
Regional sales (decline) growth:		
Americas	(8)%	(8)%
Asia Pacific	15	11
EMEA	3	(2)

In 2021, Infrastructure sales of $690.7 million decreased by $16.6 million, or 2 percent, from 2020. The reduction in U.S. oil and gas drilling activity drove year-over-year decline in the energy market. Earthworks end market sales were down year-over-year due to softness in the Americas underground mining and construction, partially offset by EMEA construction. In general engineering the increase in sales was driven by Asia Pacific and the Americas. On a regional basis, the sales decrease in the Americas was driven by declines in the energy and earthworks end markets, partially offset by an increase in the general engineering end market. The sales decrease in EMEA was primarily driven by a decline in general engineering, partly offset by an increase in the earthworks end market. The increase in sales in Asia Pacific was primarily driven by growth in the general engineering end market.

In 2021, Infrastructure operating income was $59.5 million, a $36.3 million increase from 2020. The primary drivers for the increase were incremental simplification/modernization benefits and lower material costs. These benefits were partially offset by increased variable compensation, an organic sales decline and unfavorable geographical and product mix.

CORPORATE

(in thousands)	2021	2020
Corporate expense	$ (3,148)	$ (1,846)

In 2021, Corporate expense increased $1.3 million from 2020.

LIQUIDITY AND CAPITAL RESOURCES Cash flow from operations is the primary source of funding for our capital expenditures. During the year ended June 30, 2021, cash flow provided by operating activities was $235.7 million.

During fiscal 2021, we entered into the First Amendment (the Amendment) to the Fifth Amended and Restated Credit Agreement dated as of June 21, 2018, (as amended by the Amendment, the Credit Agreement). The Credit Agreement is a five-year, multi-currency, revolving credit facility and we use it to augment cash from operations and as 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: (1) a maximum leverage ratio where debt, net of domestic cash in excess of $25 million and sixty percent of the unrestricted cash held outside of the United States, must be less than or equal to 3.5 times trailing twelve months EBITDA (temporarily increased by the Amendment to 4.25 times trailing twelve months EBITDA during the period from September 30, 2020 through and including December 31, 2021), adjusted for certain non-cash expenses and which may be further adjusted, at our discretion, to include up to $120 million of cash restructuring charges through December 31, 2021; and (2) a minimum consolidated interest coverage ratio of EBITDA to interest of 3.5 times (as such terms are defined in the Credit Agreement). Borrowings under the Credit Agreement are guaranteed by our significant domestic subsidiaries.

As of June 30, 2021, we were in compliance with all covenants of the Credit Agreement and we had no borrowings outstanding and $700.0 million of availability. There were $500.0 million borrowings outstanding as of June 30, 2020.

Other lines of credit and notes payable were $8.4 million and $0.4 million at June 30, 2021 and 2020, respectively. The lines of credit represented short-term borrowings under credit lines with commercial banks in the various countries in which we operate. These credit lines, translated into U.S. dollars at June 30, 2021 exchange rates, totaled $65.0 million.

For the year ended June 30, 2021, average daily borrowings outstanding under the Credit Agreement were approximately $128.2 million. The weighted average interest rate on borrowings under the Credit Agreement was 3.1 percent for the year ended June 30, 2021.

Based upon our debt structure at June 30, 2021, less than 1 percent of our debt was exposed to variable rates of interest. At June 30, 2020, 45.7 percent of our debt was exposed to variable rates of interest due to the $500.0 million of borrowings outstanding under the Credit Agreement in the prior year.

We consider the majority of the $1.5 billion unremitted earnings of our non-U.S. subsidiaries to be permanently reinvested. With regard to these unremitted earnings, we have not, nor do we anticipate the need to, repatriate funds to the U.S. to satisfy domestic liquidity needs arising in the ordinary course of business, including liquidity needs associated with our domestic debt service requirements. Determination of the amount of unrecognized deferred tax liability related to indefinitely reinvested earnings is not practicable due to our legal entity structure and the complexity of U.S. and local tax laws. With regard to the small portion of unremitted earnings that are not indefinitely reinvested, we maintain a deferred tax liability for foreign withholding and U.S. state income taxes. The deferred tax liability associated with unremitted earnings of our non-U.S. subsidiaries not permanently reinvested is $6.4 million as of June 30, 2021.

At June 30, 2021, we had cash and cash equivalents of $154.0 million. Total Kennametal Shareholders' equity was $1,329.6 million and total debt was $600.5 million. Our current senior credit ratings are considered investment grade. We believe that our current financial position, liquidity and credit ratings provide us access to the capital markets. 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.

The following is a summary of our contractual obligations and other commercial commitments as of June 30, 2021:

Contractual Obligations (in thousands)		Total	2022	2023-2024	2025-2026	Thereafter
Long-term debt, including current maturities	(1)	$ 777,262	$ 22,275	$ 44,550	$ 44,550	$ 665,887
Other lines of credit and notes payable		8,418	8,418	—	—	—
Pension benefit payments		(2)	53,088	108,023	110,841	(2)
Postretirement benefit payments		(2)	1,268	2,257	1,906	(2)
Operating leases		58,690	15,062	19,459	8,329	15,840
Purchase obligations	(3)	184,500	84,105	100,395	—	—
Unrecognized tax benefits	(4)	10,082	5,836	2,716	—	1,530
Total			$ 190,052	$ 277,400	$ 165,626	

(1) Long-term debt includes interest obligations of $177.8 million and excludes debt issuance costs of $6.2 million.

(2) Annual payments are expected to continue into the foreseeable future at the amounts noted in the table.

(3) Purchase obligations consist of purchase commitments for materials, supplies and machinery and equipment as part of the ordinary conduct of business. Purchase obligations with variable price provisions were determined assuming market prices as of June 30, 2021 remain constant.

(4) Unrecognized tax benefits are positions taken or expected to be taken on an income tax return that may result in additional payments to tax authorities. These amounts include interest of $1.4 million accrued related to such positions as of June 30, 2021. Positions for which we are not able to reasonably estimate the timing of potential future payments are included in the 'Thereafter' column. If a tax authority agrees with the tax position taken or expected to be taken or the applicable statute of limitations expires, then additional payments will not be necessary.

Other Commercial Commitments (in thousands)	Total	2022	2023-2024	2025-2026	Thereafter
Standby letters of credit	$ 5,462	$ 2,752	$ 2,710	$ —	$ —
Guarantees	20,992	10,428	675	—	9,889
Total	$ 26,454	$ 13,180	$ 3,385	$ —	$ 9,889

The standby letters of credit relate to insurance and other activities. The guarantees are non-debt guarantees with financial institutions, which are required primarily for security deposits, product performance guarantees and advances.

Cash Flow Provided by Operating Activities

During 2021, cash flow provided by operating activities was $235.7 million, compared to $223.7 million in 2020. During 2021, cash flow provided by operating activities consisted of net income and non-cash items amounting to $210.0 million and changes in certain assets and liabilities netting to an inflow of $25.7 million. Contributing to the changes in certain assets and liabilities were an increase in accounts payable and accrued liabilities of $46.8 million and a decrease in inventories of $61.3 million, partially offset by an increase in accounts receivable of $53.3 million, a decrease in accrued pension and postretirement benefits of $31.6 million and a decrease in accrued income taxes of $18.3 million.

During 2020, cash flow provided by operating activities was $223.7 million. Cash flow provided by operating activities consisted of net loss and non-cash items amounting to $150.3 million and changes in certain assets and liabilities netting to an inflow of $73.5 million. Contributing to the changes in certain assets and liabilities were a decrease in accounts receivable of $128.7 million and a decrease in inventories of $28.2 million, partially offset by a decrease in accounts payable and accrued liabilities of $46.3 million, a decrease in accrued pension and postretirement benefits of $20.0 million and a decrease in accrued income taxes of $8.6 million. The decreases in inventories and accounts receivable were primarily due to the decrease in demand in the March and June quarters of fiscal 2020.

Cash Flow Used for Investing Activities

Cash flow used for investing activities was $123.0 million for 2021, a decrease of $95.4 million, compared to $218.3 million in 2020. During 2021, cash flow used for investing activities included capital expenditures, net of $122.9 million, which consisted primarily of expenditures related to our simplification/modernization initiatives.

Cash flow used for investing activities was $218.3 million for 2020. During 2020, cash flow used for investing activities included capital expenditures, net of $241.5 million, which consisted primarily of expenditures related to our simplification/modernization initiatives and equipment upgrades, partially offset by proceeds from divestiture of $24.0 million from the sale of certain assets of the non-core specialty alloys and metals business located in New Castle, Pennsylvania.

Cash Flow (Used for) Provided by Financing Activities

Cash flow used for financing activities was $574.2 million for 2021, compared to cash flow provided by financing activities of $425.5 million in 2020. During the current year period, cash flow used for financing activities included $500.0 million of a net decrease in the revolving and other lines of credit, the debt refinancing (see Note 11. "Long-Term Debt" to our consolidated financial statements set forth in Part II, Item 8 of this Annual Report on Form 10-K for further discussion) and $66.7 million of cash dividends paid to Shareholders.

Cash flow provided by financing activities was $425.5 million for 2020. During 2020, cash flow provided by financing activities included an inflow of $500.4 million primarily due to borrowings outstanding under the Credit Agreement, partially offset by $66.3 million of cash dividends paid to Shareholders and $5.5 million of the effect of employee benefit and stock plans and dividend reinvestment.

FINANCIAL CONDITION At June 30, 2021, total assets were $2,665.8 million, a decrease of $371.8 million from $3,037.6 million at June 30, 2020. Total liabilities decreased $471.2 million from $1,768.8 million at June 30, 2020 to $1,297.6 million at June 30, 2021.

Working capital was $567.4 million at June 30, 2021, an increase of $24.7 million from $542.7 million at June 30, 2020. The increase in working capital was primarily driven by a decrease in revolving and other lines of credit and notes payable of $492.0 million due primarily to repayments on our Credit Agreement and an increase in accounts receivable of $65.0 million. Partially offsetting these items were a decrease in cash and cash equivalents of $452.6 million primarily due to the $500.0 million repayment under the Credit Agreement, a decrease in inventory of $46.1 million, an increase in accounts payable of $13.0 million and an increase in accrued payroll of $13.0 million. Currency exchange rate effects increased working capital by a total of approximately $26 million, the effects of which are included in the aforementioned changes.

Property, plant and equipment, net increased $16.9 million from $1,038.3 million at June 30, 2020 to $1,055.1 million at June 30, 2021, primarily due to capital additions of $127.3 million, partially offset by depreciation expense of $112.5 million, and a positive currency exchange effect of approximately $24 million.

At June 30, 2021, other assets were $605.8 million, an increase of $47.3 million from $558.5 million at June 30, 2020. The primary drivers for the increase were the increase in long-term prepaid pension benefit of $46.1 million as well as an increase in deferred income taxes by $12.0 million. These were partially offset by amortization expense of $14.0 million.

Kennametal Shareholders’ equity was $1,329.6 million at June 30, 2021, an increase of $99.7 million from $1,229.9 million in the prior year. The increase was primarily due to net income during the year of $54.4 million, capital stock issued under employee benefit and stock plans of $24.6 million and other comprehensive income. These increases were partially offset by cash dividends to Shareholders of $66.7 million.

EFFECTS OF INFLATION Despite modest inflation in recent years, rising costs, including the cost of certain raw materials, continue to affect our operations throughout the world. We strive to minimize the effects of inflation through cost containment, productivity improvements and price increases.

DISCUSSION OF CRITICAL ACCOUNTING POLICIES In preparing our consolidated financial statements in conformity with accounting principles generally accepted in the U.S., we make judgments and estimates about the amounts reflected in our consolidated financial statements. As part of our financial reporting process, our management collaborates to determine the necessary information on which to base our judgments and develops estimates used to prepare the consolidated financial statements. We use historical experience and available information to make these judgments and estimates. However, different amounts could be reported using different assumptions and in light of different facts and circumstances. Therefore, actual amounts could differ from the estimates reflected in our consolidated financial statements. Our significant accounting policies are described in Note 2 of our consolidated financial statements, which are included in Item 8 of this Annual Report. We believe that the following discussion addresses our critical accounting policies.

Revenue Recognition 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, customary local commercial terms 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 to 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 consolidated balance sheets. 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. We have recorded an estimated returned goods allowance to provide for any potential returns.

We warrant that products sold are free from defects in material and workmanship under normal use and service when correctly installed, used and maintained. This warranty terminates 30 days after delivery of the product to the customer and does not apply to products that have been subjected to misuse, abuse, neglect or improper storage, handling or maintenance. Products may be returned to Kennametal only after inspection and approval by Kennametal and upon receipt by the customer of shipping instructions from Kennametal. We have included an estimated allowance for warranty returns in our returned goods allowance discussed above.

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 June 30, 2021 and 2020.

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 consolidated statements of income.

Stock-Based Compensation We recognize stock-based compensation expense for all stock options, restricted stock awards and restricted stock units over the period from the date of grant to the date when the award is no longer contingent on the employee providing additional service (substantive vesting period), net of expected forfeitures. We utilize the Black-Scholes valuation method to establish the fair value of all stock option awards. Time vesting stock units are valued at the market value of the stock on the grant date. Performance vesting stock units with a market condition are valued using a Monte Carlo model.

Accounting for Contingencies We accrue for contingencies when it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies by their nature relate to uncertainties that require the exercise of judgment in both assessing whether or not a liability or loss has been incurred and estimating the amount of probable loss. The significant contingencies affecting our consolidated financial statements include environmental, health and safety matters and litigation.

Long-Lived Assets We evaluate the recoverability of property, plant and equipment, operating lease right-of-use (ROU) assets and intangible assets that are amortized whenever events or changes in circumstances indicate the carrying amount of such assets may not be fully recoverable. Changes in circumstances include technological advances, changes in our business model, capital structure, economic conditions or operating performance. Our evaluation is performed at the asset group level, based upon, among other things, our assumptions about the estimated future undiscounted cash flows these assets are expected to generate. When the sum of the undiscounted cash flows is less than the carrying value, we will recognize an impairment loss to the extent that carrying value exceeds fair value. We apply our best judgment when performing these evaluations to determine if a triggering event has occurred, the undiscounted cash flows used to assess recoverability and the fair value of the asset group.

Goodwill and Indefinite-Lived Intangible Assets We evaluate the recoverability of goodwill of each of our reporting units by comparing the fair value of each reporting unit with its carrying value. The fair values of our reporting units are determined using a combination of a discounted cash flow analysis and market multiples based upon historical and projected financial information. We perform our annual impairment tests during the June quarter in connection with our annual planning process unless there are impairment indicators based on the results of an ongoing cumulative qualitative assessment that warrant a test prior to that quarter. We apply our best judgment when assessing the reasonableness of the financial projections used to determine the fair value of each reporting unit. The discounted cash flow method was used to measure the fair value of our equity under the income approach. A terminal value utilizing a constant growth rate of cash flows was used to calculate a terminal value after the explicit projection period. The estimates and assumptions used in our calculations include revenue and gross margin growth rates, expected capital expenditures to determine projected cash flows, expected tax rates and an estimated discount rate to determine present value of expected cash flows. These estimates are based on historical experiences, our projections of future operating activity and our weighted average cost of capital (WACC). In order to determine the discount rate, the Company uses a market perspective WACC approach. The WACC is calculated incorporating weighted average returns on debt and equity from market participants. Therefore, changes in the market, which are beyond the control of the Company, may have an effect on future calculations of estimated fair value.

As of June 30, 2021, there is no goodwill allocated to the Infrastructure reporting unit. As of June 30, 2021, $277.6 million of goodwill was allocated to the Metal Cutting reporting unit. We completed an annual quantitative test of goodwill impairment and determined that the fair value of the reporting unit substantially exceeded the carrying value and, therefore, no impairment was recorded during fiscal 2021.

Further, an indefinite-lived trademark intangible asset of $11.8 million in the Metal Cutting reporting unit had a fair value that approximated its carrying value as of the date of the annual impairment test and, therefore, no impairment was recorded during fiscal 2021. To determine fair value, we assumed revenue growth rates that take into effect the uncertainty related to COVID-19 in the near term, the eventual recovery of our end markets, and a residual period growth rate of 3 percent. We assumed a royalty rate of 1 percent, and the future period cash flows were discounted at 20 percent per annum.

Fair value determinations require considerable judgment and are sensitive to changes in underlying assumptions and factors. As a result, there can be no assurance that the estimates and assumptions made for purposes of the annual goodwill and indefinite-lived intangible impairment test will prove to be an accurate prediction of the future. Certain events or circumstances that could reasonably be expected to negatively affect the underlying key assumptions and ultimately affect the estimated fair values of the Metal Cutting reporting unit and of the indefinite-lived trademark may include such items as: (i) a decrease in expected future cash flows, specifically, a further decrease in sales volume driven by a prolonged weakness in customer demand or other pressures, including those related to the COVID-19 pandemic, adversely affecting our long-term sales trends and (ii) inability to achieve the sales from our strategic growth initiatives.

Pension and Other Postretirement Benefits We sponsor pension and other postretirement benefit plans for certain employees and retirees. Accounting for the cost of these plans requires the estimation of the cost of the benefits to be provided well into the future and attributing that cost over either the expected work life of employees or over average life of participants participating in these plans, depending on plan status and on participant population. This estimation requires our judgment about the discount rate used to determine these obligations, expected return on plan assets, rate of future compensation increases, rate of future health care costs, withdrawal and mortality rates and participant retirement age. Differences between our estimates and actual results may significantly affect the cost of our obligations under these plans.

In the valuation of our pension and other postretirement benefit liabilities, management utilizes various assumptions. Our discount rates are derived by identifying a theoretical settlement portfolio of high quality corporate bonds sufficient to provide for a plan’s projected benefit payments. This rate can fluctuate based on changes in the corporate bond yields. At June 30, 2021, a hypothetical 25 basis point increase or decrease in our discount rates would be immaterial to our pre-tax income.

The long-term rate of return on plan assets is estimated based on an evaluation of historical returns for each asset category held by the plans, coupled with the current and short-term mix of the investment portfolio. The historical returns are adjusted for expected future market and economic changes. This return will fluctuate based on actual market returns and other economic factors.

The rate of future health care cost increases is based on historical claims and enrollment information projected over the next fiscal year and adjusted for administrative charges. This rate is expected to decrease until 2027. At June 30, 2021, a hypothetical 1 percent increase or decrease in our health care cost trend rates would be immaterial to our pre-tax income.

Future compensation rates, withdrawal rates and participant retirement age are determined based on historical information. These assumptions are not expected to significantly change. Mortality rates are determined based on a review of published mortality tables.

We expect to contribute approximately $8 million and $1 million to our pension and other postretirement benefit plans, respectively, in 2022. Expected pension contributions in 2022 are primarily for international plans.

Allowance for Doubtful Accounts We record allowances for estimated losses resulting from the inability of our customers to make required payments. We assess the creditworthiness of our customers based on multiple sources of information and analyze additional factors such as our historical bad debt experience, industry concentrations of credit risk, current economic trends, changes in customer payment terms and forward-looking information. This assessment requires significant judgment. If the financial condition of our customers was to deteriorate, additional allowances may be required, resulting in future operating losses that are not included in the allowance for doubtful accounts at June 30, 2021.

Inventories We use the last-in, first-out method for determining the cost of a significant portion of our U.S. inventories, and they are stated at the lower of cost or market. The cost of the remainder of our inventories is measured using approximate costs determined on the first-in, first-out basis or using the average cost method, and are stated at the lower of cost or net realizable value. When market conditions indicate an excess of carrying costs over market value, a lower of cost or net realizable value provision or a lower of cost or market provision, as applicable, is recorded. Once inventory is determined to be excess or obsolete, a new cost basis is established that is not subsequently written back up in future periods.

Income Taxes Realization of our deferred tax assets is primarily dependent on future taxable income, the timing and amount of which are uncertain. A valuation allowance is recognized if it is “more likely than not” that some or all of a deferred tax asset will not be realized. As of June 30, 2021, the deferred tax assets net of valuation allowances relate primarily to net operating loss and other carryforwards, pension benefits, accrued employee benefits and inventory. In the event that we were to determine that we would not be able to realize our deferred tax assets in the future, an increase in the valuation allowance would be required. In the event we were to determine that we are able to use our deferred tax assets for which a valuation allowance is recorded, a decrease in the valuation allowance would be required.

Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

On March 27, 2020, the CARES Act was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, allows net operating losses arising in taxable years beginning after December 31, 2017 and before January 1, 2021 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes; permits net operating loss carryovers and carrybacks to offset 100 percent of taxable income for taxable years beginning before January 1, 2021; and modifies the limitation on business interest by increasing the allowable business interest deduction from 30 percent of adjusted taxable income to 50 percent of adjusted taxable income for taxable years beginning in 2019 or 2020. We carried back our taxable loss in the U.S. for fiscal 2020 under the provisions of the CARES Act and recorded a benefit in our tax provision during fiscal 2020.

Swiss tax reform

Legislation was effectively enacted during the December quarter of fiscal 2020 when the Canton of Schaffhausen approved the Federal Act on Tax Reform and AHV Financing on October 8, 2019 (Swiss tax reform). Significant changes from Swiss tax reform include the abolishment of certain favorable tax regimes and the creation of a multi-year transitional period at both the federal and cantonal levels.

