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 EndedSeptember 30, 2019
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 No. 0-09115

MATTHEWS INTERNATIONAL CORPORATION

(Exact name of registrant as specified in its charter)

Pennsylvania	**25-0644320**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Two Northshore Center, Pittsburgh, PA	**15212-5851**
(Address of principal executive offices)	(Zip Code)

(412) 442-8200
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Class A Common Stock, $1.00 par value	MATW	Nasdaq Global Select Market

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 and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☒

The aggregate market value of the Class A Common Stock held by non-affiliates of the registrant, based upon the closing sale price of the Class A Common Stock on the Nasdaq Global Select Market on March 31, 2019, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $1.1 billion.

As of October 31, 2019, shares of common stock outstanding were: Class A Common Stock 31,339,703 shares.

Documents incorporated by reference: Specified portions of the Proxy Statement for the 2020 Annual Meeting of Shareholders are incorporated by reference into Part III of this Report.

PART I

CAUTIONARY STATEMENTS REGARDING FORWARD LOOKING STATEMENTS AND NON-GAAP FINANCIAL MEASURES:

Any forward-looking statements contained in this Annual Report on Form 10-K (including, but not limited to, those contained in Item 1, "Business," Item 1A, "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations") are included in this report pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks and uncertainties that may cause the actual results of Matthews International Corporation ("Matthews" or the "Company") in future periods to be materially different from management's expectations. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove correct. In addition to the risk factors previously disclosed and those discussed elsewhere in this Annual Report on Form 10-K, factors that could cause the Company's results to differ materially from the results discussed in such forward-looking statements principally include changes in domestic or international economic conditions, changes in foreign currency exchange rates, changes in the cost of materials used in the manufacture of the Company's products, changes in mortality and cremation rates, changes in product demand or pricing as a result of consolidation in the industries in which the Company operates, changes in product demand or pricing as a result of domestic or international competitive pressures, ability to achieve cost-reduction objectives, unknown risks in connection with the Company's acquisitions, cybersecurity concerns, effectiveness of the Company's internal controls, compliance with domestic and foreign laws and regulations, technological factors beyond the Company's control, and other factors described in Item 1A, "Risk Factors" in this Form 10-K. In addition, although the Company does not have any customers that would be considered individually significant to consolidated sales, changes in the distribution of the Company's products or the potential loss of one or more of the Company's larger customers are also considered risk factors. Matthews cautions that the foregoing list of important factors is not all inclusive. Readers are also cautioned not to place undue reliance on any forward looking statements, which reflect management's analysis only as of the date of this report, even if subsequently made available by Matthews on its website or otherwise. Matthews does not undertake to update any forward looking statement, whether written or oral, that may be made from time to time by or on behalf of Matthews to reflect events or circumstances occurring after the date of this report.

Included in this report are measures of financial performance that are not defined by generally accepted accounting principles in the United States ("GAAP"). These non-GAAP financial measures assist management in comparing the Company's performance on a consistent basis for purposes of business decision-making by removing the impact of certain items that management believes do not directly reflect the Company's core operations. Refer to "Non-GAAP Financial Measures" in Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations."

ITEM 1. BUSINESS.

Matthews, founded in 1850 and incorporated in Pennsylvania in 1902, is a global provider of brand solutions, memorialization products and industrial technologies. Brand solutions consists of brand management, pre-media services, printing plates and cylinders, engineered products, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries. Memorialization products consist primarily of bronze and granite memorials and other memorialization products, caskets and cremation equipment primarily for the cemetery and funeral home industries. Industrial technologies include marking and coding equipment and consumables, industrial automation products and order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products.

At October 31, 2019, the Company and its majority-owned subsidiaries had approximately 11,000 employees. The Company's principal executive offices are located at Two NorthShore Center, Pittsburgh, Pennsylvania 15212, its telephone number is (412) 442-8200 and its website is www.matw.com. The Company files or furnishes all required reports with the Securities and Exchange Commission ("SEC") in accordance with the Exchange Act. The Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and amendments to those reports are available free of charge on the Company's website as soon as reasonably practicable after being filed or furnished to the SEC. The Company's reports filed or furnished with the SEC, including exhibits attached to such reports, are also available on the SEC's website at www.sec.gov.

The Company manages its business under three reporting segments, SGK Brand Solutions, Memorialization, and Industrial Technologies. The following table sets forth reported sales for the Company's business segments for the past three fiscal years. Detailed financial information relating to business segments and to domestic and international operations is presented in Note 19, "Segment Information" in Item 8 - "Financial Statements and Supplemental Data."

	Years Ended September 30,		
	2019	2018	2017
	(Amounts in thousands)		
Sales to external customers:			
SGK Brand Solutions	$ 743,869	$ 805,274	$ 770,181
Memorialization	636,892	631,392	615,882
Industrial Technologies	156,515	165,914	129,545
Consolidated Sales	$ 1,537,276	$ 1,602,580	$ 1,515,608

In fiscal 2019, approximately 68% of the Company's sales were made from North America, 28% were made from Europe, 3% were made from Asia, and 1% were made from other regions. For further information on segments, see Note 19, "Segment Information" in Item 8 - "Financial Statements and Supplementary Data" on page 69 of this Report. Products and services of the SGK Brand Solutions segment are sold throughout the world, with principal locations in North America, Europe and Asia. Memorialization segment products are sold throughout the world, with the segment's principal operations located in North America, Europe, and Australia. The Industrial Technologies segment sells equipment and consumables directly to industrial consumers and distributors in North America and internationally through the Company's subsidiaries in Sweden, Germany and China, and other foreign distributors. Matthews owns a minority interest in Industrial Technologies product distributors in Asia, Australia and Europe.

SGK Brand Solutions:

The SGK Brand Solutions segment provides both integrated and stand-alone products, services and solutions designed to help companies market their brands more efficiently. The value in these products and services ranges from helping companies deliver new product innovations to market in order to address consumer demand; to connecting product packaging to digital brand experiences off-shelf to provide the consumer with a more engaging and connected brand experience - all of which helps marketers grow their businesses.

The segment's principal products, services and solutions include: 1) brand development and graphic design, 2) brand deployment and activation, 3) brand delivery, 4) consulting and 5) digital tools.

Brand development and graphic design: This business creates visual intellectual properties, packaging and content that helps clients differentiate their brands in the marketplace and appeal to consumer targets.
Brand deployment and activation: This business supports in-store promotion of its client's brands through the design and production of merchandising exhibits and shopper experiences and across digital and printed media channels to drive consumer interest, engagement and sales.
Brand delivery: This business produces digital packaging artwork files, pre-media graphics services for print and digital channels, and image carriers such as printing plates and gravure cylinders.
Consulting: This business advises brand owners on workflow best practices, management and technologies, and printing quality, measurement and consistency.
Digital tools: This business develops digital tools that deliver connectivity, efficiency and insights about its packaging and marketing operations to clients.

The SGK Brand Solutions segment's principal clients are global, multinational and regional companies in highly-regulated industries such as food and beverage, pharmaceutical and healthcare, beauty and cosmetics, and alcohol and tobacco. The segment also serves clients in a diverse range of sectors which includes leaders in home improvement, personal care, technology and electronics, snack food and confections, telecommunications, and apparel, as well as a diverse range of shopping formats which include: big-box stores, department stores, specialty stores, grocery stores, pharmacy chains, and online retailers. These large, well-known companies represent a variety of brands across the market place covering both national and private label brands with numerous packaging and marketing requirements. The segment also includes global packaging industry converters as clients to which it supplies printing tools and files.

The segment's products, services and solutions are purchased in part or whole by companies with operations in and/or across the North America, Europe and Asia regions. A large portion of these purchases result in annual or multi-year contracts; others are initiative-based. The segment generates new business opportunities through referrals and relationships, marketing and lead generation and select industry partnerships. The Company has many long-standing relationships among its client base that span decades and has new relationships with well-known global technology companies that are driving change in how consumers engage with brands and use devices like smartphones to shop and buy online and in-store.

Major raw materials for this segment's products include photopolymers, steel, copper, film, wood, particleboard, corrugated materials, structural steel, plastic, laminates, inks and graphic art supplies. All such materials are presently available in adequate supply from various industry sources.

The combination of the segment's businesses in North America, Europe and Asia is an important part of Matthews' strategy to be a world leader in the packaging and marketing content industry by providing graphics-related products, services and solutions that help companies scale the creation and production of their brand content globally as efficiently as possible. Competition is on the basis of product quality, timeliness of delivery and price, and increasingly, the ability to provide a holistic solution for brand content beyond its use for packaging, while at the same time elevating the role of packaging in the marketing mix.

The segment competes in an industry that is constantly challenged by emerging technologies that impact packaging and marketing. These challenges can create new opportunities for the segment to create, produce and manage large volumes of brand content. They also provide the segment with opportunities to advise its clients on how to plan for, manage and execute the digital transformation of their packaging and marketing operations. The SGK Brand Solutions segment's more than 100 years in the packaging business is comprised of a broad technical expertise relating to the creation and production of graphics, their workflows and best practices for the packaging marketing channel. This combination of knowledge, experience and skill helps the SGK Brand Solutions segment differentiate itself from competitors by enabling it to provide a better overall experience to its clients with the ability to quickly scale its packaging and content requirements globally.

Memorialization:

The Memorialization segment manufactures and markets a full line of memorialization products used primarily in cemeteries, funeral homes and crematories. The segment's products, which are sold principally in North America, Europe and Australia, include cast bronze memorials, granite memorials, caskets, cremation equipment and other memorialization products. The segment also manufactures and markets architectural products that are used to identify or commemorate people, places, events and accomplishments.

Memorial products include flush bronze and granite memorials, upright granite memorials and monuments, cremation memorialization products, granite benches, flower vases, crypt plates and letters, cremation urns, niche units, cemetery features and statues, along with other related products and services. Flush memorials are bronze plaques or granite memorials which contain personal information about a deceased individual (such as name, birth date, and death date), photos and emblems. Flush bronze and granite memorials are even or "flush" with the ground and therefore are preferred by many cemeteries for easier lawn mowing and general maintenance. The segment's memorial products also include community and family mausoleums within North America. In addition, the segment's other memorial products include bronze plaques, letters, emblems, vases, lights and photo ceramics that can be affixed to granite monuments, mausoleums, crypts and flush memorials. Principal customers for memorial products are cemeteries and memorial parks, which in turn sell the Company's products to the consumer.

Customers of the Memorialization segment can also purchase memorials and vases on a "pre-need" basis. The "pre-need" concept permits families to arrange for these purchases in advance of their actual need. Upon request, the Company will manufacture the memorial to the customer's specifications (e.g., name and birth date) and place it in storage for future delivery. Memorials in storage have been paid in full with title conveyed to each pre-need purchaser.

The segment is also a leading manufacturer and distributor of caskets and other funeral home products in North America. The segment produces and markets metal, wood and cremation caskets. Caskets are offered in a variety of colors, interior designs, handles and trim in order to accommodate specific religious, ethnic or other personal preferences. The segment also markets other funeral home products such as urns, jewelry and stationery. The segment offers individually personalized caskets through its distribution network.

Metal caskets are made from various gauges of cold-rolled steel, stainless steel, copper and bronze. Metal caskets are generally categorized by whether the casket is non-gasketed or gasketed, and by material (i.e., bronze, copper, or steel) and in the case of steel, by the gauge (thickness) of the metal. Wood caskets are primarily manufactured from nine different species of wood. The species of wood used are poplar, pine, ash, oak, pecan, maple, cherry, walnut and mahogany. The Memorialization segment is a leading manufacturer of all-wood constructed caskets, which are manufactured using pegged and dowelled construction, and include no metal parts. Cremation caskets are made primarily from wood or cardboard covered with cloth or veneer. These caskets appeal primarily to cremation consumers, environmentally concerned consumers, and value buyers.

The Memorialization segment also produces casket components. Casket components include stamped metal parts, metal locking mechanisms for gasketed metal caskets, adjustable beds and interior panels. Metal casket parts are produced by stamping cold-rolled steel, stainless steel, copper and bronze sheets into casket component parts. Locking mechanisms and adjustable beds are produced by stamping and assembling a variety of steel parts. The segment purchases from sawmills and lumber distributors various species of uncured wood, which it dries and cures. The cured wood is processed into casket components.

In addition, the segment provides product and service assortment planning, as well as merchandising and display products to funeral service businesses. These products assist funeral service professionals in providing information, value and satisfaction to their client families.

The segment also provides cremation systems, crematory management, and cremation service and supplies to the pet and human sector, and standard and specialized incineration systems, including abated filtration systems to satisfy strict environmental requirements. The primary market areas for these products and services are North America and Europe, although the segment also sells into Latin America and the Caribbean, Australia, the Middle East and Asia.

Cremation systems include flame-based systems for cremation of humans and pets, as well as equipment for processing the cremated remains and other related equipment (ventilated work stations, tables, cooler racks, vacuums). The principal markets for these products are funeral homes, cemeteries, crematories, pet crematories, animal disposers and veterinarians. These products primarily are marketed directly by segment personnel. Human crematory management/operations represent the actual operation and management of client-owned crematories. Currently the segment provides these services primarily to municipalities and private operators in the United States and Europe. Cremation service and supplies consist of operator training, preventative maintenance and on-demand service work performed on various makes and models of equipment. This work can be as simple as replacing defective bulbs or as complex as complete reconstruction and upgrading or retro-fitting on site. Supplies are consumable items and replacement parts associated with normal crematory operations.

Waste incineration systems encompass both batch load and continuous feed, static and rotary systems for incineration of all waste types, as well as equipment for in-loading waste, out-loading ash and energy recovery. The principal markets for these products are animal and medical waste disposal, oil and gas "work camp" wastes, industrial wastes and bio-mass generators. Environmental and energy systems include emissions filtration units, waste heat recovery equipment, waste gas treatment products, as well as energy recovery. The segment also provides commissioning, training and user support for customers of incineration systems. The principal markets are municipalities or public/state agencies, the cremation industry and other industries which utilize incinerators for waste reduction and energy production.

The Memorialization segment also manufactures a full line of other products, including urns in a variety of sizes, styles and shapes as well as standard and custom designed granite cremation pedestals and benches. The segment manufactures bronze and granite niche units, which are comprised of numerous compartments used to display cremation urns in mausoleums and churches. The Company also markets turnkey cremation gardens, which include the design and all related products for a cremation memorial garden.

Architectural products include cast bronze and aluminum plaques, etchings and letters that are used to recognize, commemorate and identify people, places, events and accomplishments. The Company's plaques are frequently used to identify the name of a building or the names of companies or individuals located within a building. Such products are also used to commemorate events or accomplishments, such as military service or financial donations. The principal markets for the segment's architectural products are corporations, fraternal organizations, contractors, churches, hospitals, schools and government agencies. These products are sold to and distributed through a network of independent dealers including sign suppliers, awards and recognition companies, and trophy dealers.

Raw materials used by the Memorialization segment to manufacture memorials consist principally of bronze and aluminum ingot, granite, sheet metal, coating materials, photopolymers and construction materials and are generally available in adequate supply. Ingot is obtained from various North American, European and Australian smelters. The primary materials required for casket manufacturing are cold-rolled steel and lumber. The segment also purchases copper, bronze, stainless steel, particleboard, corrugated materials, paper veneer, cloth, ornamental hardware and coating materials. Purchase orders or supply agreements are typically negotiated with large, integrated steel producers that have demonstrated timely delivery, high quality material and competitive prices. Lumber is purchased from a number of sawmills and lumber distributors. Raw materials used to manufacture cremation and incineration products consist principally of structural steel, sheet metal, electrical components, combustion devices and refractory materials. These are generally available in adequate supply from numerous suppliers.

Competition from other manufacturers of memorial products is on the basis of reputation, product quality, delivery, price, and design availability. The Company believes that its superior quality, broad product lines, innovative designs, delivery capability, customer responsiveness, experienced personnel and consumer-oriented merchandising systems are competitive advantages in its markets. Competition in the mausoleum construction industry includes various construction companies throughout North America and is on the basis of design, quality and price. Competitors in the architectural market are numerous and include companies that manufacture cast and painted signs, plastic materials, sand-blasted wood and other fabricated products.

The Memorialization segment markets its casket products in the United States through a combination of Company-owned and independent casket distribution facilities. The Company operates approximately 100 distribution centers in the United States. Approximately 85% of the segment's casket products are currently sold through Company-owned distribution centers. The casket business is highly competitive and the Company competes with other manufacturers on the basis of product quality, price, service, design availability and breadth of product line. The Memorialization segment provides a line of casket products that it believes is as comprehensive as any of its major competitors. There are a large number of casket industry participants operating in North America and also a few foreign casket manufacturers, primarily from China, participating in the North American market.

The Company competes with several manufacturers in the cremation and accessory equipment market principally on the basis of product design, quality and price. The Memorialization segment and its three largest global competitors account for a substantial portion of the United States and European cremation equipment market.

The Memorialization segment works to provide a total solution to customers that own and operate businesses in both the cemetery and funeral home markets. The Company's memorial and casket products serve the relatively stable casketed and in-ground burial death market, while its memorial products and cremation equipment also serve the growing cremation market.

Industrial Technologies:

The Industrial Technologies segment designs, manufactures and distributes a wide range of marking and coding equipment and consumables, industrial automation solutions, and warehouse automation systems. Manufacturers, suppliers and distributors worldwide rely on Matthews' integrated systems to identify, track and pick their products.

Marking systems range from stand-alone marking products to complex ink-jet printing systems that integrate into a customer's production process. The Company manufactures and markets products and systems that employ different marking technologies, including laser and ink-jet printing. These technologies apply product information required for identification and traceability, as well as to facilitate inventory and quality control, regulatory compliance and brand name communication.

Warehouse automation systems complement the tracking and distribution of a customer's products with automated order fulfillment technologies, autonomous mobile robotics, and controls for material handling systems. Material handling customers include some of the largest retail, eCommerce, and automated assembly companies in the United States. The Company also engineers innovative, custom solutions to address specific customer requirements in a variety of industries, including oil field services and security scanning.

A significant portion of the revenue of the Industrial Technologies segment is attributable to the sale of consumables and replacement parts required by the marking, coding and tracking products sold by Matthews. The Company develops inks exclusively for the use with its marking equipment which is critical to ensure ongoing equipment reliability and mark quality.

The principal customers for the Company's marking and fulfillment systems products are manufacturers, suppliers and distributors of durable goods, building products, consumer goods manufacturers (including food and beverage processors) and producers of pharmaceuticals. The Company also serves a wide variety of industrial markets, including metal fabricators, manufacturers of woven and non-woven fabrics, plastic, rubber and automotive products.

A portion of this segment's sales are outside the United States, with distribution sourced through the Company's subsidiaries in Sweden, Germany and China in addition to other international distributors. The Company owns a minority interest in distributors in Asia, Australia and Europe.

Major raw materials for this segment's products include precision components, electronics, printing components and chemicals, all of which are presently available in adequate supply from various sources.

Competitors in the marking and fulfillment systems industries are diverse, with some companies offering limited product lines for well-defined specialty markets, while others operate similarly to the Company, offering a broad product line and competing in multiple product markets and countries. Competitive differentiation for marking and fulfillment systems products is based on product performance, ease of integration into the manufacturing and/or distribution process, service and price. The Company typically competes with specialty companies in specific brand marking solutions and traceability applications. The Company believes that, in general, its Industrial Technologies segment offers one of the broadest lines of products to address a wide variety of marking, coding and industrial automation applications.

PATENTS, TRADEMARKS AND LICENSES:

The Company holds a number of trademarks and in excess of 100 domestic and foreign patents for its products and related technologies. However, the Company believes the loss of any individual or a significant number of patents or trademarks would not have a material impact on consolidated operations or revenues.

BACKLOG:

Because the nature of the Company's SGK Brand Solutions, Memorialization and Industrial Technologies businesses are primarily custom products made to order and services with short lead times, backlogs are not generally material except for rotogravure engineering projects in the SGK Brand Solutions segment, mausoleums and cremation equipment in the Memorialization segment and industrial automation and order fulfillment systems in the Industrial Technologies segment. Backlogs vary in a range of approximately six to twelve months of sales for rotogravure engineering projects and mausoleums. Cremation equipment sales backlogs vary in a range of eight to ten months of sales. Backlogs for Industrial Technologies segment sales generally vary in a range of up to four weeks for standard products and eighteen weeks for custom systems. The Company's current backlog is expected to be substantially filled in fiscal 2020.

REGULATORY MATTERS:

The Company's operations are subject to various federal, state and local laws and regulations relating to the protection of the environment. The Company is party to various environmental matters which include obligations to investigate and mitigate the effects on the environment of certain materials at various operating and non-operating sites. The Company is currently performing environmental assessments and remediation at these sites, as appropriate. Refer to Note 17, "Environmental Matters" in Item 8 - "Financial Statements and Supplementary Data," for further details.

ITEM 1A. RISK FACTORS.

There are inherent risks and uncertainties associated with the Company's businesses that could adversely affect its operating performance and financial condition. Set forth below are descriptions of those risks and uncertainties that the Company currently believes to be material. Additional risks not currently known or deemed immaterial may also result in adverse effects on the Company.