The transitional provisions of Swiss tax reform allow companies to utilize a combination of lower tax rates and tax basis adjustments to fair value, which are used for tax depreciation and amortization purposes resulting in deductions over the transitional period. To reflect the federal and cantonal transitional provisions, as they apply to us, we recorded a deferred tax asset of $14.5 million during the December quarter of fiscal 2020. We consider the deferred tax asset from Swiss tax reform to be an estimate based on our current interpretation of the legislation, which is subject to change based on further legislative guidance, review with the Swiss federal and cantonal authorities and modifications to the underlying valuation. We anticipate finalization of the deferred tax asset within the next twelve months.

NEW ACCOUNTING STANDARDS

See Note 2 to the consolidated financial statements for information regarding recently adopted accounting pronouncements.

RECONCILIATION OF FINANCIAL MEASURES NOT DEFINED BY U.S. GAAP In accordance with SEC rules, we are providing descriptions of the non-GAAP financial measures included in this Annual Report and reconciliations to the most closely related GAAP financial measures. We believe that these measures provide useful perspective on underlying business trends and results and 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 and may, therefore, also be useful to investors as they are 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 (decline) Organic sales growth (decline) is a non-GAAP financial measure of sales growth (decline) (which is the most directly comparable GAAP measure) excluding the effects 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. We report organic sales decline at the consolidated and segment levels.

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

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

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

Year ended June 30, 2021	Metal Cutting	Infrastructure	Total
Organic sales decline	(4)%	(3)%	(4)%
Foreign currency exchange effect[6]	2	2	2
Divestiture effect[7]	—	(1)	—
Sales decline	(2)%	(2)%	(2)%

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

Metal Cutting

Year ended June 30, 2021	General engineering	Transportation	Aerospace	Energy
Constant currency end market sales (decline) growth	(1)%	4%	(34)%	(12)%
Foreign currency exchange effect[6]	2	3	1	2
End market sales growth (decline)[8]	1%	7%	(33)%	(10)%

Infrastructure

Year ended June 30, 2021	Energy	Earthworks	General engineering
Constant currency end market sales decline	(11)%	(3)%	—%
Foreign currency exchange effect[6]	2	2	6
Divestiture effect[7]	(1)	—	(4)
End market sales (decline) growth[8]	(10)%	(1)%	2%

Total

Year ended June 30, 2021	General engineering	Transportation	Aerospace	Energy	Earthworks
Constant currency end market sales (decline) growth	(1)%	4%	(34)%	(11)%	(3)%
Foreign currency exchange effect[6]	3	3	1	1	2
Divestiture effect[7]	(1)	—	—	—	—
End market sales growth (decline)[8]	1%	7%	(33)%	(10)%	(1)%

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

	Year Ended June 30, 2021		
	Americas	EMEA	Asia Pacific
Metal Cutting			
Constant currency regional sales (decline) growth	(10)%	(3)%	3%
Foreign currency exchange effect[6]	(1)	5	3
Regional sales (decline) growth[9]	(11)%	2%	6%
Infrastructure			
Constant currency regional sales (decline) growth	(8)%	(2)%	11%
Foreign currency exchange effect[6]	2	5	4
Divestiture effect[7]	(2)	—	—
Regional sales (decline) growth[9]	(8)%	3%	15%
Total			
Constant currency regional sales (decline) growth	(9)%	(3)%	6%
Foreign currency exchange effect[6]	1	5	4
Divestiture effect[7]	(1)	—	—
Regional sales (decline) growth[9]	(9)%	2%	10%

[6] Foreign currency exchange effect is calculated by dividing the difference between current period sales and current period sales at prior period foreign exchange rates by prior period sales.
[7] Divestiture effect is calculated by dividing prior period sales attributable to divested businesses by prior period sales.
[8] Aggregate sales for all end markets sum to the sales amount presented on Kennametal's consolidated financial statements.
[9] Aggregate sales for all regions sum to the sales amount presented on Kennametal's consolidated financial statements.

ITEM 7A - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

MARKET RISK We are exposed to certain market risks arising from transactions that are entered into in the normal course of business. As part of our financial risk management program, we use certain derivative financial instruments to manage these risks. We do not enter into derivative transactions for speculative purposes and, therefore, hold no derivative instruments for trading purposes. We may use derivative financial instruments to provide predictability to the effects of changes in foreign exchange rates on our consolidated results. Our objective in managing foreign exchange exposures with derivative instruments is to reduce volatility in cash flow, allowing us to focus more of our attention on business operations. With respect to interest rate management, we use forward-starting interest rate swaps to effectively hedge the variability in future benchmark interest payments attributable to changes in interest rates on forecasted issuances of fixed-rate debt. See Notes 2 and 17 of our consolidated financial statements set forth in Item 8 of this Annual Report.

We are exposed to counterparty credit risk for nonperformance of derivative contracts and, in the event of nonperformance, to market risk for changes in interest and currency exchange rates, as well as settlement risk. We manage exposure to counterparty credit risk through credit standards, diversification of counterparties and procedures to monitor concentrations of credit risk. We do not anticipate nonperformance by any of the counterparties.

The following provides additional information on our use of derivative instruments. Included below is a sensitivity analysis that is based upon a hypothetical 10 percent weakening or strengthening in the U.S. dollar and its effects on the June 30, 2021 currency exchange rates and the effective interest rates under our current borrowing arrangements. We compared our contractual derivative and borrowing arrangements in effect at June 30, 2021 to the hypothetical foreign exchange or interest rates in the sensitivity analysis to determine the effect on interest expense, pre-tax income and accumulated other comprehensive loss. Our analysis takes into consideration the different types of derivative instruments and the applicability of hedge accounting.

CASH FLOW HEDGES *Currency* A portion of our operations consists of investments in foreign subsidiaries. Our exposure to market risk from changes in foreign exchange rates arises from these investments, intercompany loans utilized to finance these subsidiaries, trade receivables and payables and firm commitments arising from international transactions. We manage our foreign exchange transaction risk to reduce the volatility of cash flows caused by currency exchange rate fluctuations through natural offsets where appropriate and through foreign exchange contracts. These contracts are designated as hedges of forecasted transactions that will settle in future periods and that would otherwise expose us to currency risk.

Our foreign exchange hedging program is intended to mitigate our exposure to currency exchange rate movements. This exposure arises largely from anticipated cash flows from cross-border intercompany sales of products and services. This program utilizes range forwards and forward contracts primarily to sell foreign currency. All outstanding range forward contracts expired as of June 30, 2021. The notional amount of the contracts translated into U.S. dollars at June 30, 2020 was $2.2 million.

Interest rate During fiscal 2020 we entered into seven forward-starting interest rate swap contracts with an aggregate notional amount totaling $200.0 million. A forward-starting interest rate swap is an agreement that effectively hedges the variability in future benchmark interest payments attributable to changes in interest rates on the forecasted issuance of fixed-rate debt. During fiscal 2021, upon issuance of the Senior Unsecured Notes due 2031 we settled the forward starting interest rate swap contracts for a gain of $10.2 million in other comprehensive income (loss). The gain will be amortized out of accumulated other comprehensive income (loss) and into interest expense (as a benefit) over the life of the Senior Unsecured Notes due 2031. The notional amount of the forward starting interest rate swap contracts at June 30, 2020 was $200.0 million. We recorded $2.1 million of liabilities as of June 30, 2020 related to these contracts. There were no interest rate swap contracts outstanding at June 30, 2021.

DEBT, REVOLVING AND OTHER LINES OF CREDIT AND NOTES PAYABLE At June 30, 2021 and 2020, we had $600.5 million and $1,094.5 million, respectively, of outstanding debt, including revolving and other lines of credit and notes payable. Effective interest rates as of June 30, 2021 and 2020 were 3.7 percent and 4.4 percent, respectively. A hypothetical change of 10 percent in market interest rates from June 30, 2021 levels would be immaterial.

CURRENCY EXCHANGE RATE FLUCTUATIONS Currency exchange rate fluctuations decreased diluted earnings per share by $0.03 in 2021 and decreased diluted earnings per share by $0.07 in 2020. Currency exchange rate fluctuations may have a material effect on future earnings in the short term and long term.

ITEM 8 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Management has conducted an assessment of the Company's internal controls over financial reporting as of June 30, 2021 using the criteria in *Internal Control – Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on its assessment, management has concluded that the Company maintained effective internal control over financial reporting as of June 30, 2021, based on the criteria in *Internal Control – Integrated Framework (2013)* issued by the COSO. The effectiveness of the Company's internal control over financial reporting as of June 30, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Kennametal Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Kennametal Inc. and its subsidiaries (the “Company”) as of June 30, 2021 and 2020, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended June 30, 2021, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of June 30, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 30, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2021, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Assessment of the Realization of U.S. Net Deferred Tax Assets

As described in Notes 2 and 13 to the consolidated financial statements, the Company had $26.3 million of U.S. net deferred tax assets as of June 30, 2021. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50 percent) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as available positive and negative evidence. Upon changes in facts and circumstances, management may conclude that deferred tax assets for which no valuation allowance is currently recorded may not be realized, resulting in a charge to establish a valuation allowance. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released.

The principal considerations for our determination that performing procedures relating to the assessment of the realization of U.S. net deferred tax assets is a critical audit matter are the significant judgment by management when determining the projections of taxable income, which in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence relating to management’s assessment of the realization of U.S. net deferred tax assets and management’s significant assumptions relating to projections of taxable income.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management’s assessment of the realization of U.S. net deferred tax assets, including controls over the determination of projections of taxable income. These procedures also included, among others (i) evaluating the positive and negative evidence available in management’s assessment of the realization of U.S. net deferred tax assets, (ii) testing the completeness and accuracy of underlying data used in management’s assessment, and (iii) evaluating the reasonableness of management’s significant assumptions related to projections of taxable income. Evaluating management’s significant assumptions related to projections of taxable income involved evaluating whether the assumptions used by management were reasonable considering (i) current and past financial performance, (ii) consistency with external market and industry data, and (iii) whether the assumptions were consistent with evidence obtained in other areas of the audit.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania
August 10, 2021

We have served as the Company’s auditor since 2002.

CONSOLIDATED STATEMENTS OF INCOME

Year ended June 30 (in thousands, except per share data)	2021	2020	2019
Sales	$ 1,841,441	$ 1,885,305	$ 2,375,234
Cost of goods sold	1,288,963	1,355,834	1,543,738
Gross profit	552,478	529,471	831,496
Operating expense	407,246	388,436	474,151
Restructuring charges (Note 16)	29,061	68,228	14,084
Goodwill and other intangible assets impairments (Note 8)	—	30,227	—
Loss on divestiture (Note 4)	—	6,517	—
Amortization of intangibles	14,003	13,811	14,411
Operating income	102,168	22,252	328,850
Interest expense	46,375	35,154	32,994
Other income, net	(8,867)	(14,862)	(15,379)
Income before income taxes	64,660	1,960	311,235
Provision for income taxes (Note 13)	6,243	7,007	63,359
Net income (loss)	58,417	(5,047)	247,876
Less: Net income attributable to noncontrolling interests	3,983	614	5,951
Net income (loss) attributable to Kennametal	$ 54,434	$ (5,661)	$ 241,925
PER SHARE DATA ATTRIBUTABLE TO KENNAMETAL SHAREHOLDERS			
Basic earnings (loss) per share	$ 0.65	$ (0.07)	$ 2.94
Diluted earnings (loss) per share	$ 0.65	$ (0.07)	$ 2.90
Basic weighted average shares outstanding	83,602	83,047	82,379
Diluted weighted average shares outstanding	84,333	83,047	83,291

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year ended June 30 (in thousands)	2021	2020	2019
Net income (loss)	$ 58,417	$ (5,047)	$ 247,876
Other comprehensive income (loss), net of tax			
Unrealized gain (loss) on derivatives designated and qualified as cash flow hedges	9,255	(582)	197
Reclassification of unrealized (gain) loss on expired derivatives designated and qualified as cash flow hedges	(401)	679	1,348
Unrecognized net pension and other postretirement benefit gain (loss)	9,107	(18,299)	(39,639)
Reclassification of net pension and other postretirement benefit loss	10,355	7,935	5,124
Foreign currency translation adjustments	60,528	(35,891)	(20,785)
Total other comprehensive income (loss), net of tax	88,844	(46,158)	(53,755)
Total comprehensive income (loss)	147,261	(51,205)	194,121
Less: comprehensive income (loss) attributable to noncontrolling interests	5,910	(1,846)	5,414
Comprehensive income (loss) attributable to Kennametal Shareholders	$ 141,351	$ (49,359)	$ 188,707

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

CONSOLIDATED BALANCE SHEETS

As of June 30 (in thousands, except per share data)	2021	2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 154,047	$ 606,684
Accounts receivable, less allowance for doubtful accounts of $9,734 and $9,430 respectively	302,945	237,983
Inventories (Note 7)	476,345	522,447
Other current assets	71,470	73,698
Total current assets	1,004,807	1,440,812
Property, plant and equipment:		
Land and buildings	413,865	360,256
Machinery and equipment	1,959,176	1,913,967
Less accumulated depreciation	(1,317,906)	(1,235,952)
Property, plant and equipment, net	1,055,135	1,038,271
Other assets:		
Goodwill (Note 8)	277,615	270,580
Other intangible assets, less accumulated amortization of $153,972 and $137,386, respectively (Note 8)	120,041	132,568
Operating lease right-of-use assets (Note 9)	50,341	48,035
Deferred income taxes (Note 13)	58,742	46,782
Long-term prepaid pension benefit (Note 14)	89,233	43,116
Other	9,847	17,427
Total other assets	605,819	558,508
Total assets	$ 2,665,761	$ 3,037,591
LIABILITIES		
Current liabilities:		
Revolving and other lines of credit and notes payable (Note 12)	$ 8,365	$ 500,368
Current operating lease liabilities (Note 9)	14,220	13,246
Accounts payable	177,659	164,641
Accrued income taxes	18,059	27,938
Accrued vacation pay	17,100	16,263
Accrued payroll	44,389	31,347
Other current liabilities (Note 10)	157,602	144,277
Total current liabilities	437,394	898,080
Long-term debt, less current maturities (Note 11)	592,108	594,083
Operating lease liabilities (Note 9)	36,800	35,372
Deferred income taxes (Note 13)	23,710	21,796
Accrued postretirement benefits (Note 14)	10,131	11,012
Accrued pension benefits (Note 14)	160,936	164,446
Accrued income taxes	4,246	9,584
Other liabilities	32,231	34,430
Total liabilities	1,297,556	1,768,803
Commitments and contingencies (Note 20)		
EQUITY		
Kennametal Shareholders' Equity:		
Preferred stock, no par value; 5,000 shares authorized; none issued	—	—
Capital stock, $1.25 par value; 120,000 shares authorized; 83,614 and 82,923 shares issued, respectively	104,518	103,654
Additional paid-in capital	562,820	538,575
Retained earnings	992,597	1,004,898
Accumulated other comprehensive loss (Note 15)	(330,327)	(417,242)
Total Kennametal Shareholders' Equity	1,329,608	1,229,885
Noncontrolling interests	38,597	38,903
Total equity	1,368,205	1,268,788
Total liabilities and equity	$ 2,665,761	$ 3,037,591

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended June 30 (in thousands)	2021	2020	2019
OPERATING ACTIVITIES			
Net income (loss)	$ 58,417	$ (5,047)	$ 247,876
Adjustments to reconcile to cash from operations:			
Depreciation	112,485	106,049	97,641
Amortization	14,003	13,811	14,411
Stock-based compensation expense	24,799	16,048	22,845
Restructuring and asset impairment charges (Notes 8 and 16)	5,664	34,175	(203)
Deferred income tax provision	(21,189)	(23,899)	2,806
Loss on divestiture (Note 4)	—	6,517	—
Debt refinancing charge (Note 11)	9,071	—	—
Other	6,754	2,613	2,654
Changes in certain assets and liabilities:			
Accounts receivable	(53,324)	128,715	17,323
Inventories	61,270	28,185	(53,387)
Accounts payable and accrued liabilities	46,775	(46,315)	(49,378)
Accrued income taxes	(18,273)	(8,645)	9,013
Accrued pension and postretirement benefits	(31,585)	(20,022)	(8,186)
Other	20,815	(8,447)	(2,896)
Net cash flow provided by operating activities	235,682	223,738	300,519
INVESTING ACTIVITIES			
Purchases of property, plant and equipment	(127,302)	(244,151)	(212,343)
Disposals of property, plant and equipment	4,373	2,622	11,243
Proceeds from divestiture (Note 4)	—	23,950	—
Other	(47)	(757)	(381)
Net cash flow used for investing activities	(122,976)	(218,336)	(201,481)
FINANCING ACTIVITIES			
Net increase (decrease) in notes payable	605	(175)	(715)
Net (decrease) increase in revolving and other lines of credit	(500,000)	500,364	(174)
Term debt borrowings	297,867	—	—
Term debt repayments	(300,000)	—	(400,000)
Make-whole premium on early extinguishment of debt (Note 11)	(9,639)	—	—
Settlement of interest rate swap agreement (Note 6)	10,198	—	—
Purchase of capital stock	(197)	(209)	(214)
The effect of employee benefit and stock plans and dividend reinvestment	821	(5,464)	(4,744)
Cash dividends paid to Shareholders	(66,735)	(66,303)	(65,746)
Other	(7,165)	(2,762)	161
Net cash flow (used for) provided by financing activities	(574,245)	425,451	(471,432)
Effect of exchange rate changes on cash and cash equivalents	8,902	(6,184)	(1,744)
CASH AND CASH EQUIVALENTS			
Net (decrease) increase in cash and cash equivalents	(452,637)	424,669	(374,138)
Cash and cash equivalents, beginning of year	606,684	182,015	556,153
Cash and cash equivalents, end of year	$ 154,047	$ 606,684	$ 182,015

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

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	2021		2020		2019	
Year ended June 30 (in thousands)	Shares	Amount	Shares	Amount	Shares	Amount
CAPITAL STOCK						
Balance at beginning of year	82,923	$ 103,654	82,421	$ 103,026	81,646	$ 102,058
Dividend reinvestment	6	7	7	9	6	7
Capital stock issued under employee benefit and stock plans	691	864	502	628	775	968
Purchase of capital stock	(6)	(7)	(7)	(9)	(6)	(7)
Balance at end of year	83,614	104,518	82,923	103,654	82,421	103,026
ADDITIONAL PAID-IN CAPITAL						
Balance at beginning of year		538,575		528,827		511,909
Dividend reinvestment		191		201		207
Capital stock issued under employee benefit and stock plans		24,556		9,748		16,918
Purchase of noncontrolling interests		(311)		—		—
Purchase of capital stock		(191)		(201)		(207)
Balance at end of year		562,820		538,575		528,827
RETAINED EARNINGS						
Balance at beginning of year		1,004,898		1,076,862		900,683
Net income (loss) attributable to Kennametal		54,434		(5,661)		241,925
Cash dividends ($0.80 per share in 2021, 2020 and 2019, respectively)		(66,735)		(66,303)		(65,746)
Balance at end of year		992,597		1,004,898		1,076,862
ACCUMULATED OTHER COMPREHENSIVE LOSS						
Balance at beginning of year		(417,242)		(373,543)		(320,325)
Unrealized gain (loss) on derivatives designated and qualified as cash flow hedges		9,255		(582)		197
Reclassification of unrealized (gain) loss on expired derivatives designated and qualified as cash flow hedges		(401)		679		1,348
Unrecognized net pension and other postretirement benefit gain (loss)		9,107		(18,299)		(39,639)
Reclassification of net pension and other postretirement benefit loss		10,355		7,935		5,124
Foreign currency translation adjustments		58,599		(33,432)		(20,248)
Other comprehensive income (loss), net of tax		86,915		(43,699)		(53,218)
Balance at end of year		(330,327)		(417,242)		(373,543)
NONCONTROLLING INTERESTS						
Balance at beginning of year		38,903		39,532		36,002
Net income		3,983		614		5,951
Other comprehensive income (loss), net of tax		1,927		(2,459)		(537)
Purchase of noncontrolling interests		(1,319)		—		—
Additions to noncontrolling interests		—		1,527		443
Cash dividends		(4,897)		(311)		(2,327)
Balance at end of year		38,597		38,903		39,532
Total equity, June 30		$ 1,368,205		$ 1,268,788		$ 1,374,704

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 — NATURE OF OPERATIONS

With more than 80 years of materials expertise, the Company is a global industrial technology leader, helping customers across the aerospace, earthworks, energy, general engineering and transportation end markets manufacture with precision and efficiency. This expertise includes the development and application of tungsten carbides, ceramics, super-hard materials and solutions used in metal cutting and extreme wear applications to keep customers up and running longer against conditions such as corrosion and high temperatures.

Our standard and custom product offering spans metal cutting and wear applications including turning, milling, hole making, tooling systems and services, as well as specialized wear components and metallurgical powders. End users of the Company's metal cutting 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. The Company's wear and metallurgical powders are used by producers and suppliers in equipment-intensive operations such as road construction, mining, quarrying, and oil and gas exploration, refining, production and supply.