Changes in Economic Conditions. Generally, changes in domestic and international economic conditions affect the industries in which the Company and its customers and suppliers operate. These changes include changes in the rate of consumption or use of the Company's products due to economic downturns, volatility in currency exchange rates, and changes in raw material prices resulting from supply and/or demand conditions.

Uncertainty about current global economic conditions poses a risk, as consumers and businesses may continue to postpone or cancel spending. Other factors that could influence customer spending include energy costs, conditions in the credit markets, consumer confidence and other factors affecting consumer spending behavior. These and other economic factors could have an effect on demand for the Company's products and services and negatively impact the Company's financial condition and results of operations.

Foreign Operations. The Company conducts business in more than 25 countries around the world, and in fiscal2019 approximately 35% of the Company's sales to external customers were to customers outside the United States. In addition, the Company's manufacturing operations, suppliers and employees are located in many places around the world. As such, the Company's future success depends in part on its ability to grow sales in non-U.S. markets. Sales and operations outside of the United States are subject to certain inherent risks, including fluctuations in the value of the U.S. dollar relative to foreign currencies, global economic uncertainties, tariffs, quotas, taxes and other market barriers, political and economic instability, restrictions on the export or import of technology, potentially limited intellectual property protection, difficulties in staffing and managing international operations, potentially adverse tax consequences, and required compliance with non-U.S. laws and regulations.

Changes in Foreign Currency Exchange Rates. Manufacturing and sales of a significant portion of the Company's products are outside the United States, and accordingly, the Company holds assets, incurs liabilities, earns revenue and pays expenses in a variety of currencies. The Company's consolidated financial statements are presented in U.S. dollars, and therefore, the Company must translate the reported values of its foreign assets, liabilities, revenue and expenses into U.S. dollars. Increases or decreases in the value of the U.S. dollar compared to foreign currencies may negatively affect the value of these items in the Company's consolidated financial statements, even though their value has not changed in local currency.

Increased Prices for Raw Materials. The Company's profitability is affected by the prices of the raw materials used in the manufacture of its products. These prices may fluctuate based on a number of factors, including changes in supply and demand, domestic and global economic conditions, volatility in commodity markets, currency exchange rates, labor costs, tariffs and fuel-related costs. If suppliers increase the price of critical raw materials, alternative sources of supply, or alternative materials, may not exist or be readily available.

The Company has standard selling price structures (i.e., list prices) in certain of its segments, which are reviewed for adjustment generally on an annual basis. In addition, the Company has established pricing terms with several of its customers through contracts or similar arrangements. Based on competitive market conditions and to the extent that the Company has established pricing terms with customers, the Company's ability to immediately increase the price of its products to offset the increased costs may be limited. Significant raw material price increases that cannot be mitigated by selling price increases or productivity improvements will negatively affect the Company's results of operations.

Changes in Mortality and Cremation Rates. Generally, life expectancy in the United States and other countries in which the Company's Memorialization segment operates has increased steadily for several decades and is expected to continue to do so in the future. The increase in life expectancy is also expected to impact the number of deaths in the future. Additionally, cremations have steadily grown as a percentage of total deaths in the United States since the 1960's, and are expected to continue to increase in the future. The Company expects that these trends will continue in the future and sales of the Company's Memorialization segment may benefit from the continued growth in the number of cremations; however, such trends may adversely affect the volume of bronze and granite memorialization products and burial caskets sold in the United States.

Changes in Product Demand or Pricing. The Company's businesses have and will continue to operate in competitive markets. Changes in product demand or pricing are affected by domestic and foreign competition and an increase in consolidated purchasing by large customers operating in both domestic and global markets. The Memorialization businesses generally operate in markets with ample supply capacity and demand which is correlated to death rates. The Brand Solutions businesses serve global customers
that are requiring their suppliers to be global in scope and price-competitive. Additionally, in recent years the Company has witnessed an increase in products manufactured offshore, primarily in China, and imported into the Company's U.S. markets. It is expected that these trends will continue and may affect the Company's future results of operations.

Changes in the Distribution of the Company's Products or the Loss of a Large Customer. Although the Company does not have any customer that is individually significant to consolidated sales, it does have contracts with several large customers in both the Memorialization and SGK Brand Solutions segments. While these contracts provide important access to large purchasers of the Company's products, they can obligate the Company to sell products at contracted prices for extended periods of time. Additionally, any significant divestiture of business properties or operations by current customers could result in a loss of business if the Company is not able to maintain the business with the subsequent owners of the businesses.

Risks in Connection with Acquisitions. The Company has grown, in part, through acquisitions, and continues to evaluate acquisition opportunities that have the potential to support and strengthen its businesses. There is no assurance however that future acquisition opportunities will arise, or that if they do, that they will be consummated. In addition, acquisitions involve inherent risks that the businesses acquired will not perform in accordance with expectations, or that synergies expected from the integration of the acquisitions will not be achieved as rapidly as expected, if at all. Failure to effectively integrate acquired businesses could prevent the realization of expected rates of return on the acquisition investment, including the achievement of cost-reduction objectives, and could have a negative effect on the Company's results of operations and financial condition.

Protection of Intellectual Property. Certain of the Company's businesses rely on various intellectual property rights, including patents, copyrights, trademarks and trade secrets, as well as confidentiality provisions and licensing arrangements, to establish proprietary rights. If the Company does not enforce its intellectual property rights successfully, its competitive position may suffer which could harm the Company's operating results. In addition, the Company's patents, copyrights, trademarks and other intellectual property rights may not provide a significant competitive advantage. The Company may need to spend significant resources monitoring its intellectual property rights and may or may not be able to detect infringement by third parties. The Company's competitive position may be harmed if it cannot detect infringement and enforce its intellectual property rights quickly or at all. In some circumstances, the Company may choose to not pursue enforcement because an infringer has a dominant intellectual property position or for other business reasons. In addition, competitors might avoid infringement by designing around the Company's intellectual property rights or by developing non-infringing competing technologies. Intellectual property rights and the Company's ability to enforce them may be unavailable or limited in some countries which could make it easier for competitors to capture market share and could result in lost revenues.

Environmental Remediation and Compliance. The Company is subject to the risk of environmental liability and limitations on its operations due to environmental laws and regulations. The Company is subject to extensive federal, state, local and foreign environmental, health and safety laws and regulations concerning matters such as air emissions, wastewater discharges, solid and hazardous waste handling and disposal and the investigation and remediation of contamination. The risks of potentially substantial costs and liabilities related to compliance with these laws and regulations are an inherent part of the Company's business, and future conditions may develop, arise or be discovered that create substantial environmental compliance or remediation liabilities and costs. Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than the Company anticipates, and there is no assurance that significant expenditures related to such compliance may not be required in the future.

From time to time, the Company may be subject to legal proceedings brought by private parties or governmental authorities with respect to environmental matters, including matters involving alleged noncompliance with or liability under environmental, health and safety laws, property damage or personal injury. New laws and regulations, including those which may relate to emissions of greenhouse gases, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require the Company to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on the Company's business, financial condition or results of operations.

Technological Factors Beyond the Company's Control. The Company operates in certain markets in which technological product development contributes to its ability to compete effectively. There can be no assurance that the Company will be able to develop new products, that new products can be manufactured and marketed profitably, or that new products will successfully meet the expectations of customers.

Cybersecurity and Data Breaches. In the course of business, the Company collects and stores sensitive data and proprietary business information. The Company could be subject to service outages or breaches of security systems which may result in disruption, unauthorized access, misappropriation, or corruption of this information. Security breaches of the Company's network or data including physical or electronic break-ins, vendor service outages, computer viruses, attacks by hackers or similar breaches can create system disruptions, shutdowns, or unauthorized disclosure of confidential information. Although the Company is not aware of any significant incidents to date, if it is unable to prevent such security or privacy breaches, its operations could be disrupted or the Company may suffer legal claims, loss of reputation, financial loss, property damage, or regulatory penalties because of lost or misappropriated information.

Changes in Laws and Regulations Governing Data Privacy and Data Protection. The Company is subject to many data privacy, data protection, and data breach notification laws, including the European Union General Data Protection Regulation (the “GDPR”), which became effective in May of 2018. The GDPR contains numerous requirements, including more robust obligations and increased documentation requirements for data protection compliance programs by companies. Complying with the GDPR may cause the Company to incur substantial operational costs or require the Company to change its business practices. The Company’s measures to assess the requirements of, and to comply with, the GDPR, as well as new and existing data-related laws and regulations of other jurisdictions, could be challenged, including by authorities that regulate data-related compliance. The Company’s ongoing compliance measures could result in the incurrence of significant expense in facilitating and responding to regulatory investigations, and if the measures initiated by the Company are deemed to be inadequate, the Company could be subject to enforcement actions that may require operational changes, fines, penalties or damages, which could have an adverse impact on the Company’s business or results of operations.

Changes in Tax Rules. The enactment of the U.S. Tax Cuts and Jobs Act (the “Act”) in December 2017 significantly affected U.S. tax law by changing how the U.S. imposes tax on multinational corporations. The U.S. Department of Treasury has broad authority under the Act to issue regulations and interpretive guidance. The Company has applied available guidance to estimate its tax obligations, but new guidance issued by the U.S. Treasury Department may cause the Company to make adjustments to its tax estimates in future periods.

Compliance with Foreign Laws and Regulations. Due to the international scope of the Company's operations, Matthews is subject to a complex system of commercial and trade regulations around the world, and the Company's foreign operations are governed by laws, rules and business practices that often differ from those of the United States. The Company cannot predict the nature, scope or effect of future regulatory requirements to which the Company's operations might be subject or the manner in which existing laws might be administered or interpreted, which could have a material and negative impact on the Company's business and results of operation. For example, recent years have seen an increase in the development and enforcement of laws regarding trade compliance and anti-corruption, such as the U.S. Foreign Corrupt Practices Act and similar laws in other countries. While Matthews maintains a variety of internal policies and controls and takes steps, including periodic training and internal audits, that the Company believes are reasonably calculated to discourage, prevent and detect violations of such laws, the Company cannot guarantee that such actions will be effective or that individual employees will not engage in inappropriate behavior in contravention of the Company's policies and instructions. Such conduct, or even the allegation thereof, could result in costly investigations and the imposition of severe criminal or civil sanctions, could disrupt the Company's business, and could materially and adversely affect the Company's reputation, business and results of operations or financial condition.

Further, the Company is subject to laws and regulations worldwide affecting its operations outside the United States in areas including, but not limited to, intellectual property ownership and infringement, tax, customs, import and export requirements, anti-corruption and anti-bribery, foreign exchange controls and cash repatriation restrictions, foreign investment, data privacy requirements, anti-competition, pensions and social insurance, employment, and environment, health, and safety. Compliance with these laws and regulations may be onerous and expensive and requirements may differ among jurisdictions. Further, the promulgation of new laws, changes in existing laws and abrogation of local regulations by national laws may have a negative impact on the Company's business and prospects. In addition, certain laws and regulations are relatively new and their interpretation and enforcement involve significant uncertainties. There can be no assurance that any of these factors will not have a material adverse effect on the Company's business, results of operations or financial condition.

Effectiveness of Internal Controls. Section 404 of the Sarbanes-Oxley Act of 2002 requires a comprehensive evaluation of the Company's internal control over financial reporting. To comply with this statute, the Company is required to document and test its internal control over financial reporting, management is required to assess and issue a report concerning internal control over financial reporting, and the Company's independent registered public accounting firm is required to attest to and report on the Company's assessment of the effectiveness of internal control over financial reporting. Any failure to maintain or implement required new or improved controls could cause the Company to fail to meet its periodic reporting obligations or result in material misstatements in the consolidated financial statements, and substantial costs and resources may be required to rectify these or other internal control deficiencies. If the Company cannot produce reliable financial reports, investors could lose confidence in the Company's reported financial information, the market price of the Company's common stock could decline significantly, and its business, financial condition, and reputation could be harmed.

Compliance with Securities Laws and Regulations; Conflict Minerals Reporting. The Company is required to comply with various securities laws and regulations, including but not limited to the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"). Dodd-Frank contains provisions, among others, designed to improve transparency and accountability concerning the supply chains of certain minerals originating from the Democratic Republic of Congo and adjoining countries that are believed to be benefiting armed groups ("Conflict Minerals"). While Dodd-Frank does not prohibit companies from using Conflict Minerals, the SEC mandates due diligence, disclosure and reporting requirements for companies for which Conflict Minerals are necessary to the functionality or production of a product. The Company's efforts to comply with Dodd-Frank and other evolving laws, regulations and standards could result in increased costs and expenses related to compliance and potential violations.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not Applicable.

ITEM 2. PROPERTIES.

Principal properties of the Company and its majority-owned subsidiaries as of October 31,2019 were as follows (properties are owned by the Company except as noted):

Location	Description of Property	
SGK Brand Solutions:		
Antwerp, Belgium	Manufacturing	
Battle Creek, MI	Operating facility	(1)
Burlington, NC	Manufacturing	(1)
Chennai, India	Operating facility	(1)
Chicago, IL	Operating facilities	(1)
Cincinnati, OH	Operating facility	(1)
Cleckheaton, England	Operating facility	(1)
Dachnow, Poland	Manufacturing	(1)
Gateshead, England	Operating facility	(1)
East Butler, PA	Manufacturing	
Goslar, Germany	Manufacturing	(1)
Grenzach-Wyhlen, Germany	Manufacturing	
Istanbul, Turkey	Manufacturing	(1)
Izmir, Turkey	Manufacturing	
Jülich, Germany	Manufacturing	
Manchester, England	Manufacturing	(1)
Marietta, GA	Manufacturing	
Minneapolis, MN	Operating facility	
Mississauga, Canada	Operating facility	(1)
Mönchengladbach, Germany	Manufacturing	
Mönchengladbach, Germany	Manufacturing	(1)
Munich, Germany	Manufacturing	(1)
New Berlin, WI	Manufacturing	(1)
Novgorod, Russia	Manufacturing	
Nuremberg, Germany	Manufacturing	(1)
Penang, Malaysia	Operating facility	
Portland, OR	Operating facility	(1)
Queretaro, Mexico	Operating facility	
Redmond, WA	Operating facility	(1)
St. Louis, MO	Manufacturing	
San Francisco, CA	Operating facility	(1)
Shanghai, China	Operating facility	(1)
Shenzhen, China	Operating facility	(1)
Tarnowo Podgorne, Poland	Manufacturing	(1)
Tualatin, OR	Manufacturing	(1)
Vreden, Germany	Manufacturing	
Vreden, Germany	Manufacturing	
Vreden, Germany	Operating facility	
Wilsonville, OR	Operating facility	(1)

Location	Description of Property	
Memorialization [2]:		
Pittsburgh, PA	Manufacturing / Division Offices	
Pittsburgh, PA	Division Offices	[1]
Apopka, FL	Manufacturing / Division Offices	
Aurora, IN	Manufacturing	
Colorno, Italy	Manufacturing	[1]
Dallas, TX	Distribution Hub	[1]
Dandenong, Australia	Manufacturing	[1]
Dewy Rose, GA	Manufacturing	[1]
Elberton, GA	Manufacturing	
Elberton, GA	Manufacturing	
Fontana, CA	Distribution Hub	[1]
Harrisburg, PA	Distribution Hub	[1]
Hyde, England	Manufacturing	[1]
Indianapolis, IN	Distribution Hub	[1]
Kingwood, WV	Manufacturing	
Monterrey, Mexico	Manufacturing	[1]
Richmond, IN	Manufacturing	[1]
Richmond, IN	Manufacturing	
Searcy, AR	Manufacturing	
Stone Mountain, GA	Distribution Hub	[1]
Udine, Italy	Manufacturing	[1]
Vestone, Italy	Manufacturing	[1]
West Point, MS	Distribution	
Whittier, CA	Manufacturing	[1]
York, PA	Manufacturing	
Industrial Technologies:		
Pittsburgh, PA	Manufacturing / Division Offices	
Cincinnati, OH	Manufacturing	[1]
Cincinnati, OH	Manufacturing / Distribution	
Corvallis, OR	Manufacturing	[1]
Gothenburg, Sweden	Manufacturing / Distribution	[1]
Lima, Costa Rica	Manufacturing	[1]
Pewaukee, WI	Manufacturing	[1]
Tianjin City, China	Manufacturing	[1]
Wilsonville, OR	Manufacturing	
Corporate and Administrative Offices:		
Pittsburgh, PA	General Offices	
Pittsburgh, PA	General Offices	
Des Plaines, IL	General Offices	

[1] These properties are leased by the Company under operating lease arrangements.
[2] In addition to the properties listed, the Memorialization segment leases warehouse facilities totaling approximately 1.0 million square feet in 37 states under operating leases.

All of the owned properties are unencumbered. The Company believes its facilities are generally well suited for their respective uses and are of adequate size and design to provide the operating efficiencies necessary for the Company to be competitive. The Company's facilities provide adequate space for meeting its near-term production requirements and have availability for additional capacity. The Company intends to continue to expand and modernize its facilities as necessary to meet the demand for its products.

ITEM 3. LEGAL PROCEEDINGS.

Matthews is subject to various legal proceedings and claims arising in the ordinary course of business. Management does not expect that the results of any of these legal proceedings will have a material adverse effect on Matthews' financial condition, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

OFFICERS AND EXECUTIVE MANAGEMENT OF THE REGISTRANT

The following information is furnished with respect to officers and executive management as of October 31,2019:

Name	Age	Positions with Registrant
Joseph C. Bartolacci	59	President and Chief Executive Officer
Gregory S. Babe	62	Chief Technology Officer
Edward M. Brady	61	Chief Information Officer
Marcy L. Campbell	56	Senior Vice President, Human Resources
Brian J. Dunn	62	Executive Vice President, Strategy and Corporate Development
Steven D. Gackenbach	56	Group President, Memorialization
Paul C. Jensen	61	Division President, Industrial Technologies
Gary R. Kohl	56	President, SGK Brand Solutions
Robert M. Marsh	51	Vice President and Treasurer
Steven F. Nicola	59	Chief Financial Officer and Secretary
David A. Schawk	63	Group President, SGK Brand Solutions
Brian D. Walters	50	Senior Vice President and General Counsel

Joseph C. Bartolacci was appointed President and Chief Executive Officer effective October 2006.

Gregory S. Babe was appointed Chief Technology Officer effective November 2015. Prior thereto, he had been interim Executive Vice President, Global Information Technology and Integration since November 2014 when he joined the Company. Prior to joining the Company, Mr. Babe was President and Chief Executive Officer of Liquid X Printed Metals, Inc. from June 2013 to November 2014.

Edward M. Brady was appointed Chief Information Officer effective January 2016, when he joined the Company. Prior thereto, he was a leader in the Information Technology consulting practice of IBM since June 2006.

Marcy L. Campbell was appointed Senior Vice President, Human Resources effective February 2018. Prior thereto, Ms. Campbell served as Vice President, Human Resources since November 2014. Prior thereto, she served as Director, Regional Human Resources since January 2013.

Brian J. Dunn was appointed Executive Vice President, Strategy and Corporate Development effective July 2014.

Steven D. Gackenbach was appointed Group President, Memorialization effective October 31, 2011.

Paul C. Jensen was appointed Division President, Industrial Technologies effective October 1, 2008.

Gary R. Kohl was appointed President, SGK Brand Solutions effective May 2017. Prior thereto, he served as Executive Vice President, SGK Global Business Development since December 2015 when he joined the Company. Prior to joining the Company, Mr. Kohl was the Group Senior Vice President of R. R. Donnelley & Sons Company.

Robert M. Marsh was appointed Vice President and Treasurer in February 2016. He served as Treasurer since December 2014 when he joined the Company. Prior to joining the Company, Mr. Marsh was a partner of PNC Mezzanine Capital, the principal mezzanine investment business of The PNC Financial Services Group, LLC ("PNC"). Mr. Marsh joined PNC in 1997.

Steven F. Nicola was appointed Chief Financial Officer and Secretary effective December 2003.

David A. Schawk joined the Company in July 2014 as President, SGK Brand Solutions upon Matthews' acquisition of Schawk. On November 1, 2019, Mr. Schawk retired from his role as President, SGK Brand Solutions.

Brian D. Walters was appointed Senior Vice President and General Counsel effective February 2018. Prior thereto, Mr. Walters served as Vice President and General Counsel since February 2009.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Market Information:

The authorized common stock of the Company consists of 70,000,000 shares of Class A Common Stock, $1.00 par value. AtSeptember 30, 2019, 31,348,483 shares were outstanding. The Company's Class A Common Stock is traded on the NASDAQ Global Select Market under the symbol "MATW".

The Company has a stock repurchase program. The buy-back program is designed to increase shareholder value, enlarge the Company's holdings of its common stock, and add to earnings per share. Repurchased shares may be retained in treasury, utilized for acquisitions, or reissued to employees or other purchasers, subject to the restrictions set forth in the Company's Restated Articles of Incorporation. Under the current authorization, the Company's Board of Directors has authorized the repurchase of a total of 5,000,000 shares of Matthews' common stock under the program, of which712,312 shares remain available for repurchase as ofSeptember 30, 2019. All purchases of the Company's common stock during fiscal 2019 were part of this repurchase program.