Unless otherwise specified, any reference to a "year" is to a fiscal year ended June 30. When used in this Annual Report on Form 10-K, unless the context requires otherwise, the terms "we," "our" and "us" refer to Kennametal Inc. and its subsidiaries.

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The summary of our significant accounting policies is presented below to assist in evaluating our consolidated financial statements.

PRINCIPLES OF CONSOLIDATION The consolidated financial statements include our accounts and those of our subsidiaries in which we have a controlling interest. All significant intercompany balances and transactions are eliminated.

USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS In preparing our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP), we make judgments and estimates about the amounts reflected in our consolidated financial statements. As part of our financial reporting process, our management collaborates to determine the necessary information on which to base our judgments and develop estimates used to prepare the consolidated financial statements. We use historical experience and available information to make these judgments and estimates. However, different amounts could be reported using different assumptions and in light of different facts and circumstances. Therefore, actual amounts could differ from the estimates reflected in our consolidated financial statements.

CASH AND CASH EQUIVALENTS Cash investments having original maturities of three months or less are considered cash equivalents. Cash equivalents principally consist of investments in money market funds and bank deposits at June 30, 2021.

ACCOUNTS RECEIVABLE We market our products to a diverse customer base throughout the world. Trade credit is extended based upon periodically updated evaluations of each customer's ability to satisfy its obligations. We make judgments as to our ability to collect outstanding receivables and provide allowances for the portion of receivables when collection becomes doubtful. Accounts receivable reserves are determined based upon an aging of accounts and a review of specific accounts.

INVENTORIES We use the last-in, first-out (LIFO) method for determining the cost of a significant portion of our United States (U.S.) inventories, and they are stated at the lower of cost or market. The cost of the remainder of our inventories is measured using approximate costs determined on the first-in, first-out basis or using the average cost method, and are stated at the lower of cost or net realizable value. When market conditions indicate an excess of carrying costs over market value, a lower of cost or net realizable value provision or a lower of cost or market provision, as applicable, is recorded. Once inventory is determined to be excess or obsolete, a new cost basis is established that is not subsequently written back up in future periods.

PROPERTY, PLANT AND EQUIPMENT Property, plant and equipment are carried at cost. Major improvements are capitalized, while maintenance and repairs are expensed as incurred. Retirements and disposals are removed from cost and accumulated depreciation accounts, with the gain or loss reflected in operating income. Interest related to the construction of major facilities is capitalized as part of the construction costs and is depreciated over the facilities' estimated useful lives.

Depreciation for financial reporting purposes is computed using the straight-line method over the following estimated useful lives: building and improvements over 15-40 years; machinery and equipment over 4-15 years; furniture and fixtures over 5-10 years and computer hardware and software over 3-5 years.

LONG-LIVED ASSETS We evaluate the recoverability of property, plant and equipment, operating lease right-of-use (ROU) assets and intangible assets that are amortized, whenever events or changes in circumstances indicate the carrying amount of any such assets may not be fully recoverable. Changes in circumstances include technological advances, changes in our business model, capital structure, economic conditions or operating performance. Our evaluation is performed at the asset group level, based upon, among other things, our assumptions about the estimated future undiscounted cash flows these assets are expected to generate. When the sum of the undiscounted cash flows is less than the carrying value, we will recognize an impairment loss to the extent that carrying value exceeds fair value. We apply our best judgment when performing these evaluations to determine if a triggering event has occurred, the undiscounted cash flows used to assess recoverability and the fair value of the asset group.

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

The majority of our intangible assets with definite lives are amortized on a straight-line basis, while certain customer-related intangible assets are amortized on an accelerated method. Identifiable assets with finite lives are reviewed for impairment when events or circumstances indicate that the carrying value may not be recoverable.

PENSION AND OTHER POSTRETIREMENT BENEFITS We sponsor these types of benefit plans for certain employees and retirees. Accounting for the cost of these plans requires the estimation of the cost of the benefits to be provided well into the future and attributing that cost over either the expected work life of employees or over average life of participants participating in these plans, depending on plan status and on participant population. This estimation requires our judgment about the discount rate used to determine these obligations, expected return on plan assets, rate of future compensation increases, rate of future health care costs, withdrawal and mortality rates and participant retirement age. Differences between our estimates and actual results may significantly affect the cost of our obligations under these plans.

In the valuation of our pension and other postretirement benefit liabilities, management utilizes various assumptions. Discount rates are derived by identifying a theoretical settlement portfolio of high quality corporate bonds sufficient to provide for a plan’s projected benefit payments. This rate can fluctuate based on changes in the corporate bond yields.

The long-term rate of return on plan assets is estimated based on an evaluation of historical returns for each asset category held by the plans, coupled with the current and short-term mix of the investment portfolio. The historical returns are adjusted for expected future market and economic changes. This return will fluctuate based on actual market returns and other economic factors.

The rate of future health care costs is based on historical claims and enrollment information projected over the next year and adjusted for administrative charges. This rate is expected to decrease until 2027.

Future compensation rates, withdrawal rates and participant retirement age are determined based on historical information. These assumptions are not expected to significantly change. Mortality rates are determined based on a review of published mortality tables.

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.

The following tables provide the computation of diluted shares outstanding:

(in thousands)	2021	2019
Weighted-average shares outstanding during period	83,602	82,379
Add: Unexercised stock options and unvested restricted stock units	731	912
Number of shares on which diluted earnings per share is calculated	84,333	83,291
Unexercised stock options with an exercise price greater than the average market price and restricted stock units not included in the computation because they were anti-dilutive	295	427

In 2020, the effect of unexercised capital stock options, unvested performance awards and unvested restricted stock units was anti-dilutive as a result of a net loss in the period and therefore has been excluded from diluted shares outstanding as well as from the diluted earnings per share calculation.

REVENUE RECOGNITION 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, customary local commercial terms 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 to 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 consolidated balance sheets. 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. We have recorded an estimated returned goods allowance to provide for any potential returns.

We warrant that products sold are free from defects in material and workmanship under normal use and service when correctly installed, used and maintained. This warranty terminates 30 days after delivery of the product to the customer and does not apply to products that have been subjected to misuse, abuse, neglect or improper storage, handling or maintenance. Products may be returned to Kennametal only after inspection and approval by Kennametal and upon receipt by the customer of shipping instructions from Kennametal. We have included an estimated allowance for warranty returns in our returned goods allowance discussed above.

See "Note 21. Segment Data" for disaggregation of revenue by geography and end market.

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 June 30, 2021 and 2020.

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 consolidated statements of income.

SHIPPING AND HANDLING FEES AND COSTS All fees billed to customers for shipping and handling are classified as a component of sales. All costs associated with shipping and handling are classified as a component of cost of goods sold.

STOCK-BASED COMPENSATION We recognize stock-based compensation expense for all stock options, restricted stock awards and restricted stock units over the period from the date of grant to the date when the award is no longer contingent on the employee providing additional service (substantive vesting period), net of expected forfeitures. We utilize the Black-Scholes valuation method to establish the fair value of all stock option awards. Time vesting stock units are valued at the market value of the stock on the grant date. Performance vesting stock units with a market condition are valued using a Monte Carlo model.

Capital stock options are granted to eligible employees at fair market value at the date of grant. Capital stock options are exercisable under specified conditions for up to 10 years from the date of grant. The Kennametal Inc. Stock and Incentive Plan of 2010, as Amended and Restated on October 22, 2013, and further amended on January 27, 2015 (A/R 2010 Plan), by the Kennametal Inc. 2016 Stock and Incentive Plan, and on October 27, 2020 by the Kennametal Inc. 2020 Stock and Incentive Plan (2020 Plan) authorize the issuance of up to 9,500,000 shares of the Company's capital stock plus any shares remaining unissued under the Kennametal Inc. Stock and Incentive Plan of 2002, as amended (2002 Plan). Under the provisions of the A/R 2010 Plan and 2020 Plan participants may deliver stock, owned by the holder for at least six months, in payment of the option price and receive credit for the fair market value of the shares on the date of delivery. The fair market value of shares delivered during 2021, 2020 and 2019 was immaterial. In addition to stock option grants, the A/R 2010 Plan and the 2020 Plan permit the award of stock appreciation rights, performance share awards, performance unit awards, restricted stock awards, restricted unit awards and share awards to directors, officers and key employees.

RESEARCH AND DEVELOPMENT COSTS Research and development costs of $39.5 million, $38.7 million and $39.0 million in 2021, 2020 and 2019, respectively, were expensed as incurred. These costs are included in operating expense in the consolidated statements of income.

INCOME TAXES Deferred income taxes are recognized based on the future income tax effects (using enacted tax laws and rates) of differences in the carrying amounts of assets and liabilities for financial reporting and tax purposes. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50 percent) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, we consider all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, and projections of future profitability within the carry forward period, including taxable income from tax planning strategies. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of the deferred tax asset based on existing projections of income. Upon changes in facts and circumstances, we may conclude that deferred tax assets for which no valuation allowance is currently recorded may not be realized, resulting in a charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released.

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 use derivative financial instruments to provide predictability to the effects of changes in foreign exchange rates on our consolidated results. Our objective in managing foreign exchange exposures with derivative instruments is to reduce volatility in cash flow, allowing us to focus more of our attention on business operations. With respect to interest rate management, we use forward-starting interest rate swaps to effectively hedge the variability in future benchmark interest payments attributable to changes in interest rates on forecasted issuances of fixed-rate debt.

We account for derivative instruments as a hedge of the related asset, liability, firm commitment or anticipated transaction, when the derivative is specifically designated as a hedge of such items. We measure hedge effectiveness by assessing the changes in the fair value or expected future cash flows of the hedged item. Certain currency forward contracts hedging significant cross-border intercompany loans are considered other derivatives and, therefore, do not qualify for hedge accounting.

CASH FLOW HEDGES *Currency* Forward contracts and range forward contracts (a transaction where both a put option is purchased and a call option is sold) are designated as cash flow hedges and hedge anticipated cash flows from cross-border intercompany sales of products and services. Gains and losses realized on these contracts are recorded in accumulated other comprehensive loss, and are recognized as a component of other income, net when the underlying sale of products or services is recognized into earnings.

Interest Rate Forward starting interest rate swap contracts are designated as cash flow hedges and hedge a portion of the interest rate risk related to anticipated issuances of debt. Gains and losses realized on these contracts are recorded in accumulated other comprehensive loss, and are recognized as a component of interest expense when the interest payments on the future debt interest are recognized into earnings.

NET INVESTMENT HEDGES We designate financial instruments as net investment hedges from time to time to hedge the foreign exchange exposure of our net investment in foreign currency-based subsidiaries. The remeasurements of these non-derivatives designated as net investment hedges are calculated each period with changes reported in foreign currency translation adjustment within accumulated other comprehensive loss. Such amounts will remain in accumulated other comprehensive loss unless we complete or substantially complete liquidation or disposal of our investment in the underlying foreign operations.

CURRENCY TRANSLATION Assets and liabilities of international operations are translated into U.S. dollars using year-end exchange rates, while revenues and expenses are translated at average exchange rates throughout the year. The resulting net translation adjustments are recorded as a component of accumulated other comprehensive loss. The local currency is the functional currency of most of our locations.

Losses of $3.3 million, $3.4 million and $2.7 million from currency transactions were included in other income, net in 2021, 2020 and 2019, respectively.

NEW ACCOUNTING STANDARDS Effective July 1, 2020, the Company adopted Accounting Standards Update (ASU) No. 2016-13, Financial Instruments – Credit Losses. This ASU added a new impairment model (known as the current expected credit loss (CECL) model) that is based on expected losses rather than incurred losses. The new guidance applies to all financial assets, including trade receivables. The Company adopted the ASU on a modified retrospective approach. Under this method of adoption, there was no cumulative-effect adjustment to beginning retained earnings on the consolidated balance sheets. Adoption of this standard did not have a material effect on the Company's consolidated financial statements.

NOTE 3 — SUPPLEMENTAL CASH FLOW DISCLOSURES

Year ended June 30 (in thousands)	2021	2020	2019
Cash paid during the period for:			
Interest	$ 43,601	$ 25,796	$ 30,265
Income taxes	48,910	36,852	51,540
Supplemental disclosure of non-cash information:			
Changes in accounts payable related to purchases of property, plant and equipment	(17,500)	(9,400)	15,500
Changes in notes payable related to purchases of property, plant and equipment	7,254	—	—

NOTE 4 — DIVESTITURE

During the year ended June 30, 2020, we completed the sale of certain assets of the non-core specialty alloys and metals business within the Infrastructure segment located in New Castle, Pennsylvania to Advanced Metallurgical Group N.V. for an aggregate price of $24.0 million.

The net book value of these assets at closing was $29.5 million, and the pre-tax loss on divestiture recognized during the year ended June 30, 2020 was $6.5 million. Transaction proceeds were primarily used for capital expenditures related to our simplification/modernization efforts.

NOTE 5 — FAIR VALUE MEASUREMENTS

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

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

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

Level 3: Inputs that are unobservable.

As of June 30, 2021, the fair values of the Company's financial assets and financial liabilities measured at fair value on a recurring basis are categorized as follows:

(in thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 36	$ —	$ 36
Total assets at fair value	$ —	$ 36	$ —	$ 36
Liabilities:				
Derivatives [1]	$ —	$ 87	$ —	$ 87
Total liabilities at fair value	$ —	$ 87	$ —	$ 87

As of June 30, 2020, the fair value of the Company's financial assets and financial liabilities measured at fair value on a recurring basis are categorized as follows:

(in thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 36	$ —	$ 36
Total assets at fair value	$ —	$ 36	$ —	$ 36
Liabilities:				
Derivatives [1]	$ —	$ 2,139	$ —	$ 2,139
Total liabilities at fair value	$ —	$ 2,139	$ —	$ 2,139

[1] Currency and interest rate 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.

NOTE 6 — DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

As part of our financial risk management program, we use certain derivative financial instruments. See Note 2 for discussion on our derivative instruments and hedging activities policy.

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

(in thousands)	2021	2020
Derivatives designated as hedging instruments		
Other current assets - range forward contracts	$ —	$ 4
Other assets - forward starting interest rate swap contracts	—	20
Other liabilities - forward starting interest rate swap contracts	—	(2,094)
Total derivatives designated as hedging instruments	—	(2,070)
Derivatives not designated as hedging instruments		
Other current assets - currency forward contracts	36	12
Other current liabilities - currency forward contracts	(87)	(45)
Total derivatives not designated as hedging instruments	(51)	(33)
Total derivatives	$ (51)	$ (2,103)

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 consolidated balance sheets, with the offset to other income, net. Losses related to derivatives not designated as hedging instruments have been recognized as follows:

(in thousands)	2021	2020	2019
Other income, net - currency forward contracts	$ 2	$ 210	$ 108

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 related to these contracts are recorded in accumulated other comprehensive loss and are recognized as a component of cost of goods sold and other income, net when the underlying sale of products or services is recognized into earnings. All outstanding range forward contracts expired as of June 30, 2021. The notional amount of the contracts translated into U.S. dollars at June 30, 2020 was $2.2 million. The time value component of the fair value of range forward contracts is excluded from the assessment of hedge effectiveness.

During fiscal 2020 we entered into seven forward-starting interest rate swap contracts with an aggregate notional amount totaling $200.0 million. A forward-starting interest rate swap is an agreement that effectively hedges the variability in future benchmark interest payments attributable to changes in interest rates on the forecasted issuance of fixed-rate debt. During fiscal 2021, upon issuance of the Senior Unsecured Notes due 2031 (see Note 11 for more information) we settled the forward starting interest rate swap contracts for a gain of $10.2 million in other comprehensive income (loss). The gain will be amortized out of accumulated other comprehensive income (loss) and into interest expense (as a benefit) over the life of the Senior Unsecured Notes due 2031. The notional amount of the forward starting interest rate swap contracts at June 30, 2020 was $200.0 million. We recorded $2.1 million of liabilities as of June 30, 2020 related to these contracts. 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 years ended June 30, 2021 and 2020. There were no interest rate swap contracts outstanding at June 30, 2021.

NET INVESTMENT HEDGES

As of June 30, 2021 and 2020, we had foreign currency-denominated intercompany loans payable with total aggregate principal amounts of €5.2 million and €15.9 million, respectively, designated as net investment hedges to hedge the foreign exchange exposure of our net investment in Euro-based subsidiaries. The notional value of the contract, which has a maturity of June 26, 2022, was €5.2 million, or $6.1 million, as of June 30, 2021. A loss of $1.9 million and gains of $0.6 million and $2.4 million were recorded as a component of foreign currency translation adjustments in other comprehensive income (loss) during 2021, 2020 and 2019, respectively.

As of June 30, 2021 and 2020, the foreign currency-denominated intercompany loans payable designated as net investment hedges consisted of:

(in thousands)	2021		2020		
Instrument	Notional (EUR)[2]	Notional (USD)[2]	Notional (EUR)[2]	Notional (USD)[2]	Maturity
Foreign currency-denominated intercompany loan payable	€5,173	$6,146	€15,907	$17,833	June 26, 2022

(2) Includes principal and accrued interest.

NOTE 7 — INVENTORIES

Inventories consisted of the following at June 30:

(in thousands)	2021	2020
Finished goods	$ 302,524	$ 318,071
Work in process and powder blends	173,671	190,041
Raw materials	72,551	75,589
Inventories at current cost	548,746	583,701
Less: LIFO valuation	(72,401)	(61,254)
Total inventories	$ 476,345	$ 522,447

We used the LIFO method of valuing inventories for approximately 39 percent and 43 percent of total inventories at June 30, 2021 and 2020, respectively.

NOTE 8 — GOODWILL AND OTHER INTANGIBLE ASSETS

As of June 30, 2021, $277.6 million of goodwill was allocated to the Metal Cutting reporting unit. We completed an annual quantitative test of goodwill impairment and determined that the fair value of the reporting unit substantially exceeded the carrying value and, therefore, no impairment was recorded during fiscal 2021. Further, an indefinite-lived trademark intangible asset of $11.8 million in the Metal Cutting reporting unit had a fair value that approximated its carrying value as of the date of the annual impairment test and, therefore, no impairment was recorded during fiscal 2021.

December Quarter of Fiscal 2020 Impairment Charge

In the December quarter of fiscal 2020, the Company experienced deteriorating market conditions, primarily in general engineering and transportation applications in India and China, in addition to overall global weakness in the manufacturing sector. In view of these declining conditions and the significant detrimental effect on cash flows and actual and projected revenue and earnings compared with the fiscal 2019 annual impairment test, we determined that an impairment triggering event had occurred and performed an interim quantitative impairment test of our goodwill, indefinite-lived trademark intangible asset and other long-lived assets of our former Widia reporting unit. We evaluated the recoverability of goodwill for the reporting unit by comparing the fair value with its carrying value, with the fair values determined using a combination of a discounted cash flow analysis and market multiples based upon historical and projected financial information. As a result of this interim test, we recorded a non-cash pre-tax impairment charge during the three months ended December 31, 2019 of $14.6 million in the former Widia segment, which is now part of the Metal Cutting segment as of July 1, 2020, of which $13.1 million was for goodwill and $1.5 million was for an indefinite-lived trademark intangible asset. These impairment charges were recorded in goodwill and other intangible assets impairments in our consolidated statements of income. No impairment was recorded for the other long-lived assets.

March Quarter of Fiscal 2020 Impairment Charge

In the March quarter of fiscal 2020, the decline in actual and projected financial results for the former Widia reporting unit, primarily as a result of the COVID-19 pandemic, represented an interim impairment triggering event because there was essentially zero cushion between the reporting unit's carrying value and fair value as of March 31 2020. This is because the former Widia reporting unit was recorded at fair value as of the December 31, 2019 interim impairment testing date. We evaluated the recoverability of goodwill for the reporting unit by comparing the fair value with its carrying value, with the fair values determined using a combination of a discounted cash flow analysis and market multiples based upon historical and projected financial information. As a result of this interim test, we recorded a non-cash pre-tax impairment charge during the three months ended March 31, 2020 of $15.6 million in the former Widia segment, of which $13.7 million was for goodwill and $1.9 million was for an indefinite-lived trademark intangible asset. These impairment charges were recorded in goodwill and other intangible assets impairments in our consolidated statements of income. No impairment was recorded for the other long-lived assets.

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

(in thousands)	Metal Cutting	Infrastructure	Total
Gross goodwill	$ 450,853	$ 633,211	$ 1,084,064
Accumulated impairment losses	(150,842)	(633,211)	(784,053)
Balance as of June 30, 2019	$ 300,011	$ —	$ 300,011
Activity for the year ended June 30, 2020:			
Change in gross goodwill due to translation	(2,612)	—	(2,612)
Impairment charges	(26,819)	—	(26,819)
Gross goodwill	448,241	633,211	1,081,452
Accumulated impairment losses	(177,661)	(633,211)	(810,872)
Balance as of June 30, 2020	$ 270,580	$ —	$ 270,580
Activity for the year ended June 30, 2021:			
Change in gross goodwill due to translation	7,035	—	7,035
Gross goodwill	455,276	633,211	1,088,487
Accumulated impairment losses	(177,661)	(633,211)	(810,872)
Balance as of June 30, 2021	$ 277,615	$ —	$ 277,615

The components of our other intangible assets were as follows:

		June 30, 2021		June 30, 2020	
(in thousands)	Estimated Useful Life (in years)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Technology-based and other	4 to 20	$ 33,632	$ (24,413)	$ 32,713	$ (22,612)
Customer-related	10 to 21	183,338	(98,901)	181,408	(88,112)
Unpatented technology	10 to 30	31,957	(20,575)	31,586	(17,890)
Trademarks	5 to 20	13,268	(10,083)	13,087	(8,772)
Trademarks	Indefinite	11,818	—	11,160	—
Total		$ 274,013	$ (153,972)	$ 269,954	$ (137,386)

Amortization expense for intangible assets was $14.0 million, $13.8 million and $14.4 million for 2021, 2020 and 2019, respectively. Estimated amortization expense for 2022 through 2026 is $12.5 million, $12.3 million, $11.1 million, $9.9 million, and $9.5 million, respectively.