The following table shows the monthly fiscal2019 stock repurchase activity:

Period	Total number of shares purchased	Weighted-average price paid per share	Total number of shares purchased as part of a publicly announced plan	Maximum number of shares that may yet be purchased under the plan
October 2018	332	$ 51.88	332	1,421,950
November 2018	141,722	42.18	141,722	1,280,228
December 2018	44,363	39.63	44,363	1,235,865
January 2019	14,135	40.93	14,135	1,221,730
February 2019	78,708	39.09	78,708	1,143,022
March 2019	50,249	37.36	50,249	1,092,773
April 2019	18,323	36.62	18,323	1,074,450
May 2019	167,000	35.80	167,000	907,450
June 2019	54,832	34.29	54,832	852,618
July 2019	840	34.74	840	851,778
August 2019	104,344	31.15	104,344	747,434
September 2019	35,122	29.39	35,122	712,312
Total	709,970	$ 36.80	709,970	

Holders:

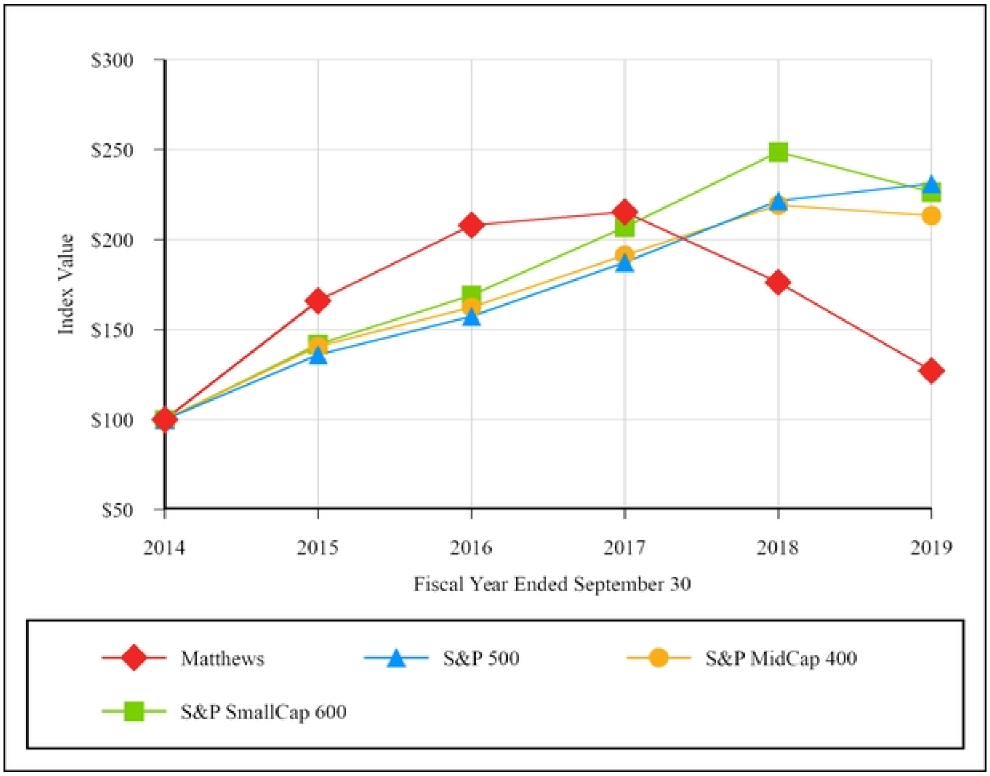
Based on records available to the Company, the number of record holders of the Company's common stock was 582 at October 31,2019.

Securities Authorized for Issuance Under Equity Compensation Plans:

See Equity Compensation Plans in Item 12 "Security Ownership of Certain Beneficial Owners and Management" on page77 of this report.

PERFORMANCE GRAPH

COMPARISON OF FIVE-YEAR CUMULATIVE RETURN *
AMONG MATTHEWS INTERNATIONAL CORPORATION,
S&P 500 INDEX, S&P MIDCAP 400 INDEX AND S&P SMALLCAP 600 INDEX



* Total return assumes dividend reinvestment

Note: Performance graph assumes $100 invested on October 1, 2014 in Matthews International Corporation Common Stock, Standard & Poor's (S&P) 500 Index, S&P MidCap 400 Index and S&P SmallCap 600 Index. The results are not necessarily indicative of future performance.

ITEM 6. SELECTED FINANCIAL DATA.

	Years Ended September 30,				
	2019[1]	2018[2]	2017[3]	2016[4]	2015[5]
	(Amounts in thousands, except per share data) (Unaudited)				
Net sales	$ 1,537,276	$ 1,602,580	$ 1,515,608	$ 1,480,464	$ 1,426,068
Operating profit [6]	10,303	138,557	121,376	127,228	110,700
Interest expense	40,962	37,427	26,371	24,344	20,610
Net (loss) income attributable to Matthews shareholders	$ (37,988)	$ 107,371	$ 74,368	$ 66,749	$ 63,449
(Loss) earnings per common share:					
Basic	$ (1.21)	$ 3.39	$ 2.31	$ 2.04	$ 1.93
Diluted	(1.21)	3.37	2.28	2.03	1.91
Weighted-average common shares outstanding:					
Basic	31,416	31,674	32,240	32,642	32,939
Diluted	31,416	31,861	32,570	32,904	33,196
Cash dividends per share	$ 0.80	$ 0.76	$ 0.68	$ 0.60	$ 0.54
Total assets	$ 2,190,603	$ 2,357,744	$ 2,244,649	$ 2,091,041	$ 2,143,611
Long-term debt, non-current	898,194	929,342	881,602	844,807	891,217

(1) Fiscal 2019 included net pre-tax charges of $114,768, primarily related to a goodwill write-down, losses from cost-method investments, losses on divestitures, acquisition-related costs, strategic cost-reduction initiatives, and net gains from the sale of buildings and vacant properties. Charges of $111,069 and $3,699 impacted operating profit and other deductions, respectively.

(2) Fiscal 2018 included net pre-tax charges of $27,115 and income of $3,771, which impacted operating profit and other deductions, respectively. These pre-tax charges primarily consisted of acquisition-related costs, and strategic cost-reduction initiatives. The pre-tax income primarily consisted of gains recognized on the disposition of certain cost-method investments.

(3) Fiscal 2017 included net pre-tax charges of $38,458 and income of $10,483, which impacted operating profit and other deductions, respectively. These pre-tax charges primarily consisted of acquisition-related costs, and strategic cost-reduction initiatives. The pre-tax income primarily consisted of loss recoveries, net of related costs, related to the previously disclosed theft of funds by a former employee.

(4) Fiscal 2016 included net pre-tax charges of $36,057 and income of $78, which impacted operating profit and other deductions, respectively. These amounts primarily consisted of acquisition-related costs and strategic cost-reduction initiatives.

(5) Fiscal 2015 included pre-tax charges of $36,883 and income of $8,726, which impacted operating profit and other deductions, respectively, and also included the unfavorable effect of related adjustments of $1,334 to income tax expense. These amounts primarily consisted of acquisition-related costs, trade name write-offs, strategic cost-reduction initiatives, and losses related to a theft of funds, partially offset by a gain on the settlement of a multi-employer pension plan obligation, and the impact of the favorable settlement of litigation, net of related expenses.

(6) Amounts were revised to reflect retrospective application for adoption of ASU No. 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" on October 1, 2018. As a result, operating income increased by $5,723, $8,773, $8,413, and $5,677 for fiscal years 2018, 2017, 2016, and 2015, respectively.

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

The following discussion should be read in conjunction with the consolidated financial statements of Matthews and related notes thereto. In addition, see "Cautionary Statement Regarding Forward-Looking Information" included in Part I of this Annual Report on Form 10-K.

RESULTS OF OPERATIONS:

The Company manages its businesses under three segments: SGK Brand Solutions, Memorialization and Industrial Technologies. The SGK Brand Solutions segment consists of brand management, pre-media services, printing plates and cylinders, engineered products, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries. The Memorialization segment consists primarily of bronze and granite memorials and other memorialization products, caskets and cremation equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment includes marking and coding equipment and consumables, industrial automation products and order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products.

Beginning in fiscal 2019, the Company changed its primary measure of segment profitability from operating profit to adjusted earnings before interest, income taxes, depreciation and amortization ("adjusted EBITDA"). Adjusted EBITDA is defined by the Company as earnings before interest, income taxes, depreciation, amortization and certain non-cash and/or non-recurring items that do not contribute directly to management's evaluation of its operating results. These items include stock-based compensation, the non-service portion of pension and postretirement expense, acquisition costs, ERP integration costs, and strategic initiatives and other charges. This presentation is consistent with how the Company's chief operating decision maker (the "CODM") evaluates the results of operations and makes strategic decisions about the business. For these reasons, the Company believes that adjusted EBITDA represents the most relevant measure of segment profit and loss.

In addition, the CODM manages and evaluates the operating performance of the segments, as described above, on a pre-corporate cost allocation basis. Accordingly, for segment reporting purposes, the Company has discontinued allocating corporate costs to its reportable segments beginning in fiscal 2019. Corporate costs include management and administrative support to the Company, which consists of certain aspects of the Company's executive management, legal, compliance, human resources, information technology (including operational support) and finance departments. These costs are included within "Corporate and Non-Operating" in the following table to reconcile to consolidated adjusted EBITDA and are not considered a separate reportable segment. Management does not allocate non-operating items such as investment income, other income (deductions), net and noncontrolling interest to the segments.

The following table sets forth sales and adjusted EBITDA for the Company's SGK Brand Solutions, Memorialization and Industrial Technologies segments for each of the last three fiscal years. The segment financial information for fiscal years 2018 and 2017 has been revised to present the prior period information on a comparable basis. Refer to Note 19, "Segment Information" in Item 8 - "Financial Statements and Supplemental Data" for the Company's financial information by segment.

	Years Ended September 30,		
	2019	2018	2017
	(Dollars in thousands)		
Sales to external customers:			
SGK Brand Solutions	$ 743,869	$ 805,274	$ 770,181
Memorialization	636,892	631,392	615,882
Industrial Technologies	156,515	165,914	129,545
Consolidated Sales	$ 1,537,276	$ 1,602,580	$ 1,515,608
Adjusted EBITDA:			
SGK Brand Solutions	$ 119,493	$ 150,233	$ 144,783
Memorialization	134,286	145,487	139,192
Industrial Technologies	24,082	25,864	18,481
Corporate and Non-Operating	(56,989)	(66,470)	(63,773)
Total Adjusted EBITDA[1]	$ 220,872	$ 255,114	$ 238,683

[1] Total Adjusted EBITDA is a non-GAAP financial measure. See the "Non-GAAP Financial Measures" section below.

Comparison of Fiscal 2019 and Fiscal 2018:

Sales for the year ended September 30, 2019 were $1.54 billion, compared to $1.60 billion for the year ended September 30, 2018, representing a decrease of $65.3 million. Changes in foreign currency rates were estimated to have an unfavorable impact of $32.6 million on fiscal 2019 consolidated sales compared to a year ago. The decrease in fiscal 2019 sales also reflected lower sales in the U.S. and U.K. for the SGK Brand Solutions segment, reduced sales of caskets and mausoleums for the Memorialization segment, and lower product identification and applied technologies sales for the Industrial Technologies segment. These decreases were partially offset by sales growth in the private label brand market for the SGK Brand Solutions segment, higher sales of cremation and incineration equipment in the U.K. for the Memorialization segment, increased sales of warehouse automation systems for the Industrial Technologies segment, and benefits from recently completed acquisitions, net of divestitures (see "Acquisitions and Divestitures" below).

In the SGK Brand Solutions segment, sales for fiscal 2019 were $743.9 million, compared to $805.3 million in fiscal 2018. Changes in foreign currency exchange rates had an unfavorable impact of $27.2 million on the segment's sales compared to the prior year. The decrease also resulted from lower sales in the U.S., reflecting a significant brand client electing to transition their work internally (approximately $24 million impact on sales), lower sales in the U.K, and reduced sales of surfaces and engineered products in Europe. These decreases were partially offset by sales growth in the private label brand market, increased brand sales in Europe, and benefits from the recently completed acquisition of Frost Converting Systems, Inc. Memorialization segment sales for fiscal 2019 were $636.9 million, compared to $631.4 million for fiscal 2018. The sales increase reflected higher sales of memorial products, cremation and incineration equipment in the U.K., and benefits from the February 2018 acquisition of Star Granite and Bronze International, Inc. These increases were partially offset by lower sales of caskets (reflecting an estimated decline in U.S. casketed deaths), lower sales of mausoleums, the impact of unfavorable changes in foreign currencies against the U.S. dollar, and the divestiture of a small pet cremation business in fiscal 2019. Changes in foreign currency exchange rates had an unfavorable impact of $3.0 million on the segment's sales compared to the prior year. Industrial Technologies segment sales for fiscal 2019 were $156.5 million, compared to $165.9 million for fiscal 2018. The decrease reflected lower product identification and applied technologies sales, partially offset by higher sales of warehouse automation systems, and benefits from the November 2017 acquisition of Compass Engineering Group, Inc. ("Compass Engineering"). Changes in foreign currency exchange rates also had an unfavorable impact of $2.3 million on the segment's sales compared to the prior year.

Gross profit for the year ended September 30, 2019 was $542.5 million, compared to $584.2 million for fiscal 2018. Consolidated gross profit as a percent of sales was 35.3% and 36.5% in fiscal 2019 and fiscal 2018, respectively. The decrease in gross profit primarily reflected lower sales, higher material costs, increased transportation costs, and unfavorable changes in foreign currency values against the U.S. dollar. These declines were partially offset by the benefits of recently completed acquisitions, and the realization of acquisition synergies and productivity improvements. Gross profit also included acquisition integration costs and other charges totaling $2.4 million and $3.0 million in fiscal 2019 and 2018, respectively.

Selling and administrative expenses for the year ended September 30, 2019 were $408.8 million, compared to $414.1 million for fiscal 2018. Consolidated selling and administrative expenses as a percent of sales were 26.6% for fiscal 2019, compared to 25.8% in fiscal 2018. The decrease in selling and administrative expenses primarily reflected benefits from ongoing cost reduction initiatives, including acquisition synergies, a reduction in performance-based compensation compared to fiscal 2018, the recognition of $7.3 million of net gains from the sale of buildings and vacant properties, and the impact of lower sales in fiscal 2019. These decreases were partially offset by additional expenses from recently completed acquisitions, and the recognition of $6.5 million of losses on divestitures within the Memorialization segment. Selling and administrative expenses also included acquisition integration and related systems-integration costs, and other charges primarily in connection with cost reduction initiatives totaling $30.5 million in fiscal 2019, compared to $24.1 million in fiscal 2018. Intangible amortization for the year ended September 30, 2019 was $45.8 million, compared to $31.6 million for fiscal 2018. The increase in intangible amortization primarily reflected $1.6 million of incremental amortization related to recently completed acquisitions, and $13.0 million of incremental amortization resulting from a reduction in useful lives for certain trade names that are being discontinued, as well as the impact of converting certain trade names from indefinite-lived to definite-lived. During the fourth quarter of fiscal 2019, the Company recorded a goodwill write-down of $77.6 million related to its Graphics Imaging reporting unit within the SGK Brand Solutions segment. Refer to Note 21, "Goodwill and Other Intangible Assets" in Item 8 - "Financial Statements and Supplementary Data" for further details.

Adjusted EBITDA for fiscal 2019 was $220.9 million, compared to $255.1 million for fiscal 2018. Adjusted EBITDA for the SGK Brand Solutions segment for fiscal 2019 was $119.5 million, compared to $150.2 million for fiscal 2018. The decrease in segment adjusted EBITDA primarily reflected the impact of lower sales, unfavorable margins in Europe, and the impact of unfavorable changes in foreign currencies against the U.S. dollar. Changes in foreign currency exchange rates had an unfavorable impact of $3.9 million on the segment's adjusted EBITDA compared to the prior year. These decreases in segment adjusted EBITDA were partially offset by growth in the private label brand market, improved mix for merchandising solutions, and a reduction in performance-based compensation compared to fiscal 2018. Memorialization segment adjusted EBITDA for fiscal 2019 was $134.3 million, compared to $145.5 million for fiscal 2018. The decrease in segment adjusted EBITDA primarily reflected the impact of higher material and transportation costs. These decreases were partially offset by benefits from the acquisition of Star Granite, and the favorable impact of acquisition synergies and other productivity initiatives. Adjusted EBITDA for the Industrial Technologies segment for fiscal 2019 was $24.1 million, compared to $25.9 million in fiscal 2018. Industrial Technologies segment adjusted EBITDA reflected the impact of lower applied technologies sales, and higher investments in the segment's product development, partially offset by the impact of higher sales of warehouse automation systems and a reduction in performance-based compensation compared to fiscal 2018.

Investment income for the year ended September 30, 2019 was $1.5 million, compared to $1.6 million for the year ended September 30, 2018. The decrease primarily reflected lower rates of return on investments (primarily marketable securities) held in trust for certain of the Company's benefit plans. Interest expense for fiscal 2019 was $41.0 million, compared to $37.4 million in fiscal 2018. The increase in interest expense reflected an increase in average borrowing levels, primarily related to acquisitions, higher average interest rates in the current fiscal year, and incremental financing costs associated with the 5.25% Senior Notes (see "Liquidity and Capital Resources" below). Other income (deductions), net for the year ended September 30, 2019 represented a decrease in pre-tax income of $8.9 million, compared to a decrease in pre-tax income of $4.7 million in fiscal 2018. Other income (deductions), net generally include banking-related fees and the impact of currency gains and losses on certain intercompany debt and foreign denominated cash balances. Other income (deductions), net also includes the non-service components of pension and postretirement expenses (see "Recently Issued Accounting Pronouncements" below), which totaled $3.8 million and $5.7 million in fiscal years 2019 and 2018, respectively. Fiscal 2019 other income (deductions), net also included a $3.7 million loss from the write-down of a cost-method investment and related assets. Fiscal 2018 other income (deductions), net included $3.8 million of gains recognized in connection with the sale of certain cost-method investments.

The Company's consolidated income taxes for the year ended September 30,2019 were a charge of $806,000, compared to an income tax benefit of$9.1 million for fiscal 2018. The increase in the fiscal 2019 effective tax rate, compared to fiscal 2018, primarily reflected the fiscal 2018 U.S. deferred tax benefit from the U.S. Tax Cuts and Jobs Act (the "Act") enactment. For 2019 the Company's effective tax rate was unfavorable compared to the U.S. federal statutory rate primarily due to the 2019 goodwill write-down, the majority of which did not have an accompanying tax benefit. The 2019 effective tax rate benefited from research and development and foreign tax credits and the elimination, achieved through tax planning, of a taxable basis difference. Refer to Note 15, "Income Taxes" in Item 8 - "Financial Statements and Supplementary Data" for further details regarding income taxes.

Net losses attributable to noncontrolling interests were $901,000 in fiscal 2019, compared to $260,000 in fiscal 2018. The net losses attributable to noncontrolling interests primarily reflected losses in less than wholly-owned businesses.

Comparison of Fiscal 2018 and Fiscal 2017:

Sales for the year ended September 30, 2018 were $1.60 billion, compared to $1.52 billion for the year ended September 30, 2017. The increase in fiscal 2018 sales of $87.0 million principally reflected higher sales of marking products and fulfillment systems (Industrial Technologies), increased sales in the U.K., Europe, and Asia Pacific brand markets, benefits from acquisitions (see "Acquisitions" below for annual revenue information for significant acquisitions) and the favorable impact of changes in foreign currencies against the U.S. dollar. Changes in foreign currency rates were estimated to have a favorable impact of $26.9 million on fiscal 2018 consolidated sales compared to fiscal 2017. These increases were partially offset by slower brand market conditions in North America for the SGK Brand Solutions segment, and lower unit sales of memorials and caskets. Comparability was also impacted by a significant merchandising display project in fiscal 2017 in the SGK Brand Solutions segment.

In the SGK Brand Solutions segment, sales for fiscal 2018 were $805.3 million, compared to $770.2 million in fiscal 2017. The increase in sales reflected sales growth in the U.K., Europe, and Asia Pacific markets, and benefits from acquisitions. Changes in foreign currency exchange rates also had a favorable impact of $22.8 million on the segment's sales compared to fiscal 2017. These increases were partially offset by slower brand market conditions in North America, lower sales of merchandising displays, and the divestiture of a small business in the U.K. Lower merchandising display sales reflected a large project (approximately $18.0 million) in fiscal 2017 that did not repeat in fiscal 2018. Memorialization segment sales for fiscal 2018 were $631.4 million compared to $615.9 million for fiscal 2017. The sales increase reflected the benefits of acquisitions, partially offset by lower unit sales of memorials and caskets, consistent with an estimated decline in U.S. casketed deaths. Changes in foreign currency exchange rates also had a favorable impact of $2.8 million on the segment's sales compared to fiscal 2017. Industrial Technologies segment sales for fiscal 2018 were $165.9 million, compared to $129.5 million for fiscal 2017. The increase reflected higher sales of marking products and fulfillment systems, and benefits from acquisitions. Changes in foreign currency exchange rates also had a favorable impact of $1.2 million on the segment's sales compared to fiscal 2017.