NOTE 9 — LEASES

At the inception of our contracts we determine if the contract is or contains a lease. A contract is or contains a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. ROU assets and operating lease liabilities are recognized based on the present value of lease payments over the lease term at commencement. For leases that do not have a readily determinable implicit rate, we use a discount rate based on our incremental borrowing rate, which is determined considering factors such as the lease term, our credit rating and the economic environment of the location of the lease as of the commencement date.

We account for non-lease components separately from lease components. These costs often relate to the payments for a proportionate share of real estate taxes, insurance, common area maintenance and other operating costs in addition to base rent. We also do not recognize ROU assets and liabilities for leases with an initial term of 12 months or less. Lease costs associated with leases of less than 12 months were $2.4 million and $6.4 million for the years ended June 30, 2021 and 2020, respectively.

As a lessee, we have various operating lease agreements primarily related to real estate, vehicles and office and plant equipment. Our real estate leases, which are comprised primarily of manufacturing, warehousing, office and administration facilities, represent a majority of our lease liability. Our lease payments are largely fixed. Any variable lease payments, including utilities, common area maintenance and repairs and maintenance, are expensed during the period incurred. Variable lease costs were immaterial for the year ended June 30, 2021 and 2020. A majority of our real estate leases include options to extend the lease and options to early terminate the lease. Leases with an early termination option generally involve a termination payment. We review all options to extend, terminate, or purchase the ROU assets at the inception of the lease and account for these options when they are reasonably certain of being exercised. Our lease agreements generally do not contain any material residual value guarantees or materially restrictive covenants. We do not have any material leases that have been signed but not commenced, and we did not have any lease transactions with related parties.

Operating lease expense is recognized on a straight-line basis over the lease term and is included in operating expense on our consolidated statements of income. Operating lease cost was $20.2 million, $22.6 million and $26.6 million in 2021, 2020 and 2019, respectively.

The following table sets forth supplemental balance sheet information related to our operating leases:

Year Ended June 30,	2021	2020
Weighted average remaining lease term	8.0 years	8.6 years
Weighted average discount rate	3.3 %	3.3 %

The following table sets forth supplemental cash flow information related to our operating leases:

Year Ended June 30, (in thousands)		2021		2020
Operating cash outflows from operating leases	$	17,651	$	15,635
ROU assets obtained in exchange for new operating lease liabilities	$	17,235	$	16,171

The following table sets forth the maturities of our operating lease liabilities and reconciles the respective undiscounted payments to the operating lease liabilities in the consolidated balance sheet as of June 30, 2021:

Year Ended June 30, (in thousands)		June 30, 2021
2022	$	15,062
2023		11,466
2024		7,993
2025		5,346
2026		2,983
Thereafter		15,840
Total undiscounted operating lease payments	$	58,690
Less: discount to net present value		7,670
Total operating lease liabilities	$	51,020

NOTE 10 — OTHER CURRENT LIABILITIES

Other current liabilities consisted of the following at June 30:

(in thousands)		2021		2020
Accrued employee benefits	$	51,783	$	20,194
Accrued restructuring (Note 16)		19,851		34,910
Accrued legal and professional fees		8,428		7,724
Payroll, state and local taxes		6,873		5,053
Accrued interest		3,520		7,630
Other		67,147		68,766
Total other current liabilities	$	157,602	$	144,277

NOTE 11 — LONG-TERM DEBT

Long-term debt consisted of the following at June 30:

(in thousands)		2021		2020
2.800% Senior Unsecured Notes due fiscal 2031, net of discount of $0.2 million for 2021	$	299,823	$	—
4.625% Senior Unsecured Notes due fiscal 2028, net of discount of $1.5 million for 2021 and $1.7 million for 2020		298,483		298,264
3.875% Senior Unsecured Notes due fiscal 2022, net of discount of $0.1 million for 2020		—		299,940
Total term debt		598,306		598,204
Less unamortized debt issuance costs		(6,198)		(4,121)
Total long-term debt	$	592,108	$	594,083

Senior Unsecured Notes In February 2021, we issued $300.0 million of 2.800 percent Senior Unsecured Notes with a maturity date of March 1, 2031. Interest will be paid semi-annually on March 1 and September 1 of each year. We settled forward starting interest rate swap contracts for a gain of $10.2 million related to the bond issuance as discussed in Note 6. In March 2021, we used the net proceeds from the bond issuance, plus cash on hand, for the early extinguishment of our $300.0 million of 3.875 percent Senior Unsecured Notes due 2022 (the 2022 Senior Notes). Due to the early extinguishment, interest expense during fiscal 2021 includes a make-whole premium of $9.6 million and the acceleration of a loss in the amount of $2.6 million from other comprehensive loss related to forward starting interest rate contracts that were used to hedge the interest payments of the 2022 Senior Notes. A stranded tax benefit associated with the termination of this hedge was also recognized during fiscal 2021. Refer to Note 13 for more information related to the stranded tax benefit. On June 7, 2018, we issued $300.0 million of 4.625 percent Senior Unsecured Notes with a maturity date of June 15, 2028. Interest on these notes is paid semi-annually on June 15 and December 15 of each year.

Future principal maturities of long-term debt are $300.0 million in 2028 and $300.0 million in 2031.

Fixed rate debt had a fair market value of $644.2 million and $630.2 million at June 30, 2021 and 2020, respectively. The Level 2 fair value is determined based on the quoted market prices for similar debt instruments as of June 30, 2021 and 2020, respectively.

NOTE 12 — REVOLVING AND OTHER LINES OF CREDIT AND NOTES PAYABLE

Credit Agreement During the three months ended September 30, 2020, we entered into the First Amendment (the Amendment) to the Fifth Amended and Restated Credit Agreement dated as of June 21, 2018, (as amended by the Amendment, the Credit Agreement). The Credit Agreement is a five-year, multi-currency, revolving credit facility, which we use to augment cash from operations and as 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: (1) a maximum leverage ratio where debt, net of domestic cash in excess of $25 million and sixty percent of the unrestricted cash held outside of the United States, must be less than or equal to 3.5 times trailing twelve months EBITDA (temporarily increased by the Amendment to 4.25 times trailing twelve months EBITDA during the period from September 30, 2020 through and including December 31, 2021), adjusted for certain non-cash expenses and which may be further adjusted, at our discretion, to include up to $120 million of cash restructuring charges through December 31, 2021; and (2) a minimum consolidated interest coverage ratio of EBITDA to interest of 3.5 times (as such terms are defined in the Credit Agreement). Borrowings under the Credit Agreement are guaranteed by our significant domestic subsidiaries.

As of June 30, 2021, we were in compliance with all covenants of the Credit Agreement and we had no borrowings outstanding and $700.0 million of availability. There were $500.0 million borrowings outstanding as of June 30, 2020. The weighted average interest rate on borrowings under the Credit Agreement was 3.1 percent for the year ended June 30, 2021.

Other lines of credit and notes payable were $8.4 million and $0.4 million at June 30, 2021 and 2020, respectively. The lines of credit represented short-term borrowings under credit lines with commercial banks in the various countries in which we operate. These credit lines, translated into U.S. dollars at June 30, 2021 exchange rates, totaled $65.0 million.

NOTE 13 — INCOME TAXES

Income (loss) before income taxes consisted of the following for the years ended June 30:

(in thousands)	2021	2020	2019
Income (loss) before income taxes:			
United States	$ (60,775)	$ (76,107)	$ 60,756
International	125,435	78,067	250,479
Total income before income taxes	$ 64,660	$ 1,960	$ 311,235
Current income taxes:			
Federal	$ 39	$ (3,558)	$ 5,679
State	133	905	321
International	30,726	33,559	54,553
Total current income taxes	30,898	30,906	60,553
Deferred income taxes:			
Federal	$ (23,170)	$ (9,113)	$ (3,606)
State	(2,948)	724	45
International	1,463	(15,510)	6,367
Total deferred income taxes:	(24,655)	(23,899)	2,806
Provision for income taxes	$ 6,243	$ 7,007	$ 63,359
Effective tax rate	9.7 %	357.5 %	20.4 %

Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

On March 27, 2020, the CARES Act was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, allows net operating losses arising in taxable years beginning after December 31, 2017 and before January 1, 2021 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes; permits net operating loss carryovers and carrybacks to offset 100 percent of taxable income for taxable years beginning before January 1, 2021; and modifies the limitation on business interest by increasing the allowable business interest deduction from 30 percent of adjusted taxable income to 50 percent of adjusted taxable income for taxable years beginning in 2019 or 2020. We carried back our taxable loss in the U.S. for fiscal 2020 under the provisions of the CARES Act and recorded a benefit in our tax provision during fiscal 2020.

Swiss tax reform

Legislation was effectively enacted during the December quarter of fiscal 2020 when the Canton of Schaffhausen approved the Federal Act on Tax Reform and AHV Financing on October 8, 2019 (Swiss tax reform). Significant changes from Swiss tax reform include the abolishment of certain favorable tax regimes and the creation of a multi-year transitional period at both the federal and cantonal levels.

The transitional provisions of Swiss tax reform allow companies to utilize a combination of lower tax rates and tax basis adjustments to fair value, which are used for tax depreciation and amortization purposes resulting in deductions over the transitional period. To reflect the federal and cantonal transitional provisions, as they apply to us, we recorded a deferred tax asset of $14.5 million during the December quarter of fiscal 2020. We consider the deferred tax asset from Swiss tax reform to be an estimate based on our current interpretation of the legislation, which is subject to change based on further legislative guidance, review with the Swiss federal and cantonal authorities, and modifications to the underlying valuation. We anticipate finalization of the deferred tax asset within the next twelve months.

The reconciliation of income taxes computed using the statutory U.S. income tax rate and the provision for income taxes was as follows for the years ended June 30:

(in thousands)	2021	2020	2019
Income taxes at U.S. statutory rate	$ 13,579	$ 412	$ 65,359
State income taxes, net of federal tax benefit	(1,725)	1,283	289
U.S. income taxes provided on international income	(6,479)	12,422	7,347
Combined tax effects of international income	5,860	10,583	162
Impact of goodwill impairment charges	—	5,651	—
Change in valuation allowance and other uncertain tax positions	1,127	755	(1,473)
U.S. research and development credit	(3,055)	(4,093)	(3,911)
Change in permanent reinvestment assertion	—	—	6,093
Combined effects of U.S. tax reform	—	—	(9,280)
Combined effects of Swiss tax reform	—	(14,500)	—
Combined effects of the U.S. CARES Act	—	(6,913)	—
Recognition of stranded deferred tax balance	(3,465)	—	—
Other	401	1,407	(1,227)
Provision for income taxes	$ 6,243	$ 7,007	$ 63,359

During 2021, we recorded a tax benefit of $3.5 million for the recognition of a stranded deferred tax balance in accumulated other comprehensive loss associated with the forward starting interest rate swap contracts that were terminated when the 2022 Senior Notes were extinguished. The impact of this item is included in the tax reconciliation table under the caption “Recognition of stranded deferred tax balance” and in the consolidated statements of cash flows as a non-cash item within the caption "Debt refinancing charge."

During 2021, we recorded a net tax benefit of $9.3 million related to a tax election made in our fiscal 2020 U.S. income tax return pursuant to global intangible low-taxed income (GILTI) regulations which were issued during the current fiscal year. The impact of this item is included in the tax reconciliation table under the caption “U.S. income taxes provided on international income.”

During 2019, we recorded a net tax benefit of $9.3 million associated with the finalization of our toll tax charge which included a benefit of $14.5 million for the toll tax charge and a $5.3 million charge for an unrecognized tax benefit. The effect of these items is included in the tax reconciliation table under the caption “Combined effects of U.S. tax reform.”

During 2019, we released a $1.1 million valuation allowance that was previously recorded against the net deferred tax assets of our Australian subsidiary. The effect of this item is included in the tax reconciliation table under the caption “Change in valuation allowance and other uncertain tax positions.”

The components of net deferred tax assets and liabilities were as follows at June 30:

(in thousands)		2021		2020
Deferred tax assets:				
Net operating loss (NOL) carryforwards	$	44,258	$	31,891
Inventory valuation and reserves		11,068		8,220
Pension benefits		7,136		19,608
Other postretirement benefits		3,486		4,110
Accrued employee benefits		11,168		11,650
Operating lease liabilities		12,652		11,889
Other accrued liabilities		15,596		7,310
Tax credits and other carryforwards		32,490		21,048
Intangible assets		7,784		10,531
Other		—		364
Total		145,638		126,621
Valuation allowance		21,263		16,654
Total deferred tax assets	$	124,375	$	109,967
Deferred tax liabilities:				
Tax depreciation in excess of book	$	63,020	$	67,411
Operating lease right-of-use assets		12,502		11,715
Unremitted earnings not permanently reinvested		6,429		5,855
Other	$	7,392		—
Total deferred tax liabilities	$	89,343	$	84,981
Total net deferred tax assets (liabilities)	$	35,032	$	24,986

As of June 30, 2021, we have $26.3 million of U.S. net deferred tax assets. Within this amount is $57.0 million related to net operating loss, tax credit, and other carryforwards that can be used to offset future U.S. taxable income. Certain of these carryforwards will expire if they are not used within a specified timeframe. At this time, we consider it more likely than not that we will have sufficient U.S. taxable income in the future that will allow us to realize these net deferred tax assets. However, it is possible that some or all of these tax attributes could ultimately expire unused, especially if our end markets do not continue to recover from the COVID-19 global pandemic. Therefore, if we are unable to generate sufficient U.S. taxable income from our operations, a valuation allowance to reduce the U.S. net deferred tax assets may be required, which would materially increase income tax expense in the period in which the valuation allowance is recorded.

Included in deferred tax assets at June 30, 2021 is $32.5 million associated with tax credits and other carryforward items in the U.S. Of that amount, $0.7 million expires through 2031, $4.6 million expires through 2036, $18.3 million expires through 2041, $2.6 million does not expire, and $6.3 million is amortizable over eight years.

Included in deferred tax assets at June 30, 2021 is $44.3 million associated with NOL carryforwards in U.S. federal, state and foreign jurisdictions. Of that amount, $8.1 million expires through 2026, $2.2 million expires through 2031, $2.7 million expires through 2036, $3.8 million expires through 2041, and the remaining $27.5 million does not expire. The realization of these tax benefits is primarily dependent on future taxable income in these jurisdictions.

A valuation allowance of $21.3 million has been placed against deferred tax assets primarily in U.S. state, Brazil and Bolivia jurisdictions, all of which would be allocated to income tax expense upon realization of the deferred tax assets. As the respective operations generate sufficient income, the valuation allowances will be partially or fully reversed at such time we believe it will be more likely than not that the deferred tax assets will be realized. In 2021, the valuation allowance related to these deferred tax assets increased by $4.6 million.

We consider the majority of the $1.5 billion unremitted earnings of our non-U.S. subsidiaries to be permanently reinvested. With regard to these unremitted earnings, we have not, nor do we anticipate the need to, repatriate funds to the U.S. to satisfy domestic liquidity needs arising in the ordinary course of business, including liquidity needs associated with our domestic debt service requirements. Determination of the amount of unrecognized deferred tax liability related to indefinitely reinvested earnings is not practicable due to our legal entity structure and the complexity of U.S. and local tax laws. With regard to the small portion of unremitted earnings that are not indefinitely reinvested, we maintain a deferred tax liability for foreign withholding and U.S. state income taxes. The deferred tax liability associated with unremitted earnings of our non-U.S. subsidiaries not permanently reinvested is $6.4 million as of June 30, 2021.

A reconciliation of the beginning and ending amount of unrecognized tax benefits (excluding interest and penalty) is as follows as of June 30:

(in thousands)	2021	2020	2019
Balance at beginning of year	$ 8,680	$ 8,952	$ 5,775
Increases for tax positions of prior years	—	—	7,384
Decreases related to settlement with taxing authority	—	—	(3,765)
Decreases related to lapse of statute of limitations	(229)	(214)	(324)
Foreign currency translation	205	(58)	(118)
Balance at end of year	$ 8,656	$ 8,680	$ 8,952

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate in 2021, 2020 and 2019 is $8.7 million, $8.7 million and $9.0 million, respectively. We believe that it is reasonably possible that the amount of unrecognized tax benefits will decrease by approximately $5.3 million within the next twelve months.

Our policy is to recognize interest and penalties related to income taxes as a component of the provision for income taxes in the consolidated statements of income. We recognized a decrease of $0.2 million and $0.4 million in 2021 and 2019, respectively, and an increase of $1.0 million in 2020. As of June 30, 2021 and 2020, the amount of interest accrued was $1.4 million and $1.2 million, respectively. As of June 30, 2021 there was no penalty accrued and at June 30, 2020, the amount of penalty accrued was $0.5 million.

With few exceptions, we are no longer subject to income tax examinations by tax authorities for years prior to 2015. The Internal Revenue Service has audited or the statute of limitations has expired for all U.S. tax years prior to 2018. Various state and foreign jurisdiction tax authorities are in the process of examining our income tax returns for various tax years ranging from 2015 to 2018. We continuously review our uncertain tax positions and evaluate any potential issues that may lead to an increase or decrease in the total amount of unrecognized tax benefits recorded.

NOTE 14 — PENSION AND OTHER POSTRETIREMENT BENEFITS

Defined Benefit Pension Plans

We have defined benefit pension plans that cover certain employees in the U.S., Germany, the UK, Switzerland, Canada and Israel. Pension benefits under defined benefit pension plans are based on years of service and, for certain plans, on average compensation for specified years preceding retirement. We fund pension costs in accordance with the funding requirements of the Employee Retirement Income Security Act of 1974 (ERISA), as amended, for U.S. plans and in accordance with local regulations or customs for non-U.S. plans. The accrued benefit for all participants in the Kennametal Inc. Retirement Income Plan was frozen as of December 31, 2016. The majority of our defined benefit pension plans are closed to future participation.

We have an Executive Retirement Plan for certain executives and a Supplemental Executive Retirement Plan both of which have been closed to future participation on June 15, 2017 and July 26, 2006, respectively.

We presently provide varying levels of postretirement health care and life insurance benefits to certain employees and retirees. By fiscal 2019, participants over the age of 65 were transitioned to a private exchange and some received a fixed Health Retirement Account (HRA) contribution to offset the cost of their coverage. Postretirement health and life benefits are closed to future participants as of December 31, 2016.

We use a June 30 measurement date for all of our plans. During fiscal 2021, as part of the plan to wind-up the fully frozen, overfunded Canadian defined benefit pension plans, the Company purchased an upfront annuity for retirees resulting in a non-cash settlement charge of $2.8 million. The Company expects to complete the wind-up of the Canadian plans by fiscal 2023.

The funded status of our pension plans and amounts recognized in the consolidated balance sheets as of June 30 were as follows:

(in thousands)	2021	2020
Change in benefit obligation:		
Benefit obligation, beginning of year	$ 1,004,005	$ 964,741
Service cost	1,685	1,796
Interest cost	23,188	27,320
Participant contributions	548	637
Actuarial (gains) losses	(16,794)	67,403
Benefits and expenses paid	(52,719)	(50,733)
Currency translation adjustments	23,276	(5,758)
Plan amendments	(129)	(231)
Plan settlements	(13,966)	(1,286)
Plan curtailments	(10)	(171)
Other adjustments	(359)	287
Benefit obligation, end of year	$ 968,725	$ 1,004,005
Change in plans' assets:		
Fair value of plans' assets, beginning of year	$ 876,036	$ 825,869
Actual return on plans' assets	54,026	96,133
Company contributions	9,998	9,721
Participant contributions	548	637
Plan settlements	(13,966)	(1,286)
Benefits and expenses paid	(52,719)	(50,733)
Currency translation adjustments	16,032	(4,305)
Other adjustments	149	$ —
Fair value of plans' assets, end of year	$ 890,104	$ 876,036
Funded status of plans	$ (78,621)	$ (127,969)
Amounts recognized in the balance sheets consist of:		
Long-term prepaid benefit	$ 89,233	$ 43,116
Short-term accrued benefit obligation	(6,918)	(6,639)
Accrued pension benefits	(160,936)	(164,446)
Net amount recognized	$ (78,621)	$ (127,969)

The pre-tax amounts related to our defined benefit pension plans recognized in accumulated other comprehensive loss were as follows at June 30:

(in thousands)	2021	2020
Unrecognized net actuarial losses	$ 279,628	$ 305,903
Unrecognized net prior service costs	2,001	2,026
Unrecognized transition obligations	277	332
Total	$ 281,906	$ 308,261

To the best of our knowledge and belief, the asset portfolios of our defined benefit pension plans do not contain our capital stock. Apart from the partial annuitization of the Canadian plans as previously mentioned, we do not issue insurance contracts to cover future annual benefits of defined benefit pension plan participants. Transactions between us and our defined benefit pension plans include the reimbursement of plan expenditures incurred by us on behalf of the plans. To the best of our knowledge and belief, the reimbursement of cost is permissible under current ERISA rules or local government law. The accumulated benefit obligation for all defined benefit pension plans was $967.5 million and $1,001.8 million as of June 30, 2021 and 2020, respectively.