Gross profit for the year ended September 30, 2018 was $584.2 million, compared to $567.8 million for fiscal 2017. Consolidated gross profit as a percent of sales was 36.5% and 37.5% in fiscal 2018 and fiscal 2017, respectively. The increase in gross profit primarily reflected the impact of higher sales, including recent acquisitions, the benefits of productivity initiatives, and realization of acquisition synergies. These increases were partially offset by higher material costs, particularly bronze and steel, and lower U.S. sales (excluding acquisitions) in the SGK Brand Solutions and Memorialization segments. Fiscal 2018 gross profit also included acquisition integration costs and other charges totaling $3.0 million. Fiscal 2017 gross profit included an expense of $2.0 million for the write-off of inventory step-up value related to fiscal 2017 acquisitions.

Selling and administrative expenses for the year ended September 30, 2018 were $414.1 million, compared to $423.1 million for fiscal 2017. Consolidated selling and administrative expenses as a percent of sales were 25.8% for fiscal 2018, compared to 27.9% in fiscal 2017. Selling and administrative expenses in fiscal 2018 included acquisition integration and related systems-integration costs, and other charges primarily in connection with cost reduction initiatives totaling $24.1 million, compared to $35.2 million in fiscal 2017. Selling and administrative expenses in fiscal 2018 also included benefits from cost reduction initiatives, including acquisition-integration synergies and a reduction in performance-based compensation compared to fiscal 2017. These benefits were partially offset by additional expenses in fiscal 2018 from recently completed acquisitions. Intangible amortization for the year ended September 30, 2018 was $31.6 million, compared to $23.3 million for fiscal 2017. The increase in intangible amortization primarily reflected $6.7 million of incremental amortization related to recently completed acquisitions.

Adjusted EBITDA for fiscal 2018 was $255.1 million, compared to $238.7 million for fiscal 2017. The SGK Brand Solutions segment adjusted EBITDA for fiscal 2018 was $150.2 million, compared to $144.8 million for fiscal 2017. Fiscal 2018 adjusted EBITDA for the SGK Brand Solutions segment reflected benefits from recently completed acquisitions, reductions in performance-based compensation, and the favorable impact of changes in foreign currencies against the U.S. dollar of approximately $3.9 million. These improvements were partially offset by the impact of lower sales (excluding acquisitions) in North America. Memorialization segment adjusted EBITDA for fiscal 2018 was $145.5 million, compared to $139.2 million for fiscal 2017. The increase in segment adjusted EBITDA reflected the benefits from recently completed acquisitions, and the favorable impact of acquisition synergies and other productivity initiatives. These increases were partially offset by higher material costs, and the impact of lower memorial and casket sales volume. Adjusted EBITDA for the Industrial Technologies segment for fiscal 2018 was $25.9 million, compared to $18.5 million in fiscal 2017. The increase in segment adjusted EBITDA reflected higher sales of marking products, fulfillment systems, and OEM solutions, and the benefits from recently completed acquisitions. These increases were partially offset by higher investments in the segment's product development.

Investment income for the year ended September 30, 2018 was $1.6 million, compared to $2.5 million for the year ended September 30, 2017. The decrease reflected lower rates of return on investments held in trust for certain of the Company's benefit plans. Interest expense for fiscal 2018 was $37.4 million, compared to $26.4 million in fiscal 2017. The increase in interest expense reflected an increase in average borrowing levels, primarily related to acquisitions, higher average interest rates in fiscal 2018, and incremental financing costs associated with the 5.25% Senior Notes (see "Liquidity and Capital Resources" below). Other income (deductions), net, for the year ended September 30, 2018 represented a decrease in pre-tax income of $4.7 million, compared to a decrease in pre-tax income of $1.2 million in fiscal 2017. Other income and deductions generally include banking-related fees and the impact of currency gains and losses on certain intercompany debt and foreign denominated cash balances. Other income (deductions), net also includes the non-service components of pension and post-retirement expense (see "Recently Issued Accounting Pronouncements" below), which totaled $5.7 million and $8.8 million in fiscal years 2018 and 2017, respectively. Fiscal 2018 other income and deductions also included $3.8 million of gains recognized in connection with the sale of certain cost-method investments. Fiscal 2017 other income and deductions included loss recoveries of $11.3 million related to the previously disclosed theft of funds by a former employee initially identified in fiscal 2015.

The Company's consolidated income taxes for the year ended September 30, 2018 were a benefit of $9.1 million, compared to income tax expense of $22.4 million for fiscal 2017. The difference between the Company's fiscal 2018 effective tax rate and the fiscal 2017 effective tax rate primarily resulted from the impacts of the U.S. Tax Cuts and Jobs Act which was enacted on December 22, 2017. The Act reduced the U.S. federal corporate tax rate from 35.0% to 21.0% effective January 1, 2018, which resulted in a blended U.S. statutory tax rate of 24.5% for the Company in fiscal 2018. The Act also required a one-time transition tax on earnings of certain foreign subsidiaries that were previously deferred, and created new taxes on certain foreign-sourced earnings. At September 30, 2018, the Company had not finalized its accounting for the tax effects of the Act; however, management had made a reasonable estimate of the effects on existing deferred tax balances and had recorded an estimated amount for its one-time transition tax. For the items for which the Company was able to determine a reasonable estimate, a provisional net tax benefit of $29.2 million was recognized, which was included entirely as a component of income tax benefit (provision) for the year ended September 30, 2018. The difference between the Company's fiscal 2018 effective tax rate and the blended U.S. federal statutory rate of 24.5% primarily reflected the re-measurement of U.S. deferred taxes and the benefit of credits and incentives, partially offset by the one-time transition tax and the impact of state taxes. Refer to Note 15, “Income Taxes” in Item 8 - “Financial Statements and Supplementary Data” for further details regarding income taxes.

Net losses attributable to noncontrolling interests were $260,000 in fiscal 2018, compared to $435,000 in fiscal 2017. The net losses attributable to noncontrolling interests primarily reflected losses in less than wholly-owned Memorialization and Industrial Technologies businesses.

NON-GAAP FINANCIAL MEASURES:

Included in this report are measures of financial performance that are not defined by GAAP. The Company uses non-GAAP financial measures to assist in comparing its performance on a consistent basis for purposes of business decision-making by removing the impact of certain items that management believes do not directly reflect the Company’s core operations including acquisition costs, ERP integration costs, strategic initiative and other charges (which includes non-recurring charges related to operational initiatives and exit activities), stock-based compensation and the non-service portion of pension and postretirement expense. Management believes that presenting non-GAAP financial measures is useful to investors because it (i) provides investors with meaningful supplemental information regarding financial performance by excluding certain items that management believes do not directly reflect the Company's core operations, (ii) permits investors to view performance using the same tools that management uses to budget, forecast, make operating and strategic decisions, and evaluate historical performance, and (iii) otherwise provides supplemental information that may be useful to investors in evaluating the Company’s results. The Company believes that the presentation of these non-GAAP financial measures, when considered together with the corresponding GAAP financial measures and the reconciliations to those measures, provided herein, provides investors with an additional understanding of the factors and trends affecting the Company’s business that could not be obtained absent these disclosures.

The Company believes that adjusted EBITDA provides relevant and useful information, which is used by the Company’s management in assessing the performance of its business. Adjusted EBITDA is defined by the Company as earnings before interest, income taxes, depreciation, amortization and certain non-cash and/or non-recurring items that do not contribute directly to management’s evaluation of its operating results. These items include stock-based compensation, the non-service portion of pension and postretirement expense, acquisition costs, ERP integration costs, and strategic initiatives and other charges. Adjusted EBITDA provides the Company with an understanding of earnings before the impact of investing and financing charges and income taxes, and the effects of certain acquisition and ERP integration costs, and items that do not reflect the ordinary earnings of the Company’s operations. This measure may be useful to an investor in evaluating operating performance. It is also useful as a financial measure for lenders and is used by the Company’s management to measure business performance. Adjusted EBITDA is not a measure of the Company's financial performance under GAAP and should not be considered as an alternative to net income or other performance measures derived in accordance with GAAP, or as an alternative to cash flow from operating activities as a measure of the Company's liquidity. The Company's definition of adjusted EBITDA may not be comparable to similarly titled measures used by other companies.

The reconciliation of net income to adjusted EBITDA is as follows:

	Years Ended September 30,		
	2019	2018	2017
	(Dollar amounts in thousands)		
Net (loss) income	$ (38,889)	$ 107,111	$ 73,933
Income tax provision (benefit)	806	(9,118)	22,354
(Loss) income before income taxes	(38,083)	97,993	96,287
Net loss attributable to noncontrolling interests	901	260	435
Interest expense	40,962	37,427	26,371
Depreciation and amortization *	90,793	76,974	67,981
Acquisition costs (1)**	10,872	10,918	17,722
ERP integration costs (2)**	7,508	10,864	8,026
Strategic initiatives and other charges (3)**	13,449	5,266	9,209
Loss recoveries, net of costs (4)	—	—	(10,683)
Joint Venture depreciation, amortization and interest expense (5)	1,514	—	—
Goodwill write-down (6)	77,572	—	—
Net realized losses (gains) on divestitures and asset dispositions:			
Loss on divestitures (7)	6,469	—	—
Realized loss (gain) on cost-method investments (8)	4,731	(3,771)	—
Net gains from the sale of buildings and vacant properties (9)	(7,347)	—	—
Stock-based compensation	7,729	13,460	14,562
Non-service pension and postretirement expense (10)	3,802	5,723	8,773
Total Adjusted EBITDA	220,872	255,114	238,683

(1) Includes certain non-recurring costs associated with recent acquisition activities.

(2) Represents costs associated with global ERP system integration efforts.

(3) Includes certain non-recurring costs primarily associated with productivity and cost-reduction initiatives intended to result in improved operating performance, profitability and working capital levels.

(4) Represents loss recoveries, net of related costs, related to the theft of funds by a former employee.

(5) Represents the Company's portion of depreciation, intangible amortization and interest expense incurred by non-consolidated subsidiaries accounted for as equity-method investments within the Memorialization segment.

(6) Represents the goodwill write-down for a reporting unit within the SGK Brand Solutions segment.

(7) Represents a loss on the sale of a controlling interest in a subsidiary and divestiture of a business within the Memorialization segment.

(8) Includes gains/losses related to cost-method investments, and related assets, within SGK Brand Solutions and Memorialization segments.

(9) Includes significant building and vacant property transactions resulting in a gain of $8.7 million within the Industrial Technologies segment and losses of $0.9 million and $0.4 million within the SGK Brand Solutions and Memorialization segments, respectively.

(10) Non-service pension and postretirement expense includes interest cost, expected return on plan assets and amortization of actuarial gains and losses. These benefit cost components are excluded from adjusted EBITDA since they are primarily influenced by external market conditions that impact investment returns and interest (discount) rates. The service cost and prior service cost components of pension and postretirement expense are included in the calculation of adjusted EBITDA, since they are considered to be a better reflection of the ongoing service-related costs of providing these benefits. Please note that GAAP pension and postretirement expense or the adjustment above are not necessarily indicative of the current or future cash flow requirements related to these employee benefit plans.