Included in the above information are plans with accumulated benefit obligations exceeding the fair value of plan assets as of June 30 as follows:

(in thousands)	2021	2020
Projected benefit obligation	$ 174,973	$ 180,388
Accumulated benefit obligation	173,684	178,195
Fair value of plan assets	7,116	9,273

The components of net periodic pension income include the following as of June 30:

(in thousands)	2021	2020	2019
Service cost	$ 1,685	$ 1,796	$ 1,627
Interest cost	23,188	27,320	31,901
Expected return on plans' assets	(53,653)	(53,943)	(53,789)
Amortization of transition obligation	94	88	91
Amortization of prior service cost	34	50	(19)
Curtailment	(7)	(115)	—
Settlement	3,190	(51)	—
Recognition of actuarial losses	13,606	10,359	6,723
Other adjustments	(473)	288	—
Net periodic pension income	$ (12,336)	$ (14,208)	$ (13,466)

As of June 30, 2021, the projected benefit payments, including future service accruals for these plans for 2022 through 2026, are $53.1 million, $53.0 million, $55.0 million, $55.5 million and $55.4 million, respectively, and $268.3 million in 2027 through 2031.

The amounts of accumulated other comprehensive loss expected to be recognized in net periodic pension cost during 2022 related to net actuarial losses are $11.9 million. The amount of accumulated other comprehensive income expected to be recognized in net periodic pension cost during 2022 related to transition obligations and prior service cost is immaterial.

We expect to contribute approximately $8 million to our pension plans in 2022, which is primarily for international plans.

Other Postretirement Benefit Plans

The funded status of our other postretirement benefit plans and the related amounts recognized in the consolidated balance sheets were as follows:

(in thousands)	2021	2020
Change in benefit obligation:		
Benefit obligation, beginning of year	$ 12,365	$ 12,642
Interest cost	307	404
Actuarial losses	60	709
Benefits paid	(1,281)	(1,390)
Other	(68)	—
Benefit obligation, end of year	$ 11,383	$ 12,365
Funded status of plan	$ (11,383)	$ (12,365)
Amounts recognized in the balance sheets consist of:		
Short-term accrued benefit obligation	$ (1,252)	$ (1,353)
Accrued postretirement benefits	(10,131)	(11,012)
Net amount recognized	$ (11,383)	$ (12,365)

The pre-tax amounts related to our other postretirement benefit plans which were recognized in accumulated other comprehensive loss were as follows at June 30:

(in thousands)	2021	2020
Unrecognized net actuarial losses	$ 4,355	$ 4,602
Unrecognized net prior service credits	(1,924)	(2,200)
Total	$ 2,431	$ 2,402

The components of net periodic other postretirement benefit cost include the following for the years ended June 30:

(in thousands)	2021	2020	2019
Interest cost	$ 307	$ 404	$ 613
Amortization of prior service credit	(276)	(276)	(90)
Recognition of actuarial loss	307	257	248
Net periodic other postretirement benefit cost	$ 338	$ 385	$ 771

As of June 30, 2021, the projected benefit payments, including future service accruals for our other postretirement benefit plans for 2022 through 2026, are $1.3 million, $1.2 million, $1.1 million, $1.0 million and $0.9 million, respectively, and $3.6 million in 2027 through 2031.

The amounts of accumulated other comprehensive loss expected to be recognized in net periodic pension cost during 2022 related to net actuarial losses and related to prior service credit are costs of $0.3 million and income of $0.3 million, respectively.

We expect to contribute approximately $1.3 million to our other postretirement benefit plans in 2022.

The service cost component of net periodic pension income of $1.7 million, $1.8 million and $1.6 million for 2021, 2020 and 2019, respectively, was reported as a component of cost of goods sold and operating expense. The other components of net periodic pension income and net periodic other postretirement benefit cost totaling a net benefit of $13.7 million, $15.6 million and $14.3 million for 2021, 2020 and 2019, respectively, were presented as a component of other income, net.

Assumptions

The significant actuarial assumptions used to determine the present value of net benefit obligations for our defined benefit pension plans and other postretirement benefit plans were as follows:

	2021	2020	2019
Discount Rate:			
U.S. plans	1.2-3.0%	1.6-2.9%	2.7-3.6%
International plans	0.3-3.2%	0.2-2.4%	0.4-2.9%
Rates of future salary increases:			
U.S. plans (Executive Retirement Plan only)	4.0 %	4.0 %	4.0 %
International plans	1.5 %	1.5 %	1.8-3.0%

The significant assumptions used to determine the net periodic income for our pension and other postretirement benefit plans were as follows:

	2021	2020	2019
Discount Rate:			
U.S. plans	1.2-3.0%	2.7-3.6%	4.0-4.3%
International plans	0.3-3.2%	0.4-2.9%	1.8-3.3%
Rates of future salary increases:			
U.S. plans (Executive Retirement Plan only)	4.0 %	4.0 %	4.0 %
International plans	1.5 %	1.8-3.0%	2.5-3.0%
Rate of return on plans assets:			
U.S. plans	6.8 %	7.0 %	7.0 %
International plans	0.2-5.3%	0.4-5.3%	5.0-5.3%

The rates of return on plan assets are based on historical performance, as well as future expected returns by asset class considering macroeconomic conditions, current portfolio mix, long-term investment strategy and other available relevant information.

The annual assumed rate of increase in the per capita cost of covered benefits (the health care cost trend rate) for our postretirement benefit plans was as follows:

	2021	2020	2019
Health care costs trend rate assumed for next year	6.5 %	6.8 %	7.0 %
Rate to which the cost trend rate gradually declines	5.0 %	5.0 %	5.0 %
Year that the rate reaches the rate at which it is assumed to remain	2027	2027	2027

A change of one percentage point in the assumed health care cost trend rates would have an immaterial effect on both the total service and interest cost components of our other postretirement cost and other postretirement benefit obligation at June 30, 2021.

Plan Assets

The primary objective of certain of our pension plans' investment policies is to ensure that sufficient assets are available to provide the benefit obligations at the time the obligations come due. The overall investment strategy for the defined benefit pension plans' assets combine considerations of preservation of principal and moderate risk-taking. The assumption of an acceptable level of risk is warranted in order to achieve satisfactory results consistent with the long-term objectives of the portfolio. Fixed income securities comprise a significant portion of the portfolio due to their plan-liability-matching characteristics and to address the plans' cash flow requirements. Additionally, diversification of investments within each asset class is utilized to further reduce the effect of losses in single investments.

Investment management practices for U.S. defined benefit pension plans must comply with ERISA and all applicable regulations and rulings thereof. The use of derivative instruments is permitted where appropriate and necessary for achieving overall investment policy objectives. Currently, the use of derivative instruments is not significant when compared to the overall investment portfolio.

The Company utilizes a liability driven investment strategy (LDI) for the assets of its U.S. defined benefit pension plans in order to reduce the volatility of the funded status of these plans and to meet the obligations at an acceptable cost over the long term. This LDI strategy entails modifying the asset allocation and duration of the assets of the plans to more closely match the liability profile of these plans. The asset reallocation involves increasing the fixed income allocation, reducing the equity component and adding alternative investments. Longer duration interest rate swaps have been utilized periodically in order to increase the overall duration of the asset portfolio to more closely match the liabilities.

Our defined benefit pension plans’ asset allocations as of June 30, 2021 and 2020 and target allocations for 2022, by asset class, were as follows:

	2021	2020	Target %
Equity	20 %	22 %	20 %
Fixed Income	76 %	75 %	80 %
Other	4 %	3 %	— %

The following sections describe the valuation methodologies used by the trustee to measure the fair value of the defined benefit pension plan assets, including an indication of the level in the fair value hierarchy in which each type of asset is generally classified (see Note 5 for the definition of fair value and a description of the fair value hierarchy).

Corporate fixed income securities Investments in corporate fixed income securities consist of corporate debt and asset backed securities. These investments are classified as level two and are valued using independent observable market inputs such as the treasury curve, swap curve and yield curve.

Common stock Common stocks are classified as level one and are valued at their quoted market price.

Government securities Investments in government securities consist of fixed income securities such as U.S. government and agency obligations and foreign government bonds and asset and mortgage backed securities such as obligations issued by government sponsored organizations. These investments are classified as level two and are valued using independent observable market inputs such as the treasury curve, credit spreads and interest rates.

Other fixed income securities Investments in other fixed income securities are classified as level two and valued based on observable market data.

Other Other investments consist primarily of state and local obligations and short term investments including cash, corporate notes, and various short term debt instruments which can be redeemed within a nominal redemption notice period. These investments are primarily classified as level two and are valued using independent observable market inputs.

The fair value methods described may not be reflective of future fair values. Additionally, while the Company believes the valuation methods used by the plans’ trustee are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in different fair value measurement at the reporting date.

The following table presents the fair value of the benefit plans' assets by asset category as of June 30, 2021:

(in thousands)	Level 1	Level 2	Level 3	NAV[3]	Total
Common / collective trusts [3]:					
Blend funds	$ —	$ —	$ —	$ 90,338	$ 90,338
Mutual funds	—	—	—	48,446	48,446
Corporate fixed income securities	—	443,948	—	—	443,948
Common stock	42,670	—	—	—	42,670
Government securities:					
U.S. government securities	—	149,514	—	—	149,514
Foreign government securities	—	57,253	—	—	57,253
Other fixed income securities	—	21,107	—	—	21,107
Other	1,107	35,721	—	—	36,828
Total investments	$ 43,777	$ 707,543	$ —	$ 138,784	$ 890,104

The following table presents the fair value of the benefit plans' assets by asset category as of June 30, 2020:

(in thousands)	Level 1	Level 2	Level 3	NAV[3]	Total
Common / collective trusts [3]:					
Blend funds	$ —	$ —	$ —	$ 94,667	$ 94,667
Mutual funds	—	—	—	59,674	59,674
Corporate fixed income securities	—	394,521	—	—	394,521
Common stock	38,487	—	—	—	38,487
Government securities:					
U.S. government securities	—	178,364	—	—	178,364
Foreign government securities	—	61,153	—	—	61,153
Other fixed income securities	—	22,544	—	—	22,544
Other	2,410	24,216	—	—	26,626
Total investments	$ 40,897	$ 680,798	$ —	$ 154,341	$ 876,036

[3] Investments in common / collective trusts invest primarily in publicly traded securities and are valued using net asset value (NAV) of units of a bank collective trust. Therefore, these amounts have not been classified in the fair value hierarchy and are presented in the tables to reconcile the fair value hierarchy to the total fair value of plan assets.

Defined Contribution Plans

We sponsor several defined contribution retirement plans. Costs for defined contribution plans were $13.3 million, $14.7 million and $16.3 million in 2021, 2020 and 2019, respectively.

Certain U.S. employees are eligible to participate in the Kennametal Thrift Plus Plan (Thrift), which is a qualified defined contribution plan under section 401(k) of the Internal Revenue Code. Under the Thrift, eligible employees receive a full match of their contributions up to 6 percent of eligible compensation.

All contributions, including the company match and discretionary, are made in cash and invested in accordance with participants’ investment elections. There are no minimum amounts that must be invested in company stock, and there are no restrictions on transferring amounts out of company stock to another investment choice, other than excessive trading rules applicable to such investments. Employee contributions and our matching and discretionary contributions vest immediately as of the participants' employment dates.

NOTE 15 — ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of and changes in accumulated other comprehensive loss (AOCL) were as follows, net of tax, for the year ended June 30, 2021 (in thousands):

Attributable to Kennametal:	Pension and other postretirement benefits	Currency translation adjustment	Derivatives	Total
Balance, June 30, 2020	$ (232,634)	$ (181,027)	$ (3,581)	$ (417,242)
Other comprehensive income before reclassifications	9,107	58,599	9,255	76,961
Amounts Reclassified from AOCL	10,355	—	(401)	9,954
Net other comprehensive income	19,462	58,599	8,854	86,915
AOCL, June 30, 2021	$ (213,172)	$ (122,428)	$ 5,273	$ (330,327)
Attributable to noncontrolling interests:				
Balance, June 30, 2020	$ —	$ (5,909)	$ —	$ (5,909)
Other comprehensive income before reclassifications	—	1,927	—	1,927
Net other comprehensive income	—	1,927	—	1,927
AOCL, June 30, 2021	$ —	$ (3,982)	$ —	$ (3,982)

The components of and changes in AOCL were as follows, net of tax, for the year ended June 30, 2020 (in thousands):

Attributable to Kennametal:	Pension and other postretirement benefits	Currency translation adjustment	Derivatives	Total
Balance, June 30, 2019	$ (222,270)	$ (147,595)	$ (3,678)	$ (373,543)
Other comprehensive loss before reclassifications	(18,299)	(33,432)	(582)	(52,313)
Amounts Reclassified from AOCL	7,935	—	679	8,614
Net other comprehensive loss	(10,364)	(33,432)	97	(43,699)
AOCL, June 30, 2020	$ (232,634)	$ (181,027)	$ (3,581)	$ (417,242)
Attributable to noncontrolling interests:				
Balance, June 30, 2019	$ —	$ (3,450)	$ —	$ (3,450)
Other comprehensive loss before reclassifications	—	(2,459)	—	(2,459)
Net other comprehensive loss	—	(2,459)	—	(2,459)
AOCL, June 30, 2020	$ —	$ (5,909)	$ —	$ (5,909)

The components of and changes in AOCL were as follows, net of tax, for the year ended June 30, 2019 (in thousands):

Attributable to Kennametal:	Pension and other postretirement benefits	Currency translation adjustment	Derivatives	Total
Balance, June 30, 2018	$ (187,755)	$ (127,347)	$ (5,223)	$ (320,325)
Other comprehensive loss before reclassifications	(39,639)	(20,248)	197	(59,690)
Amounts Reclassified from AOCL	5,124	—	1,348	6,472
Net other comprehensive (loss) income	(34,515)	(20,248)	1,545	(53,218)
AOCL, June 30, 2019	$ (222,270)	$ (147,595)	$ (3,678)	$ (373,543)
Attributable to noncontrolling interests:				
Balance, June 30, 2018	$ —	$ (2,913)	$ —	$ (2,913)
Other comprehensive loss before reclassifications	—	(537)	—	(537)
Net other comprehensive loss	—	(537)	—	(537)
AOCL, June 30, 2019	$ —	$ (3,450)	$ —	$ (3,450)

Reclassifications out of AOCL for the years ended June 30, 2021, 2020 and 2019 consisted of the following:

Details about AOCL components (in thousands)	Year Ended June 30, 2021	2020	2019	Affected line item in the Income Statement
Losses and (gains) on cash flow hedges:				
Forward starting interest rate swaps	$ 4,082	$ 2,444	$ 2,352	Interest expense
Currency exchange contracts	(24)	(1,545)	(567)	Other income, net
Total before tax	4,058	899	1,785	
Tax impact	(4,459)	(220)	(437)	Provision for income taxes
Net of tax	$ (401)	$ 679	$ 1,348	
Pension and other postretirement benefits:				
Amortization of transition obligations	$ 94	$ 88	$ 91	Other income, net
Amortization of prior service credit	(242)	(226)	(109)	Other income, net
Recognition of actuarial losses	13,913	10,616	6,971	Other income, net
Total before tax	13,765	10,478	6,953	
Tax impact	(3,410)	(2,543)	(1,829)	Provision for income taxes
Net of tax	$ 10,355	$ 7,935	$ 5,124	

The amount of income tax allocated to each component of other comprehensive income for the year ended June 30, 2021:

(in thousands)	Pre-tax	Tax impact	Net of tax
Unrealized gain on derivatives designated and qualified as cash flow hedges	$ 12,264	$ (3,009)	$ 9,255
Reclassification of unrealized loss (gain) on expired derivatives designated and qualified as cash flow hedges	4,058	(4,459)	(401)
Unrecognized net pension and other postretirement benefit gain	11,901	(2,794)	9,107
Reclassification of net pension and other postretirement benefit loss	13,765	(3,410)	10,355
Foreign currency translation adjustments	61,038	(510)	60,528
Other comprehensive income	$ 103,026	$ (14,182)	$ 88,844

The amount of income tax allocated to each component of other comprehensive loss for the year ended June 30, 2020:

(in thousands)	Pre-tax	Tax impact	Net of tax
Unrealized loss on derivatives designated and qualified as cash flow hedges	$ (771)	$ 189	$ (582)
Reclassification of unrealized loss on expired derivatives designated and qualified as cash flow hedges	899	(220)	679
Unrecognized net pension and other postretirement benefit loss	(23,999)	5,700	(18,299)
Reclassification of net pension and other postretirement benefit loss	10,478	(2,543)	7,935
Foreign currency translation adjustments	(35,936)	45	(35,891)
Other comprehensive loss	$ (49,329)	$ 3,171	$ (46,158)

The amount of income tax allocated to each component of other comprehensive loss for the year ended June 30, 2019:

(in thousands)	Pre-tax	Tax impact	Net of tax
Unrealized gain on derivatives designated and qualified as cash flow hedges	$ 261	$ (64)	$ 197
Reclassification of unrealized loss on expired derivatives designated and qualified as cash flow hedges	1,785	(437)	1,348
Unrecognized net pension and other postretirement benefit loss	(52,087)	12,448	(39,639)
Reclassification of net pension and other postretirement benefit loss	6,953	(1,829)	5,124
Foreign currency translation adjustments	(20,881)	96	(20,785)
Other comprehensive loss	$ (63,969)	$ 10,214	$ (53,755)

NOTE 16 — RESTRUCTURING AND RELATED CHARGES

FY20 Restructuring Actions

In the June quarter of fiscal 2019, we implemented, and in fiscal 2020 substantially completed, the FY20 Restructuring Actions associated with our simplification/modernization initiative to reduce structural costs, improve operational efficiency and position us for long-term profitable growth. Total restructuring and related charges since inception of $54.8 million were recorded for this program through June 30, 2021, consisting of: $46.6 million in Metal Cutting and $8.3 million in Infrastructure.

FY21 Restructuring Actions

In the September quarter of fiscal 2020, we announced the initiation of restructuring actions in Germany associated with our simplification/modernization initiative to reduce structural costs. Subsequently, we also announced the acceleration of our other structural cost reduction plans including the closing of the Johnson City, Tennessee facility. Expected pre-tax charges for the FY21 Restructuring Actions are approximately $90 million. Total restructuring and related charges since inception of $82.2 million were recorded for this program through June 30, 2021, consisting of: $74.5 million in Metal Cutting and $7.7 million in Infrastructure. The majority of the remaining charges related to the FY21 Restructuring Actions are expected to be in the Metal Cutting segment.

Annual Restructuring Charges

During 2021, we recorded restructuring and related charges of $40.4 million, which consisted of $35.6 million in Metal Cutting and $4.8 million in Infrastructure. Of this amount, restructuring charges totaled $29.6 million, of which $0.5 million was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of $10.8 million were recorded in cost of goods sold.

During 2020, we recorded restructuring and related charges of $83.3 million. Of this amount, restructuring charges totaled $69.2 million, of which $0.9 million was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of $14.1 million were recorded in cost of goods sold.

During 2019, we recorded restructuring and related charges of $16.9 million, net of a $4.8 million gain on the sale of our previously closed Madison, AL manufacturing location as part of FY19 Restructuring Actions. Of this amount, restructuring charges totaled $19.5 million, of which $0.7 million was related to inventory and was recorded in cost of goods sold. Restructuring-related charges of $1.8 million were recorded in cost of goods sold and $0.3 million were recorded in operating expense during 2019.

As of June 30, 2021, $19.9 million the restructuring accrual is recorded in other current liabilities and $9.9 million is recorded in other liabilities in our consolidated balance sheet. As of June 30, 2020, $34.9 million of the restructuring accrual is recorded in other current liabilities and $12.5 million is recorded in other liabilities in our consolidated balance sheet. The amounts are as follows:

(in thousands)	June 30, 2020	Expense, net	Asset Write-Down	Translation	Cash Expenditures	June 30, 2021
Severance	$ 47,303	$ 23,917	$ —	$ 2,445	$ (43,942)	$ 29,723
Facilities	—	5,664	(5,664)	—	—	—
Other	63	—	—	2	(65)	—
Total	47,366	29,581	(5,664)	2,447	(44,007)	29,723

(in thousands)	June 30, 2019	Expense	Asset Write-Down	Translation	Cash Expenditures	June 30, 2020
Severance	$ 19,125	$ 66,129	$ —	$ (397)	$ (37,554)	$ 47,303
Facilities	—	3,039	(3,039)	—	—	—
Other	87	6		(2)	(28)	63
Total	19,212	69,174	(3,039)	(399)	(37,582)	47,366

NOTE 17 — FINANCIAL INSTRUMENTS

The methods used to estimate the fair value of our financial instruments are as follows:

Cash and Equivalents, Revolving and Other Lines of Credit and Notes Payable The carrying amounts approximate their fair value because of the short maturity of the instruments.

Long-Term Debt, Including Current Maturities Fixed rate debt had a fair market value of $644.2 million and $630.2 million at June 30, 2021 and 2020, respectively. The Level 2 fair value is determined based on the quoted market prices for similar debt instruments as of June 30, 2021 and 2020, respectively.

Foreign Exchange Contracts All outstanding range forward contracts expired as of June 30, 2021. The notional amount of the contracts translated into U.S. dollars at June 30, 2020 was $2.2 million. We would have received an immaterial amount at June 30, 2020 to settle these contracts representing the fair value of these agreements. The carrying value equaled the fair value for these contracts at June 30, 2020. Fair value was estimated based on quoted market prices of comparable instruments.

Interest Rate Swap Contracts During fiscal 2021, upon issuance of the Senior Unsecured Notes due 2031 (see Note 11 for more information) we settled the forward starting interest rate swap contracts used to hedge a portion of the interest rate risk related to the refinancing. The notional amount of the forward starting interest rate swap contracts at June 30, 2020 was $200.0 million. We recorded $2.1 million of liabilities as of June 30, 2020 related to these contracts. There were no interest rate swap contracts outstanding at June 30, 2021.

Concentrations of Credit Risk Financial instruments that potentially subject us to concentrations of credit risk consist primarily of temporary cash investments and trade receivables. By policy, we make temporary cash investments with high credit quality financial institutions and limit the amount of exposure to any one financial institution. With respect to trade receivables, concentrations of credit risk are significantly reduced because we serve numerous customers in many industries and geographic areas.

We are exposed to counterparty credit risk for nonperformance of derivatives and, in the unlikely event of nonperformance, to market risk for changes in interest and currency exchange rates, as well as settlement risk. We manage exposure to counterparty credit risk through credit standards, diversification of counterparties and procedures to monitor concentrations of credit risk. We do not anticipate nonperformance by any of the counterparties. As of June 30, 2021 and 2020, we had no significant concentrations of credit risk.

NOTE 18 — STOCK-BASED COMPENSATION

Stock Options

Changes in our stock options for 2021 were as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Aggregate Intrinsic value (in thousands)
Options outstanding, June 30, 2020	646,959	$ 33.60		
Exercised	(280,274)	27.10		
Lapsed and forfeited	(51,673)	43.01		
Options outstanding, June 30, 2021	315,012	$ 37.83	2.6	$ 642
Options vested and expected to vest, June 30, 2021	315,012	$ 37.83	2.6	$ 642
Options exercisable, June 30, 2021	315,012	$ 37.83	2.6	$ 642

As of June 30, 2021 and June 30, 2020, there was no unrecognized compensation cost related to options outstanding. All options were fully vested as of June 30, 2021 and June 30, 2020.

Tax benefits relating to excess stock-based compensation deductions are presented in the consolidated statements of cash flows as operating cash inflows. Tax benefits resulting from stock-based compensation deductions were greater than the amounts reported for financial reporting purposes by $0.7 million in 2021, and less than amounts reported for financial reporting purposes by an immaterial amount in 2020 and by $1.3 million in 2019.

The amount of cash received from the exercise of capital stock options during 2021, 2020 and 2019 was $6.6 million, $0.9 million and $4.8 million, respectively. The related tax benefit was $0.6 million in 2021, was immaterial in 2020, and was $0.5 million 2019. The total intrinsic value of options exercised in 2021, 2020 and 2019 was $2.4 million, $0.3 million and $2.4 million, respectively.

Restricted Stock Units – Time Vesting and Performance Vesting

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

Changes in our time vesting and performance vesting restricted stock units for 2021 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, 2020	554,633	$ 34.26	1,039,695	$ 32.48
Granted	220,876	33.49	924,850	31.84
Vested	(77,284)	47.47	(480,754)	33.88
Performance metric adjustments, net	(100,000)	32.92	—	—
Other adjustments	(4,565)	30.26	—	—
Forfeited	(93,183)	32.39	(151,051)	30.87
Unvested, June 30, 2021	500,477	$ 32.53	1,332,740	$ 31.72

During 2021, 2020 and 2019, compensation expense related to time vesting and performance vesting restricted stock units was $23.9 million, $15.3 million and $21.9 million, respectively. Certain performance metrics related to fiscal 2020 were not met, resulting in an adjustment of 100,000 performance vesting stock units during 2021. As of June 30, 2021, the total unrecognized compensation cost related to unvested time vesting and performance vesting restricted stock units was $22.7 million and is expected to be recognized over a weighted average period of 1.8 years.

NOTE 19— 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 sites associated with our current or former operations.

We establish and maintain accruals for certain potential environmental obligations. At June 30, 2021 and 2020, the balances of these liabilities were $14.7 million, of which $2.6 million was current, and $15.6 million, of which $6.1 million was current, respectively. These accruals represent anticipated costs associated with the remediation of these issues and are generally not discounted.

The accruals we have established for environmental liabilities represent our best current estimate of the probable and reasonably estimable costs of addressing 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 accruals currently appear to be sufficient to cover these environmental obligations, 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 recorded and unrecorded 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.

Among other environmental laws, we are subject to the Comprehensive Environmental Response Compensation and Liability Act of 1980, under which we have been identified by the USEPA or other third party as a PRP with respect to environmental remedial costs at certain sites. We have evaluated our claims and potential liability associated with these sites based upon the best information currently available to us. We believe our environmental accruals will be adequate to cover our portion of the environmental remedial costs at those sites where we have been designated a PRP, to the extent these expenses are probable and reasonably estimable.

NOTE 20 — COMMITMENTS AND CONTINGENCIES

Legal Matters Various lawsuits arising during the normal course of business are pending against us. In our opinion, the ultimate liability, if any, resulting from these matters will have no significant effect on our consolidated financial position or results of operations.

Lease Commitments We lease a wide variety of facilities and equipment under operating leases, primarily for warehouses, production and office facilities and equipment. Refer to Note 9 for more information.

Purchase Commitments We have purchase commitments for materials, supplies and machinery and equipment as part of the ordinary conduct of business. Some of these commitments extend beyond one year and are based on minimum purchase requirements. We believe these commitments are not at prices in excess of current market.

Other Contractual Obligations We do not have material financial guarantees or other contractual commitments that are reasonably likely to adversely affect our liquidity.

Related Party Transactions Sales to affiliated companies were immaterial in 2021, 2020 and 2019. We do not have any other related party transactions that affect our operations, results of operations, cash flow or financial condition.

NOTE 21 — SEGMENT DATA

The Company manages and reports its business in the following two segments: Metal Cutting and Infrastructure. The Company's reportable operating segments have been determined in accordance with the Company's internal management structure, which is organized based on operating activities, the manner in which we organize segments for making operating decisions and assessing performance and the availability of separate financial results. We do not allocate certain corporate expenses related to executive retirement plans, the Company's Board of Directors and strategic initiatives, as well as certain other costs and report them in Corporate. Our former segments, Industrial and Widia, were combined into one Metal Cutting segment as of July 1, 2020. Infrastructure remains unchanged. Segment results have been retrospectively restated to reflect the change in reportable segments. Our reportable operating segments do not represent the aggregation of two or more operating segments.

Sales to a single customer did not aggregate to five percent or more of total sales in 2021, 2020 and 2019.

METAL CUTTING The Metal Cutting segment develops and manufactures high performance tooling and metal cutting products and services and offers an assortment of standard and custom metal cutting solutions to diverse end markets, including aerospace, general engineering, energy and transportation. The products include milling, hole making, turning, threading and toolmaking systems used in the manufacture of airframes, aero engines, trucks and automobiles, ships and various types of industrial equipment. We leverage advanced manufacturing capabilities in combination with varying levels of customization to solve our customers' toughest challenges and deliver improved productivity for a wide range of applications**.** Metal Cutting markets its products under the Kennametal®, WIDIA®, WIDIA Hanita® and WIDIA GTD® brands through its direct sales force, a network of independent and national 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.

INFRASTRUCTURE Our Infrastructure segment produces engineered tungsten carbide and ceramic components, earth-cutting tools, and advanced metallurgical powders, primarily for the energy, earthworks and general engineering end markets. These wear-resistant products include compacts, nozzles, frac seats and custom components used in oil and gas and petrochemical industries; rod blanks and abrasive water jet nozzles for general industries; earth cutting tools and systems used in underground mining, trenching and foundation drilling and road milling; tungsten carbide powders for the oil and gas, aerospace and process industries; and ceramics used by the packaging industry for metallization of films and papers. We combine deep metallurgical and engineering expertise with advanced manufacturing capabilities to deliver solutions that drive improved productivity for our customers. Infrastructure markets its products primarily under the Kennametal® brand and sells through a direct sales force as well as through distributors.

Segment data is summarized as follows:

(in thousands)		2021		2020		2019
Sales:						
Metal Cutting	$	1,150,746	$	1,178,053	$	1,472,021
Infrastructure		690,695		707,252		903,213
Total sales	$	1,841,441	$	1,885,305	$	2,375,234
Operating income:						
Metal Cutting	$	45,855	$	985	$	223,578
Infrastructure		59,461		23,113		108,480
Corporate		(3,148)		(1,846)		(3,208)
Total operating income	$	102,168	$	22,252	$	328,850
Interest expense	$	46,375	$	35,154	$	32,994
Other income, net		(8,867)		(14,862)		(15,379)
Income before income taxes	$	64,660	$	1,960	$	311,235
Depreciation and amortization:						
Metal Cutting	$	81,796	$	74,664	$	67,763
Infrastructure		44,661		45,176		44,284
Corporate		31		20		5
Total depreciation and amortization	$	126,488	$	119,860	$	112,052
Segment assets[4]:						
Metal Cutting	$	1,532,177	$	1,452,131	$	1,462,257
Infrastructure		698,766		748,424		883,566
Corporate		434,818		837,036		310,446
Total assets	$	2,665,761	$	3,037,591	$	2,656,269
Capital expenditures:						
Metal Cutting	$	103,812	$	195,167	$	167,647
Infrastructure		23,490		48,984		44,696
Total capital expenditures	$	127,302	$	244,151	$	212,343

[4] Metal Cutting and Infrastructure segment assets are principally accounts receivable, less allowance for doubtful accounts; inventories; property, plant and equipment, net; goodwill; other intangible assets, net of accumulated amortization; and operating lease ROU assets. Corporate assets are principally cash and cash equivalents, other current assets, long-term prepaid pension benefit, deferred income taxes and other assets.

Geographic information for sales, based on country where the sale originated, and long-lived assets is as follows:

(in thousands)	2021	2020	2019
Sales:			
United States	$ 692,106	$ 778,054	$ 1,014,189
Germany	260,792	248,796	314,035
China	242,815	214,364	247,858
Canada	79,891	90,247	108,261
India	94,966	81,366	113,287
Italy	59,955	52,699	68,585
France	45,356	45,817	59,899
United Kingdom	28,464	33,305	44,384
Other[4]	337,096	340,657	404,736
Total sales	$ 1,841,441	$ 1,885,305	$ 2,375,234
Total long-lived assets:			
United States	$ 611,724	$ 607,222	$ 525,713
Germany	218,250	210,674	201,714
China	97,404	92,658	78,410
India	44,504	44,673	44,643
Israel	21,790	22,249	24,042
Canada	19,144	20,508	20,435
Other	42,319	40,287	39,938
Total long-lived assets[5]	$ 1,055,135	$ 1,038,271	$ 934,895

[4] Other consists of sales from 27 countries, none of which individually exceed 2 percent of total sales.

[5] Total long-lived assets as of June 30, 2021, 2020 and 2019 include property, plant and equipment, net of $1,055.1 million, $1,038.3 million and $934.9 million, respectively.

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

	Metal Cutting			Infrastructure			Total Kennametal		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Americas	38 %	42 %	41 %	57 %	62 %	66 %	45 %	49 %	50 %
EMEA	39	37	38	19	18	16	31	30	30
Asia Pacific	23	21	21	24	20	18	24	21	20

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

	Metal Cutting			Infrastructure			Total Kennametal		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
General Engineering	54 %	53 %	52 %	35 %	34 %	34 %	47 %	46 %	45 %
Transportation	30	27	29	—	—	—	19	17	18
Aerospace	8	12	11	—	—	—	5	7	7
Energy	8	8	8	26	28	33	15	16	17
Earthworks	—	—	—	39	38	33	14	14	13

NOTE 22 — SUBSEQUENT EVENTS

The Company evaluated subsequent events after June 30, 2021 through the date these financial statements were issued and has determined there have been no subsequent events for which disclosure is required, other than as disclosed below.

On July 27, 2021, the Board of Directors authorized a three-year share repurchase program. Under this program, the Company intends to repurchase up to $200 million of Kennametal common stock. The Company expects to fund repurchases through cash generated from operations.

ITEM 9 — CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A — CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

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)) as of June 30, 2021. 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 Exchange Act of 1934, as amended, 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 June 30, 2021 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.

(b) Management's Report on Internal Control over Financial Reporting

Management's Report on Internal Control over Financial Reporting is included in Item 8 of this Annual Report and incorporated herein by reference.

(c) Attestation Report of the Independent Registered Public Accounting Firm

The effectiveness of Kennametal's internal control over financial reporting as of June 30, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report included in Item 8 of this Annual Report, which is incorporated herein by reference.

(d) Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting that occurred during the fourth quarter of 2021 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B — OTHER INFORMATION

None.

PART III

ITEM 10 — DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Information regarding the executive officers of Kennametal Inc. is as follows: Name, Age, Position, and Experience During the Past Five Years [(1)].

Christopher Rossi, 57
President and Chief Executive Officer
President and Chief Executive Officer since August 2017; Formerly, Chief Executive Officer of Dresser-Rand at Siemens Aktiengesellschaft (provides custom-engineered rotating equipment for applications in the oil, gas, process, power, and other industries), from September 2015 to May 2017; Executive Vice President of Global Operations at Dresser-Rand Group Inc. from September 2012 to September 2015.

Damon J. Audia, 50
Vice President and Chief Financial Officer
Vice President and Chief Financial Officer since September 2018; Formerly, Senior Vice President and Chief Financial Officer at Carpenter Technology Corporation (manufactures, fabricates and distributes specialty metals) from October 2015 to September 2018; Senior Vice President of Finance in North America Business at The Goodyear Tire & Rubber Company (develops, manufactures, markets and distributes tires).

Judith L. Bacchus, 59
Vice President and Chief Administrative Officer
Vice President and Chief Administrative Officer since May 2019; Vice President and Chief Human Resources and Corporate Relations Officer since December 2015; Vice President and Chief Human Resources Officer from June 2011 to November 2015.

Franklin Cardenas, 53
Vice President, Kennametal Inc. and President, Infrastructure Business Segment
Vice President, Kennametal Inc. and President, Infrastructure Business Segment since February 2020; Formerly, Vice President of Asia Pacific for the Donaldson Company (a global leader in the filtration industry) from 2016 to 2020 and Vice President, Global Engine Aftermarket from 2010 to 2016. He started at Donaldson Company in 1995 and held roles of increasing responsibility until 2020.

Sanjay Chowbey, 53
President, Metal Cutting
President, Metal Cutting since June 2021; Formerly, President, Services and Solutions of Flowserve from 2019 to 2021 and Senior Vice President and President of TE SubCom from 2017 to 2018. Previously spent over 11 years at Danaher / Fortive Corporation (from 2006 through 2017) serving in various roles of increasing responsibility, the latest being President, Thomson Industries.

Michelle R. Keating, 45
Vice President, Secretary and General Counsel, Kennametal Inc.
Vice President, Secretary and General Counsel, Kennametal Inc. since December 2016; Vice President, Secretary and Interim General Counsel from July 2016 to December 2016; Vice President, Associate General Counsel & Assistant Secretary from March 2016 to July 2016; Assistant General Counsel & Assistant Secretary from August 2011 to February 2016.

Carlonda R. Reilly, 53
Vice President and Chief Technology Officer
Vice President and Chief Technology Officer since September 2018; Formerly, Global Technology Director in Transportation and Advanced Polymers business at DuPont (chemical company) from January 2016 to September 2018 and Global Technology Director in Building Innovations at DuPont from 2013 to January 2016.

Patrick S. Watson, 48
Vice President Finance and Corporate Controller, Kennametal Inc.
Vice President Finance and Corporate Controller, Kennametal Inc. since March 2017; Vice President Finance - Industrial Business from March 2014 to February 2017; Director Finance, Kennametal EMEA from August 2011 to August 2014.

(1) Each executive officer has been elected by the Board of Directors to serve until removed or until a successor is elected and qualified. Unless otherwise noted, none of the executive officers (i) has an arrangement or understanding with any other person(s) pursuant to which he or she was selected as an officer, (ii) has any family relationship with any director or executive officer of the Company, or (iii) is involved in any legal proceeding which would require disclosure under this item.

Incorporated herein by reference is the information to be provided under the captions “Proposal I. Election of Directors” in our definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after June 30, 2021 (2021 Proxy Statement). Also incorporated herein by reference is the information to be set forth under the caption “Ethics and Corporate Governance-Code of Conduct” and "Ethics and Corporate Governance-Corporate Governance" in the 2021 Proxy Statement.

The Company has a separately designated standing Audit Committee established in accordance with Section 3(a) (58) (A) of the Exchange Act. The members of the Audit Committee are: William M. Lambert (Chair); Lorraine M. Martin; Sagar A. Patel; and Steven H. Wunning. Incorporated herein by reference is the information provided under the caption “Board of Directors and Board Committees-Committee Functions-Audit Committee” in the 2021 Proxy Statement.

ITEM 11 — EXECUTIVE COMPENSATION

Incorporated herein by reference from our 2021 Proxy Statement is the information to be set forth under the captions “Executive Compensation, Compensation Discussion and Analysis,” "Compensation Committee Report," "Analysis of Risk Inherent in our Compensation Policies and Practices," "Executive Compensation Tables," "2021 Nonqualified Deferred Compensation," "Retirement Programs" and "Potential Payments Upon Termination or Change in Control." Also incorporated herein by reference from our 2021 Proxy Statement is the information to be set forth under the captions “Board of Directors Compensation and Benefits” and “Board of Directors and Board Committees - Committee Functions - Compensation Committee Interlocks and Insider Participation."

ITEM 12 — SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Incorporated herein by reference from our 2021 Proxy Statement are: (i) the information to be set forth under the caption “Equity Compensation Plans,” (ii) the information to be set forth under the caption “Ownership of Capital Stock by Directors, Nominees and Executive Officers” with respect to the directors’ and officers’ shareholdings; and (iii) the information to be set forth under the caption “Principal Holders of Voting Securities” with respect to other beneficial owners.

ITEM 13 — CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Incorporated herein by reference is the information to be set forth under the captions “Ethics and Corporate Governance-Corporate Governance-Board of Director Review and Approval of Related Person Transactions,” “Executive Compensation,” “Executive Compensation Tables” and “Ethics and Corporate Governance-Corporate Governance-Board Composition and Independence” in the 2021 Proxy Statement.

ITEM 14 — PRINCIPAL ACCOUNTING FEES AND SERVICES

Incorporated herein by reference is the information with respect to pre-approval policies set forth under the caption “Proposal II. Ratification of PricewaterhouseCoopers LLP as our Independent Registered Public Accounting Firm for the Fiscal Year ending June 30, 2022-Audit Committee Pre-Approval Policy” and the information with respect to principal accountant fees and services set forth under “Proposal II. Ratification of PricewaterhouseCoopers LLP as our Independent Registered Public Accounting Firm for the Fiscal Year ending June 30, 2022-Fees and Services” to be set forth in the 2021 Proxy Statement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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: August 10, 2021	By:	/s/ Patrick S. Watson
		Patrick S. Watson
		Vice President Finance and Corporate Controller

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

SIGNATURE	**TITLE**	**DATE**
/s/ CHRISTOPHER ROSSI Christopher Rossi	President and Chief Executive Officer	August 10, 2021
/s/ DAMON J. AUDIA Damon J. Audia	Vice President and Chief Financial Officer	August 10, 2021
/s/ PATRICK S. WATSON Patrick S. Watson	Vice President Finance and Corporate Controller	August 10, 2021
/s/ LAWRENCE W. STRANGHOENER Lawrence W. Stranghoener	Chairman of the Board	August 10, 2021
/s/ JOSEPH ALVARADO Joseph Alvarado	Director	August 10, 2021
/s/ CINDY L. DAVIS Cindy L. Davis	Director	August 10, 2021
/s/ WILLIAM J. HARVEY William J. Harvey	Director	August 10, 2021
/s/ WILLIAM M. LAMBERT William M. Lambert	Director	August 10, 2021
/s/ LORRAINE M. MARTIN Lorraine M. Martin	Director	August 10, 2021
/s/ SAGAR A. PATEL Sagar A. Patel	Director	August 10, 2021
/s/ STEVEN H. WUNNING Steven H. Wunning	Director	August 10, 2021

PART IV

ITEM 15 — EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this Form 10-K report.
1. Financial Statements included in Part II, Item 8
2. Financial Statement Schedule

The financial statement schedule required by Part II, Item 8 of this document is filed as part of this report. All of the other schedules are omitted as the required information is inapplicable or the information is presented in our consolidated financial statements or related notes.

FINANCIAL STATEMENT SCHEDULE	Page 79

Schedule II—Valuation and Qualifying Accounts for the Years Ended June 30, 2021, 2020 and 2019

3. Exhibits

3	**Articles of Incorporation and Bylaws**	
3.1	Articles of Incorporation of Kennametal Inc., as amended and restated through October 28, 2014	Exhibit 3.(i) of the Form 8-K filed October 30, 2014 (File No. 001-05318) is incorporated herein by reference.
3.2	By-Laws of Kennametal Inc., as amended and restated through July 26, 2016	Exhibit 10.1 of the Form 8-K filed July 28, 2016 (File No. 001-05318) is incorporated herein by reference.
4	**Instruments Defining the Rights of Security Holders, Including Indentures**	
4.1	Indenture, dated as of June 19, 2002, by and between the Registrant and Bank One Trust Company, N.A., as trustee	Exhibit 4.1 of the Form 8-K filed June 20, 2002 (File No. 001-05318) is incorporated herein by reference.
4.2	First Supplemental Indenture, dated as of June 19, 2002, by and between the Registrant and Bank One Trust Company, N.A., as trustee	Exhibit 4.2 of the Form 8-K filed June 20, 2002 (File No. 001-05318) is incorporated herein by reference.
4.3	Indenture dated February 14, 2012 between Kennametal Inc. and U.S. Bank National Association	Exhibit 4.1 of the Form 8-K filed February 14, 2012 (File No. 001-05318) is incorporated herein by reference.
4.4	First Supplemental Indenture dated February 14, 2012 between Kennametal Inc. and U.S. Bank National Association (including Form of 3.875% Note due 2022)	Exhibit 4.2 of the Form 8-K filed February 14, 2012 (File No. 001-05318) is incorporated herein by reference.
4.5	Second Supplemental Indenture dated November 7, 2012 between Kennametal Inc. and U.S. Bank National Association (including Form of 2.650% Note due 2019)	Exhibit 4.4 of the Form 8-K filed November 7, 2012 (File No. 001-05318) is incorporated herein by reference.
4.6	Third Supplemental Indenture dated June 7, 2018 between Kennametal Inc. and U.S. Bank National Association (including Form of 4.625% Note due June 15, 2028).	Exhibit 4.1 of the Form 8-K filed June 7, 2018 (File No. 001-05318) is incorporated herein by reference.
4.7	Fourth Supplemental Indenture dated February 23, 2021 between Kennametal Inc. and U.S. Bank National Association	Exhibit 4.1 of the Form 8-K filed February 23, 2021 (File No. 001-05318) is incorporated herein by reference.
4.8	Form of 2.800% Senior Note due March 1, 2031 (form included in Fourth Supplemental Indenture)	Exhibit 4.1 of the Form 8-K filed February 23, 2021 (File No. 001-05318) is incorporated herein by reference.
4.9	Description of Registrant's Securities	Filed herewith.
10	**Material Contracts**	
10.1*	Deferred Fee Plan for Outside Directors, as amended and restated effective December 30, 2008	Exhibit 10.1 of the December 31, 2008 Form 10-Q filed February 4, 2009 (File No. 001-05318) is incorporated herein by reference.
10.2*	Directors Stock Incentive Plan, as amended and restated effective December 30, 2008	Exhibit 10.2 of the December 31, 2008 Form 10-Q filed February 4, 2009 (File No. 001-05318) is incorporated herein by reference.
10.3*	Performance Bonus Stock Plan of 1995, as amended and restated effective December 30, 2008	Exhibit 10.3 of the December 31, 2008 Form 10-Q filed February 4, 2009 (File No. 001-05318) is incorporated herein by reference.
10.4*	Kennametal Inc. Stock and Incentive Plan of 2002 (as amended on October 21, 2008)	Appendix A to the 2008 Proxy Statement filed September 8, 2008 (File No. 001-05318) is incorporated herein by reference.
10.5*	Form of Indemnification Agreement for Named Executive Officers	Exhibit 10.2 of the Form 8-K filed March 22, 2005 (File No. 001-05318) is incorporated herein by reference.
10.6*	Schedule of Named Executive Officers who have entered into the Form of Indemnification Agreement as set forth in Exhibit 10.5	Filed herewith.
10.7*	Kennametal Inc. Executive Retirement Plan (for Designated Officers) (as amended effective December 30, 2008)	Exhibit 10.8 of the December 31, 2008 Form 10-Q filed February 4, 2009 (File No. 001-05318) is incorporated herein by reference.
10.8*	Amendment No. 1 to Kennametal Inc. Executive Retirement Plan (dated January 27, 2015)	Exhibit 10.2 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.9*	Amendment No. 2 to Kennametal Inc. Executive Retirement Plan (dated June 18, 2015)	Exhibit 10.1 of the Form 8-K filed June 23, 2015 (File No. 001-05318) is incorporated herein by reference.
10.10*	Kennametal Inc. Supplemental Executive Retirement Plan (as amended effective December 30, 2008)	Exhibit 10.9 of the December 31, 2008 Form 10-Q filed February 4, 2009 (File No. 001-05318) is incorporated herein by reference.
10.11*	Amendment No. 1 to the Kennametal Inc. Supplemental Executive Retirement Plan (as amended effective December 30, 2008) (dated June 18, 2015)	Exhibit 10.2 of the Form 8-K filed June 23, 2015 (File No. 001-05318) is incorporated herein by reference.
10.12*	Description of Compensation Payable to Non-Employee Directors	Exhibit 10.12 of the Form 10-K filed August 10, 2018 (File No. 001-05318) is incorporated herein by reference.
10.13*	Form of Kennametal Inc. Nonstatutory Stock Option Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2010)	Exhibit 10.5 of Form 10-Q filed February 8, 2011 (File No. 001-05318) is incorporated herein by reference.

10.14*	Form of Kennametal Inc. Nonstatutory Stock Option Award for Non-Employee Directors (granted under the Kennametal Inc. Stock and Incentive Plan of 2010)	Exhibit 10.6 of Form 10-Q filed February 8, 2011 (File No. 001-05318) is incorporated herein by reference
10.15*	Form of Officer's Employment Agreement with certain Named Executive Officers	Exhibit 10.1 of Form 8-K filed May 13, 2011 (File No. 001-05318) is incorporated herein by reference.
10.16*	Schedule of Executive Officers who have entered into the Form of Officer's Employment Agreement as set forth in Exhibit 10.15	Exhibit 10.16 of the Form 10-K filed August 13, 2019 (File No. 001-05318) is incorporated herein by reference.
10.17*	Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013)	Appendix A of the 2013 Proxy Statement filed September 17, 2013 (File No. 001-05318) is incorporated herein by reference.
10.18*	Form of Kennametal Inc. Restricted Unit Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.39 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.19*	Form of Kennametal Inc. Nonstatutory Stock Option Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.41 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.20*	Form of Kennametal Inc. Nonstatutory Stock Option Award for Non-Employee Directors (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.42 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.21*	Form of Kennametal Inc. Cash Settled Share-Based Award for China-based Employees (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.43 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.22*	Form of Kennametal Inc. Restricted Unit Award - Alternate Form (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.45 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.23*	Form of Kennametal Inc. Nonstatutory Stock Option Award - Alternate Form (granted under the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.46 of Form 10-K filed August 13, 2014 (File No. 001-05318) is incorporated herein by reference.
10.24*	Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013)	Exhibit 10.1 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.25*	Form of Kennametal Inc. Performance Unit Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.3 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.26*	Form of Kennametal Inc. Restricted Unit Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.4 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.27*	Form of Kennametal Inc. Restricted Unit Award for Non-Employee Directors (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.5 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.28*	Form of Kennametal Inc. Restricted Unit Award - Alternate Form (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.6 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.29*	Form of Kennametal Inc. Nonstatutory Stock Option Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.8 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.30*	Form of Kennametal Inc. Nonstatutory Stock Option Award for Non-Employee Directors (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.9 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.31*	Form of Kennametal Inc. Nonstatutory Stock Option Award - Alternate Form (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.10 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.32*	Form of Kennametal Inc. Cash Settled Share-Based Award for China-based Employees (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.12 to the Form 8-K dated February 2, 2015 (File No. 001-05318) is incorporated herein by reference.
10.33*	Form of Kennametal Inc. Performance Unit Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.1 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.

10.34*	Form of Kennametal Inc. Restricted Unit Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.3 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.
10.35*	Form of Kennametal Inc. Restricted Unit Award - Alternate Form (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.5 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.
10.36*	Form of Kennametal Inc. Cash Settled Share-Based Award for China-based Employees (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.6 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.
10.37*	Form of Kennametal Inc. Nonstatutory Stock Option Award (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.7 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.
10.38*	Form of Kennametal Inc. Nonstatutory Stock Option Award - Alternate Form (granted under Amendment No. 1 to the Kennametal Inc. Stock and Incentive Plan of 2010 (As Amended and Restated October 22, 2013))	Exhibit 10.9 to the Form 8-K dated July 30, 2015, (File No. 001-05318) is incorporated herein by reference.
10.39*	Kennametal Inc. 2016 Stock and Incentive Plan	Appendix C of 2016 Proxy Statement filed September 13, 2016 (File No. 001-05318) is incorporated by reference herein.
10.40*	Form of Kennametal Inc. Performance Unit Award (granted under Kennametal Inc. Stock and Incentive Plan of 2010, as amended and restated on October 22, 2013, and amended on January 27, 2015)	Exhibit 10.1 of the Form 10-Q filed November 7, 2016 (File No. 001-05318) is incorporated by reference herein.
10.41*	Form of Kennametal Inc. Restricted Unit Award (granted under the Kennametal Inc. 2016 Stock and Incentive Plan)	Exhibit 10.4 of the Form 10-Q filed November 7, 2016 (File No. 001-05318) is incorporated by reference herein.
10.42*	Form of Kennametal Inc. Cash Settled Share-Based Award for China-Based Employees (granted under the Kennametal Inc. 2016 Stock and Incentive Plan)	Exhibit 10.5 of the Form 10-Q filed November 7, 2016 (File No. 001-05318) is incorporated by reference herein.
10.43*	Form of Kennametal Inc. Restricted Stock Unit Award (three year cliff vest) (granted under the Kennametal Inc. 2016 Stock and Incentive Plan)	Exhibit 10.1 of the Form 10-Q filed February 8, 2017 (File No. 001-05318) is incorporated by reference herein.
10.44*	Form of Updated Kennametal Inc. Restricted Unit Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.74 to Form 10-K filed August 14, 2017 (File No. 001-05318) is incorporated by reference herein.
10.45*	Form of Kennametal Inc. Restricted Unit Award for Non-Employee Directors (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.75 to Form 10-K filed August 14, 2017 (File No. 001-05318) is incorporated by reference herein.
10.46*	Form of Kennametal Inc. Cash-Settled Restricted Unit Award for China-based Employees (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.76 to Form 10-K filed August 14, 2017 (File No. 001-05318) is incorporated by reference herein.
10.47*	Form of Updated Kennametal Inc. Cash-Settled Restricted Unit Award for China-based Employees (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.52 to Form 10-K filed August 13, 2019 (File No. 001-05318) is incorporated by reference herein.
10.48*	Form of Kennametal Inc. Performance Unit Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.77 to Form 10-K filed August 14, 2017 (File No. 001-05318) is incorporated by reference herein.
10.49*	Form of Fiscal 2020 Kennametal Inc. Performance Unit Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.54 to Form 10-K filed August 13, 2019 (File No. 001-05318) is incorporated by reference herein.
10.50*	Form of Kennametal Inc. Retention Restricted Unit Award (granted under the Kennametal Inc. Stock and Incentive Plan of 2016)	Exhibit 10.78 to Form 10-K filed August 14, 2017 (File No. 001-05318) is incorporated by reference herein.
10.51*	Form of Amended and Restated Officer's Employment Agreement with President and CEO Christopher Rossi	Exhibit 10.2 to Form 10-Q filed November 6, 2018 (File No. 001-05318) is incorporated by reference herein.
10.52*	Kennametal Inc. Restoration Plan (dated January 1, 2018)	Exhibit 10.1 of the Form 8-K filed November 3, 2017 (File No. 001-05318) is incorporated herein by reference.
10.53*	Kennametal Inc. Restoration Plan Adoption Agreement (dated January 1, 2018)	Exhibit 10.2 of the Form 8-K filed November 3, 2017 (File No. 001-05318) is incorporated herein by reference.
10.54*	Second Amendment to the Kennametal Inc. Restoration Plan (dated July 1, 2019)	Exhibit 10.59 to Form 10-K filed August 13, 2019 (File No. 001-05318) is incorporated by reference herein.
10.55*	2018 Form of Officer’s Employment Agreement with certain Named Executive Officers	Exhibit 10.60 of the Form 10-K filed August 10, 2018 (File No. 001-05318) is incorporated by reference herein.
10.56*	Schedule of Executive Officers who have entered into the 2018 Form of Officer's Employment Agreement as set forth in Exhibit 10.55	Filed herewith.

10.57	Fifth Amended and Restated Credit Agreement dated as of June 21, 2018 by and among Kennametal Inc. and Kennametal Europe GmbH (the “Borrowers”) and the several banks and other financial institutions or entities from time to time parties thereto (the “Lenders”), Bank of America Merrill Lynch International Limited, as Euro Swingline Lender, PNC Bank, N.A. and JPMorgan Chase Bank, N.A., as co-syndication agents (in such capacity, the “Co-Syndication Agents”), Citizens Bank of Pennsylvania, MUFG Bank, Ltd. and Mizuho Bank, Ltd., as co-documentation agents (in such capacity, the “Co-Documentation Agents”) and Bank of America, N.A., as administrative agent.	Exhibit 10.1 of the Form 8-K filed June 22, 2018 (File No. 001-05318) is incorporated herein by reference.
10.58	First Amendment to Credit Agreement dated as of September 10, 2020, to the Fifth Amended and Restated Credit Agreement dated as of June 21, 2018, each by and among Kennametal Inc. and Kennametal Europe GmbH (the “Borrowers”), and in the case of such Amendment, to the subsidiaries party thereto as guarantors, the several banks and other financial institutions or entities from time to time parties thereto (the “Lenders”), Bank of America Merrill Lynch International Designated Activity Company (formerly Bank of America Merrill Lynch International Limited), as Euro Swingline Lender, PNC Bank, N.A. and JPMorgan Chase Bank, N.A., as co-syndication agents (in such capacity, the “Co-Syndication Agents”), Citizens Bank, N.A. (as successor by merger to Citizens Bank of Pennsylvania), MUFG Bank, Ltd. and Mizuho Bank, Ltd., as co-documentation agents (in such capacity, the “Co-Documentation Agents”) and Bank of America, N.A., as administrative agent.	Exhibit 10.1 of the Form 8-K filed September 14, 2020 (File No. 001-05318) is incorporated herein by reference
10.59*	Form of Kennametal Inc. Restricted Unit Award (three-year cliff vest) (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.1 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.60*	Form of Kennametal Inc. Restricted Unit Award (two-year cliff vest) (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.2 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.61*	Form of Kennametal Inc. Cash-Settled Long-Term Incentive Award for China-based employees (two-year cliff vest) (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.3 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.62*	Form of Kennametal Inc. Restricted Unit Award for Non-Employee Directors (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.4 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.63*	Form of Kennametal Inc. Restricted Unit Award (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.5 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.64*	Form of Kennametal Inc. Cash-Settled Long-Term Incentive Award for China-based employees (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Exhibit 10.6 of the Form 10-Q filed February 3, 2021 (File No. 001-05318) is incorporated herein by reference.
10.65*	Form of Kennametal Inc. Performance Unit Award (granted under the 2020 Kennametal Inc. Stock and Incentive Plan)	Filed herewith.
10.66*	Kennametal Inc. 2020 Stock and Incentive Plan	Appendix B of 2020 Proxy Statement filed September 15, 2020 (File No. 001-05318) is incorporated by reference herein.
10.67	Separation Agreement for Peter A. Dragich, dated August 26, 2020	Exhibit 10.1 of the Form 8-K filed September 16, 2020 (File No. 001-05318) is incorporated herein by reference.
21	**Subsidiaries of the Registrant**	**Filed herewith.**
23	**Consent of Independent Registered Public Accounting Firm**	**Filed herewith.**
31	**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.

*Denotes management contract or compensatory plan or arrangement.

101	**XBRL**	
101.INS(1)	XBRL Instance Document.	Filed herewith.
101.SCH(2)	XBRL Taxonomy Extension Schema Document.	Filed herewith.
101.CAL(2)	XBRL Taxonomy Extension Calculation Linkbase Document.	Filed herewith.
101.DEF(2)	XBRL Taxonomy Definition Linkbase	Filed herewith.
101.LAB(2)	XBRL Taxonomy Extension Label Linkbase Document.	Filed herewith.
101.PRE(2)	XBRL Taxonomy Extension Presentation Linkbase Document.	Filed herewith.

(1) The instance document does not appear in the Interactive Data File because its XBRL (Extensible Business Reporting Language) tags are embedded within the Inline XBRL document.

(2) Attached as Exhibit 101 to this report are the following documents formatted in Inline XBRL: (i) the Consolidated Statements of Income for the years ended June 30, 2021, 2020 and 2019, (ii) the Consolidated Statements of Comprehensive Income for the years ended June 30, 2021, 2020 and 2019, (iii) the Consolidated Balance Sheets at June 30, 2021 and 2020, (iv) the Consolidated Statements of Cash Flows for the years ended June 30, 2021, 2020 and 2019 and (v) Notes to Consolidated Financial Statements for the years ended June 30, 2021, 2020 and 2019.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

(In thousands) For the year ended June 30	Balance at Beginning of Year	Charges to Costs and Expenses	Recoveries	Other Adjustments	Deductions from Reserves	Balance at End of Year
2021						
Allowance for doubtful accounts	$ 9,430	$ 2,602	$ 635	$ 400 [1]	$ (3,333) [2]	$ 9,734
Deferred tax asset valuation allowance	16,654	4,115	—	494 [1]	0	21,263
2020						
Allowance for doubtful accounts	$ 10,083	$ 2,300	$ 40	$ (287) [1]	$ (2,706) [2]	$ 9,430
Deferred tax asset valuation allowance	14,614	4,213	—	(1,216) [1]	(957) [3]	16,654
2019						
Allowance for doubtful accounts	$ 11,807	$ 2,366	$ 111	$ (248) [1]	$ (3,953) [2]	$ 10,083
Deferred tax asset valuation allowance	21,629	(5,597)	—	(1,418) [1]	—	14,614

(1) Represents foreign currency translation adjustment.

(2) Represents uncollected accounts charged against the allowance.

(3) Represents primarily a forfeited net operating loss deduction

ITEM 16 — FORM 10-K SUMMARY

None.

Exhibit 4.9

DESCRIPTION OF KENNAMETAL INC.'S SECURITIES

Common Stock

The following summary of the terms of Kennametal Inc.'s (the "Company") common stock is not complete and is subject to and qualified in its entirety by reference to the relevant provisions of the laws of the Commonwealth of Pennsylvania, the Company's Amended and Restated Articles of Incorporation (the "Articles"), and its Amended and Restated Bylaws (the "Bylaws"). Copies of the Articles and Bylaws have been filed with the Securities and Exchange Commission.

General

The Company's Articles provide that it may issue up to 120,000,000 shares of capital stock, par value $1.25 per share (the "common stock") and 5,000,000 shares of Class A Preferred Stock without par value.

Voting and Other Rights

Each share of the Company's common stock is entitled to one vote on all matters requiring a vote of shareholders and, subject to the rights of the holders of any outstanding shares of preferred stock, each shareholder is entitled to receive any dividends, in cash, securities or property, as the Company's board of directors may declare. Pennsylvania law prohibits the payment of dividends or the repurchase of the Company's shares if the Company is insolvent or if the Company would become insolvent after the dividend or repurchase. Holders of common stock do not have any preemptive or similar rights.

In the event of the Company's liquidation, dissolution or winding up, either voluntarily or involuntarily, subject to the rights of the holders of any outstanding shares of preferred stock, holders of common stock are entitled to share pro-rata in all of the Company's remaining assets available for distribution.

Anti-Takeover Provisions in Kennametal Inc.'s Charter and Bylaws

Certain provisions of the Articles and Bylaws could have an anti-takeover effect. These provisions are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and in the strategies it formulates. They may also discourage an unsolicited takeover of the Company if the board of directors determines that the takeover is not in the best interests of the Company and its shareholders. These provisions could have the effect of discouraging certain attempts to acquire the Company or remove incumbent management even if some or a majority of shareholders deemed such an attempt to be in their best interests.

The provisions in the Articles and Bylaws include: (i) a procedure which requires shareholders to nominate directors in advance of a meeting to elect such directors; and (ii) the authority to issue additional shares of common stock or preferred stock without shareholder approval.

The Articles also include a provision requiring the affirmative vote of the holders of 75% of the Company's outstanding stock to approve certain mergers or other business combinations or transactions with five percent shareholders; a provision requiring the affirmative vote of the holders of 75% of the Company's outstanding stock to remove the entire board of directors, a class of the board of directors, any individual member of the board of directors without cause, or to increase the size of the board of directors to more than twelve members or decrease the size of the board of directors to fewer than eight members; a provision requiring, in the case of repurchases at a premium over market by the Company from any 4% Shareholder (as defined in the Articles), the affirmative vote of the holders of voting power of an amount of shares equal to the voting power of the 4% Shareholder plus a majority of the voting power of the other shares not held by the 4% Shareholder; and a provision requiring the affirmative vote of a majority of the Company's outstanding stock held by disinterested shareholders to approve certain business combinations involving a shareholder who beneficially owns more than 10% of the voting power of the Company's then outstanding voting stock, unless certain conditions are satisfied or the transaction is approved by a majority of disinterested directors.

Pursuant to the Articles and the laws of the Commonwealth of Pennsylvania, the board of directors is permitted to consider the effects of a change in control on the Company's non-shareholder constituencies, such as the Company's employees, suppliers, and other constituents and the communities in which the Company operates. Pursuant to this provision, the board of directors may be guided by factors in addition to price and other financial considerations.

The Bylaws provide that any shareholder who desires to present a nomination of person(s) for election to the board of directors or a proposal of other business at a shareholders' meeting (a "Proponent") must first provide timely written notice to the Secretary. The Bylaws set forth the deadlines for submitting such advance notice. As described in the Bylaws, the advance notice must set forth in reasonable detail (i) as to each person the shareholder proposes to nominate for election to the board of directors, information concerning the proposed nominee that would be required to be disclosed in a proxy statement or other filings required to be made in connection with the solicitation of proxies for the election of directors in an election contest, or otherwise required, in each case pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder, including such nominee's consent to serve as a director if elected and other specific information called for by the Bylaws, or (ii) as to any other business that the Proponent proposes to bring before the meeting, a description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws, the language of the proposed amendment), the reasons for conducting such business at the meeting, and any material interest in such business of the Proponent and the beneficial owner, if any, on whose behalf the proposal is made. The advance notice must also include a representation from the Proponent that such person is a shareholder of record and intends to appear in person or by proxy at the meeting to present the nomination or other proposal specified in the notice, a description of the Proponent's beneficial ownership and other financial interests in the Company, a description of all arrangements or understandings between the Proponent and any other person or persons (naming such persons) pursuant to which the nomination or other proposal is to be made by the Proponent, and all such information regarding the Proponent's proposal and/or nominee(s) which would have been required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission had the nomination or other proposal been made by the board of directors.

PBCL Anti-Takeover Provisions

The Pennsylvania Business Corporation Law (the "PBCL") contains a number of statutory "anti-takeover" provisions, including Subchapters E, F, G and H of Chapter 25 and Sections 2521, 2524 and 2538 of the PBCL, which apply automatically to a Pennsylvania registered corporation (usually a public company) unless the corporation elects to opt-out of those provisions. The Company is a Pennsylvania registered corporation, and as a result it is subject to the anti-takeover provisions described below, however, the Company has elected to opt-out of certain provisions as described below. Descriptions of the anti-takeover provisions are qualified in their entirety by reference to the PBCL.

Subchapter E (relating to control transactions) generally provides that if any person or group acquires 20% or more of the Company's voting power, the remaining holders of voting shares may demand from such person or group the fair value of their voting shares, including a proportionate amount of any control premium.

Subchapter F (relating to business combinations) generally delays for five years and imposes conditions upon "business combinations" between an "interested shareholder" and the Company. The term "business combination" is defined broadly to include various transactions between a corporation and an interested shareholder including mergers, sales or leases of specified amounts of assets, liquidations, reclassifications and issuances of specified amounts of additional shares of stock of the corporation. An "interested shareholder" is defined generally as the beneficial owner of at least 20% of a corporation's voting shares.

Section 2521 of the PBCL provides that shareholders are not entitled to call special meetings of the shareholders and the Company's Bylaws do not give shareholders any right to call special meetings.

Section 2524 provides that shareholders cannot act by partial written consent unless permitted in the articles of incorporation.

Section 2538 of the PBCL generally establishes certain shareholder approval requirements with respect to specified transactions with "interested shareholders."

The Company has elected to opt out of Subchapters G and H of Chapter 25 of the PBCL. Subchapter G would have required a shareholder vote to accord voting rights to control shares acquired by a 20% shareholder in a control-share acquisition. Subchapter H would have required a person or group to disgorge to the Company any profits received from a sale of the Company's equity securities within 18 months after the person or group acquired, offered to acquire or publicly disclosed an intention to acquire 20% of the Company's voting power or publicly disclosed an intention to acquire control of the Company.

Transfer Agent and Registrar

Computershare is the Transfer Agent and Registrar for the Common Stock.

Exhibit 10.6

SCHEDULE OF NAMED EXECUTIVE OFFICERS WHO HAVE ENTERED INTO THE FORM OF INDEMNIFICATION AGREEMENT AS SET FORTH IN EXHIBIT 10.5

<u>NAME</u>

Damon J. Audia
Judith L. Bacchus
Franklin Cardenas
Sanjay Chowbey
Michelle R. Keating
Carlonda R. Reilly
Christopher Rossi
Patrick S. Watson

Exhibit 10.56

SCHEDULE OF NAMED EXECUTIVE OFFICERS WHO HAVE ENTERED INTO THE 2018 FORM OF INDEMNIFICATION AGREEMENT AS SET FORTH IN EXHIBIT 10.55

<u>NAME</u>

Damon J. Audia
Judith L. Bacchus
Franklin Cardenas
Sanjay Chowbey
Michelle R. Keating
Carlonda R. Reilly
Patrick S. Watson

KENNAMETAL INC.

PERFORMANCE UNIT AWARD

Grant Date: ________________

Kennametal Inc. (the “Company”) hereby grants to «name» (the “Awardee”), as of the Grant Date listed above, this Performance Unit Award (the “Award”) for «number of target stock units» Stock Units, subject to the terms and conditions of the Kennametal Inc. 2020 Stock and Incentive (the “Plan”) and the additional terms listed below. Capitalized terms used herein, but not otherwise defined, shall have the same meaning ascribed to them in the Plan.

1. Each Stock Unit represents the right to receive one Share of the Company’s Capital Stock, par value $1.25 per share, subject to the satisfaction of the Service Condition described herein and the Performance Conditions attached hereto as **Exhibit A**. Stock Units as initially awarded have no independent economic value, but rather are mere units of measurement used for purposes of calculating the number of Shares, if any, to be delivered under this Award. The maximum amount of Stock Units that may be earned under this Award is equal to 2.0 times the target number of Stock Units listed in the preamble above.

2. Except as otherwise provided in this Award, Awardee must be actively employed by the Company on the Payment Date (defined below) to be eligible to receive Shares in payment of any Stock Units earned under this Award (the “Service Condition”).

3. In addition to satisfaction of the Service Condition, payment under this Award is subject to, and contingent upon, achievement of the annual Performance Conditions during the Performance Period specified on **Exhibit A**. The amount of this Award payable to Awardee will be determined by the level of achievement of the annual Performance Conditions as set forth in **Exhibit A**. Achievement of the Performance Conditions, including the level of achievement, if any, for each fiscal year in the Performance Period shall be determined by the Compensation Committee of the Board of Directors (the “Compensation Committee”), in its sole discretion, and Awardee agrees to be bound by such determination; provided, however, the Compensation Committee shall not use its discretionary authority reserved to it under Section 6(f) of the Plan to reduce the number of Stock Units earned, if any, based on the achievement of the Performance Conditions pursuant to the terms and conditions of this Award. For each fiscal year of the Performance Period, any Stock Units that are not earned will be cancelled and forfeited at the end of such fiscal year.

4. Issuance and Distribution.

a. At the end of each fiscal year of the Performance Period to which this Award relates, the Compensation Committee will certify in writing the extent to which the applicable annual Performance Conditions have been achieved. For purposes of this provision, and for so long as the Code permits, the approved minutes of the Committee meeting in which the certification is made may be treated as written certification.

b. Subject to the terms and conditions of this Award and unless otherwise specifically provided herein, Stock Units earned by an Awardee will be settled and paid in Shares of the Company’s Capital Stock as soon as practicable following the end of the three-year Performance Period on a date determined in the Company’s discretion, but in no event later than the last day of the “applicable 2½ month period” specified in Treas. Reg. §1.409A-1(b)(4) (the “Payment Date”).

5. Change in Awardee’s Status; Change in Control.

a. Death or Disability. In the event an Awardee Separates from Service before the Payment Date on account of death or Disability, the Service Condition will be waived. For completed fiscal years, Awardee shall be entitled to receive payment for any Stock Units that have been earned based on the achievement of the Performance Conditions applicable to such fiscal year. For fiscal years not completed, the Performance Conditions will be deemed to have been achieved at the target level and the Awardee will be deemed to have earned for each such fiscal year a number of Stock Units that were able to be earned for such fiscal year.

Subject to the terms and conditions of this Award and unless otherwise specifically provided herein, in the event an Awardee Separates from Service on account of death or Disability, the Stock Units, to the extent earned by the Awardee, shall be paid as soon as practicable following the date of such Separation from Service, but in no event later than the last day of the "applicable 2½ month period" specified in Treas. Reg. §1.409A-1(b)(4).

b. Change in Control. In the event there is a Change in Control during the Performance Period, (i) with respect to all outstanding Performance Units subject to this Award (other than Performance Units for fiscal years within the Performance Period that were completed prior to the Change in Control), the target level of performance set forth with respect to each performance criterion under such Performance Units shall be deemed to have been attained and such Performance Units shall be converted into, and remain outstanding, as Restricted Units and (ii) with respect to Performance Units for fiscal years within the Performance Period that were completed prior to the Change in Control, such Performance Units, measured at actual performance achieved, shall remain outstanding. Unless otherwise specifically provided herein, payment under this Award will remain subject to the satisfaction of the Service Condition.

c. Change in Control Separation. In the event an Awardee Separates from Service prior to the Payment Date on account of an involuntary termination by the Company without cause or Awardee voluntarily terminates employment for Good Reason (as defined in the Plan) (a) within the six-month period immediately preceding a Change in Control in contemplation of such Change in Control (and the Change in Control actually occurs) or (b) during the two-year period following a Change in Control (a "Change in Control Separation"), the Service Condition applicable to the Performance Units and/or Restricted Units into which such Performance Units were converted upon the Change in Control will be waived and such Performance Units and/or Restricted Units shall be fully vested and nonforfeitable.

d. Retirement. In the event a Retirement Eligible Awardee (as defined below) Separates from Service on account of Retirement (including Early Retirement) during the Performance Period, the Service Condition will be waived (i) in the case of Retirement other than Early Retirement, on all outstanding Stock Units or (ii) in the case of Early Retirement, on a pro-rata portion of such Stock Units based upon the ratio of the number of days of the Awardee's employment during the Performance Period to the total number of days in the Performance Period, and the remainder of such Stock Units shall immediately terminate and be forfeited without payment by the Company or any affiliate. The amount to be paid, if any, with respect to the Stock Units on which the Service Condition was waived will be determined following the end of the Performance Period based upon the actual achievement of the Performance Condition over the Performance Period.

With respect to an Awardee who Separates from Service on account of Retirement during the Performance Period (a "Retirement Eligible Awardee"), any payment for any Award shall be made on the Payment Date provided in Section 4(b), above. Notwithstanding the foregoing or any provisions of this Award or the Plan to the contrary, for a U.S. participant who is a "specified employee" under Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") upon Separation from Service due to Retirement (including Early Retirement), Disability or a Change in Control Separation, the delivery of any Shares underlying this Award will be delayed and delivered on the first day following the six (6) month anniversary of the Awardee's Separation from Service (or upon earlier death) if and to the extent such payments would constitute or be considered as deferred compensation under Code Section 409A, subject to the Awardee's satisfaction of all applicable income and employment withholding taxes.

e. All Other Separations from Service. In the event an Awardee Separates from Service for any other reason (other than death, Disability, Retirement or Change in Control Separation), including, but not limited to, voluntarily by the Awardee, or involuntarily by the Company with or without cause, prior to the Payment Date, all Stock Units granted to the Awardee shall be cancelled and forfeited, whether payable or not, without payment by the Company or any Affiliate.

6. The Stock Units will be entitled to receive Dividend Equivalents, which will be subject to all conditions and restrictions applicable to the underlying Stock Units to which they relate. Dividend Equivalents may not be paid until and unless the underlying Stock Units have vested. Dividend Equivalents will accrue during the Performance Period. At the end of each fiscal year, Dividend Equivalents will be earned only for Stock Units that are earned or deemed earned under this Award for that fiscal year. With respect to Stock Units that are not earned for a fiscal year (because the applicable Performance Conditions are not satisfied or otherwise), Dividend Equivalents that were accrued for those Stock Units will be cancelled and forfeited along with the Stock Units and underlying Shares, without payment by the Company or any Affiliate. Dividend Equivalents will be paid in cash at such time as the underlying Stock Units to which they relate are paid.

7. The Stock Units may not be sold, assigned, pledged, exchanged, hypothecated, gifted or otherwise transferred, encumbered or disposed of prior to the Payment Date, except as described herein or in the Plan.

8. The Shares underlying the Stock Units shall not be sold or otherwise disposed of in any manner that would constitute a violation of any applicable federal or state securities laws. The Company may refuse to register a transfer of the Shares on the stock transfer records of the Company if the transfer constitutes a violation of any applicable securities law and the Company may give related instructions to its transfer agent, if any, to stop registration of the transfer of the Shares.

9. This Performance Unit Award is intended to comply with Section 409A of the Internal Revenue Code (which deals with nonqualified deferred compensation) or an exception thereto and the regulations promulgated thereunder and will be construed accordingly. To the extent a payment is subject to Section 409A and not excepted therefrom, such payment shall be treated as made on the specified date of payment if such payment is made at such date or a later date in the same calendar year or, if later, by the 15th day of the third calendar month following the specified date of payment, as provided and in accordance with Treas. Reg. § 1.409A-3(d). An Awardee shall have no right to designate the date of any payment under this Award. The Company reserves the right to administer, amend or modify the Award or to take any other action necessary or desirable to enable the Award to be interpreted and construed accordingly. Notwithstanding the foregoing, the Awardee acknowledges and agrees that Section 409A may impose upon the Awardee certain taxes or interest charges for which the Awardee is and shall remain solely responsible.

10. Notwithstanding anything to the contrary in this Award or the Plan, in the event that this Award is not accepted by the Awardee on or before the date that is 180 days from the grant date noted herein (the “Forfeiture Date”), then this Award shall become null and void and all Stock Units subject to this Award shall be forfeited by the Awardee as of the Forfeiture Date. For acceptance to be valid, the Awardee must accept this Award in the manner specified by the Company. Any Shares underlying the Stock Units covered by this Award that are forfeited by the Awardee shall be returned to the Plan and resume the status of shares available for grant.

11. All other terms and conditions applicable to this Award are contained in the Plan. A copy of the Plan and related Prospectus is available on your accounts page at netbenefits.fidelity.com under Plan Information and Documents, as well as on The Hub under Human Resources.

KENNAMETAL INC.

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

Exhibit 21

CORPORATE DIRECTORY

Our consolidated subsidiaries and affiliated companies as of June 30, 2021 are:

Consolidated Subsidiaries and Affiliated Companies of Kennametal Inc.
Kennametal (Malaysia) Sdn. Bhd.
Kennametal (Singapore) Pte. Ltd.
Kennametal (Thailand) Co., Ltd.
Kennametal Australia Pty. Ltd.
Kennametal de Mexico, S.A. de C.V.
Kennametal Distribution Services Asia Pte. Ltd.
Kennametal Hardpoint (Taiwan) Inc.
Kennametal Holdings Europe Inc.
Kennametal International S.A. (Panama)
Kennametal Japan Ltd.
Kennametal Korea Ltd.
Kennametal Manufacturing S.A. (Pty) Ltd.
Kennametal Shared Services Private Limited
Kennametal South Africa (Pty.) Ltd.
PT. Kennametal Indonesia Services

Consolidated Subsidiary of Kennametal (Singapore) Pte. Ltd.
Widia Shinki Vietnam LLC (partnership)

Consolidated Subsidiaries of Kennametal Holdings Europe Inc.
Deloro Stellite Holdings Corporation
Kennametal Holdings, LLC
Kennametal Holdings, LLC Luxembourg S.C.S.

Consolidated Subsidiaries of Deloro Stellite Holdings Corporation
DSGP LLC
Kennametal Stellite, L.P.
Kennametal Stellite Inc.
Kennametal Stellite (Shanghai) Co., Ltd. (Joint Venture)

Consolidated Subsidiary of Kennametal Holdings, LLC Luxembourg S.C.S.
Kennametal Luxembourg Holding S.à r.l.

Consolidated Subsidiaries of Kennametal Luxembourg Holding S.à r.l.
Kennametal Argentina S.A.
Kennametal Chile Ltda.
Kennametal do Brasil Ltda.
Kennametal Europe GmbH
Kennametal Luxembourg S.à r.l.
Comericializadora Kennametal Bolivia S.R.L.

Consolidated Subsidiaries of Kennametal Luxembourg S.à r.l.
Kennametal Asia (HK) Ltd.
Kennametal Ltd.
Kennametal Sintec Holding GmbH

Consolidated Subsidiaries of Kennametal Asia (HK) Ltd.
Kennametal Asia (China) Management Co. Ltd.
Kennametal (Baotou) Company Ltd.
Kennametal (China) Co. Ltd.
Kennametal Hardpoint (Shanghai) Co., Ltd.
Kennametal (Xuzhou) Company, Ltd.

Consolidated Subsidiary of Kennametal Sintec Holding GmbH
Kennametal Sintec Keramik Asia Ltd.

Consolidated Subsidiary of Kennametal Sintec Keramik Asia Ltd.
Sunshine Power-Tech (Shanghai) Ltd.

Consolidated Subsidiaries of Kennametal Europe GmbH
Hanita Metal Works, Ltd.
Kennametal Holding GmbH
Kennametal Nederland B.V.
OOO Kennametal

Consolidated Subsidiaries of Kennametal Holding GmbH
Kennametal GmbH
Kennametal Hungaria Kft.
Kennametal Logistics GmbH
Kennametal Shared Services GmbH
Kennametal Sintec Keramik GmbH
Widia GmbH

Consolidated Subsidiaries and Affiliated Companies of Kennametal GmbH
Kenci S.L.
Kennametal Belgium BVBA
Kennametal Deutschland GmbH
Kennametal France S.A.S.
Kennametal GmbH Organizacni Slozka
Kennametal GmbH Zweigniederlassung Osterreich
Kennametal GmbH Zweigniederlassung Rumanien
Kennametal GmbH Zweigniederlassung Slowakei
Kennametal Infrastructure GmbH
Kennametal Italia S.p.A.
Kennametal Kesici Takimlar Sanayi Ve Ticaret Anonim Sirketi
Kennametal Polska Sp. z o.o.
Kennametal Produktions GmbH & Co. KG. (partnership)
Kennametal Sp. z o.o.
Kennametal Stellram S.r.L.
Kennametal UK Limited
Ruebig Real Estate GmbH & Co. KG

Consolidated Subsidiary of Kennametal Italia S.p.A.
Kennametal Italia Produzione S.R.L.

Consolidated Affiliated Company of Kennametal Produktions GmbH & Co. KG (partnership)
Kennametal Real Estate GmbH & Co. KG (partnership)

Consolidated Affiliated Company of Kennametal Deutschland GmbH
Kennametal (Deutschland) Real Estate GmbH & Co. KG (partnership)

Consolidated Subsidiary of Kennametal Sp. z o.o
Kennametal Produkcja Sp. z o.o.

Consolidated Subsidiaries and Affiliated Companies of Widia GmbH
Kennametal Widia Produktions GmbH & Co. KG (partnership)
Kennametal Widia Real Estate GmbH & Co. KG (partnership)
Meturit AG

Consolidated Subsidiary of Meturit AG
Kennametal India Ltd.

Consolidated Subsidiary of Kennametal India Ltd.
Widia India Tooling Private Limited

Consolidated Subsidiaries of Kenci S.L.
Kenci Lda.
Kennametal Manufacturing Barcelona S.L.

Consolidated Subsidiaries of Kennametal UK Limited
Kennametal Logistics UK Ltd.
Kennametal Manufacturing UK Ltd.

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-248209) and Form S-8 (No. 033-65023, No. 333-18423, No. 333-18429, No. 333-18437, No. 333-77411, No. 333-88049, No. 333-30454, No. 333-30448, No. 333-53562, No. 333-100867, No. 333-120314, No. 333-124774, No. 333-142727, No. 333-154705, No. 333-170348, No. 333-193782, No. 333-214474, No. 333-222177 and No. 333-249824) of Kennametal Inc. of our report dated August 10, 2021 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania
August 10, 2021

Exhibit 31.1

I, Christopher Rossi, certify that:

1. I have reviewed this annual report on Form 10-K 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:	August 10, 2021	/s/ Christopher Rossi
		Christopher Rossi President and Chief Executive Officer

Exhibit 31.2

I, Damon J. Audia, certify that:

1. I have reviewed this annual report on Form 10-K 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:	August 10, 2021	/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 Annual Report of Kennametal Inc. (the "Corporation") on Form 10-K for the period ended June 30, 2021, 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

August 10, 2021

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

August 10, 2021

*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.