* Depreciation and amortization was $59.7 million, $46.3 million, and $41.9 million for the SGK Brand Solutions segment, $19.7 million, $20.0 million, and $19.8 million for the Memorialization segment, $6.2 million, $5.8 million, and $2.9 million for the Industrial Technologies segment, and $5.2 million, $4.9 million, and $3.4 million for Corporate and Non-Operating, for the fiscal years ended September 30, 2019, 2018, and 2017, respectively.

** Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $8.9 million, $11.0 million, and $14.5 million for the SGK Brand Solutions segment, $3.1 million, $0.6 million, and $0.6 million for the Industrial Technologies segment, and $19.9 million, $14.0 million, and $19.1 million for Corporate and Non-Operating, for the fiscal years ended September 30, 2019, 2018, and 2017, respectively. Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $1.4 million, and $0.8 million for the Memorialization segment for the fiscal years ended September 30, 2018 and 2017, respectively.

LIQUIDITY AND CAPITAL RESOURCES:

Net cash provided by operating activities was $131.1 million for the year ended September 30, 2019, compared to $147.6 million and $149.3 million for fiscal years 2018 and 2017, respectively. Operating cash flow for fiscal 2019 principally included net (loss) income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, net losses related to goodwill and investments, net gains from the sale of buildings and other property, and non-cash pension expense, and an increase in working capital items. Fiscal 2019 operating cash flow also included cash contributions of $2.3 million to the Company's pension and other postretirement plans. The fiscal 2019 decline primarily reflected the impact of lower adjusted EBITDA for fiscal 2019, compared to fiscal 2018. Operating cash flow for fiscal 2018 principally included net income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, and non-cash pension expense, and an increase in working capital items, primarily reflecting a decrease in accrued compensation amounts. Fiscal 2018 operating cash flow also included cash contributions of $12.7 million to the Company's pension and other postretirement plans. Operating cash flow for fiscal 2017 principally included net income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, and non-cash pension expense, and a decrease in working capital items, partially offset by cash contributions of $8.7 million to the Company's pension and other postretirement plans. Fiscal 2017 operating cash flow also included cash proceeds from loss recoveries of $10.0 million.

Cash used in investing activities was $60.8 million for the year ended September 30, 2019, compared to $162.3 million and $141.6 million for fiscal years 2018 and 2017, respectively. Investing activities for fiscal 2019 primarily reflected capital expenditures of $37.7 million, acquisition payments (net of cash acquired or received from sellers) of $11.5 million, proceeds of $13.3 million from the sale of assets, proceeds of $8.3 million from the divestiture of a controlling interest in a small pet cremation business (see "Acquisitions and Divestitures" below), and additional investments made in non-consolidated subsidiaries of $33.1 million. Investing activities for fiscal 2018 primarily reflected capital expenditures of $43.2 million, acquisition payments (net of cash acquired or received from sellers) of $121.1 million (see "Acquisitions and Divestitures" below), proceeds of $9.2 million from the sale of certain cost-method investments, and cash payments of $11.9 million for purchases of investments. Investing activities for fiscal 2017 primarily reflected capital expenditures of $44.9 million and acquisition payments (net of cash acquired or received from sellers) of $98.2 million (see "Acquisitions and Divestitures" below).

Capital expenditures were $37.7 million for the year ended September 30, 2019, compared to $43.2 million and $44.9 million for fiscal years 2018 and 2017, respectively. Capital expenditures in each of the last three fiscal years reflected reinvestments in the Company's business segments and were made primarily for the purchase of new production machinery, equipment, software and systems, and facilities designed to improve product quality, increase manufacturing efficiency, lower production costs and meet regulatory requirements. Capital spending for property, plant and equipment has averaged $41.9 million for the last three fiscal years. Capital expenditures for the last three fiscal years were primarily financed through operating cash. Capital spending for fiscal 2020 is currently estimated to be approximately $50 million. The Company expects to generate sufficient cash from operations to fund all anticipated capital spending projects.

Cash used in financing activities for the year ended September 30, 2019 was $75.0 million, and principally reflected repayments, net of proceeds, on long-term debt of $16.0 million, purchases of treasury stock of $26.1 million, payment of dividends to the Company's shareholders of $25.6 million ($0.80 per share), and $4.4 million of holdback and contingent consideration payments related to a fiscal 2018 acquisition. Cash provided by financing activities for the year ended September 30, 2018 was $0.9 million, and primarily reflected proceeds, net of repayments, on long-term debt of $53.0 million, purchases of treasury stock of $21.2 million, payment of dividends to the Company's shareholders of $24.6 million ($0.76 per share), and payment of deferred financing fees of $4.1 million. Cash used in financing activities for the year ended September 30, 2017 was $7.2 million, and reflected proceeds, net of repayments on long-term debt of $28.6 million, purchases of treasury stock of $14.0 million, and payment of dividends to the Company's shareholders of $21.8 million ($0.68 per share).

The Company has a domestic credit facility with a syndicate of financial institutions that includes a $900.0 million senior secured revolving credit facility and a $250.0 million senior secured amortizing term loan. A portion of the revolving credit facility (not to exceed $150.0 million) can be drawn in foreign currencies. The term loan requires scheduled principal payments of 5.0% of the outstanding principal in year one, 7.5% in year two, and 10.0% in years three through five, payable in quarterly installments. Pursuant to the terms of the domestic credit facility agreement, principal payments may be made on the term loan prior to the scheduled due date. The balance of the revolving credit facility and the term loan are due on the maturity date of April 26, 2021. Borrowings under both the revolving credit facility and the term loan bear interest at LIBOR (Euro LIBOR for balances drawn in Euros) plus a factor ranging from 0.75% to 2.00% (1.50% at September 30, 2019) based on the Company's secured leverage ratio. The secured leverage ratio is defined as net secured indebtedness divided by EBITDA (earnings before interest, income taxes, depreciation and amortization) as defined within the domestic credit facility agreement. The Company is required to pay an annual commitment fee ranging from 0.15% to 0.25% (based on the Company's leverage ratio) of the unused portion of the revolving credit facility.

The domestic credit facility requires the Company to maintain certain leverage and interest coverage ratios. A portion of the facility (not to exceed $35.0 million) is available for the issuance of trade and standby letters of credit. Outstanding U.S. dollar denominated borrowings on the revolving credit facility at September 30, 2019 and 2018 were $325.6 million and $319.5 million, respectively. During fiscal 2019, the Company borrowed €125.0 million on the revolving credit facility. Proceeds from the Euro denominated borrowings were used to make a principal payment of $140.0 million on the outstanding balance of the term loan. Outstanding Euro denominated borrowings on the revolving credit facility at September 30, 2019 were €125.0 million ($136.5 million). There were no Euro denominated borrowings on the revolving credit facility at September 30, 2018. Outstanding borrowings on the term loan at September 30, 2019 and 2018 were $53.5 million and $212.1 million, respectively. The weighted-average interest rate on outstanding borrowings for the domestic credit facility (including the effects of interest rate swaps and Euro denominated borrowings) at September 30, 2019 and 2018 was 2.65% and 3.12%, respectively.

The Company has $300.0 million of 5.25% senior unsecured notes due December 1, 2025 (the "2025 Senior Notes"). The 2025 Senior Notes bear interest at a rate of 5.25% per annum with interest payable semi-annually in arrears on June 1 and December 1 of each year. The Company's obligations under the 2025 Senior Notes are guaranteed by certain of the Company's direct and indirect wholly-owned domestic subsidiaries. The Company is subject to certain covenants and other restrictions in connection with the 2025 Senior Notes. The Company incurred direct financing fees and costs in connection with 2025 Senior Notes of $4.1 million, which are being deferred and amortized over the term of the 2025 Senior Notes.

The Company has a $115.0 million accounts receivable securitization facility (the "Securitization Facility") with certain financial institutions which matures on April 11, 2020, and the Company intends to extend this facility. Under the Securitization Facility, the Company and certain of its domestic subsidiaries sell, on a continuous basis without recourse, their trade receivables to Matthews Receivables Funding Corporation, LLC (“Matthews RFC”), a wholly-owned bankruptcy-remote subsidiary of the Company. Matthews RFC in turn assigns a collateral interest in these receivables to certain financial institutions, and then may borrow funds under the Securitization Facility. The Securitization Facility does not qualify for sale treatment. Accordingly, the trade receivables and related debt obligations remain on the Company's Consolidated Balance Sheet. Borrowings under the Securitization Facility bear interest at LIBOR plus 0.75%. The Company is required to pay an annual commitment fee ranging from 0.25% to 0.35% of the unused portion of the Securitization Facility. Outstanding borrowings under the Securitization Facility at September 30, 2019 and 2018 were $94.0 million and $102.3 million, respectively. The interest rate on borrowings under this facility at September 30, 2019 and 2018 was 2.77% and 3.01%, respectively.

The following table presents information related to interest rate contracts entered into by the Company and designated as cash flow hedges:

	September 30, 2019	September 30, 2018
	(Dollars in thousands)	
Pay fixed swaps - notional amount	$ 293,750	$ 343,750
Net unrealized (loss) gain	$ (534)	$ 11,309
Weighted-average maturity period (years)	1.9	2.7
Weighted-average received rate	2.02 %	2.26 %
Weighted-average pay rate	1.41 %	1.37 %

The Company enters into interest rate swaps in order to achieve a mix of fixed and variable rate debt that it deems appropriate. The interest rate swaps have been designated as cash flow hedges of future variable interest payments which are considered probable of occurring. Based on the Company's assessment, all of the critical terms of each of the hedges matched the underlying terms of the hedged debt and related forecasted interest payments, and as such, these hedges were considered highly effective.

The fair value of the interest rate swaps reflected an unrealized loss, net of unrealized gains, of $534,000 ($403,000 after tax) and an unrealized gain of $11.3 million ($8.5 million after tax) at September 30, 2019 and 2018, respectively, that is included in shareholders' equity as part of accumulated other comprehensive income ("AOCI"). Assuming market rates remain constant with the rates at September 30, 2019, a gain (net of tax) of approximately $48,000 included in AOCI is expected to be recognized in earnings over the next twelve months.

The Company, through certain of its European subsidiaries, has a credit facility with a European bank, which is guaranteed by Matthews. The maximum amount of borrowings available under this facility is €35.0 million ($38.2 million). The credit facility matures in December 2019 and the Company intends to extend this facility. Outstanding borrowings under this facility totaled

€12.8 million ($14.0 million) and €2.8 million ($3.2 million) at September 30, 2019 and 2018, respectively. The weighted-average interest rate on outstanding borrowings under this facility at September 30, 2019 and 2018 was 1.25% and 1.75% respectively.

The Company's German subsidiary, Matthews Europe GmbH & Co. KG, has €15.0 million ($16.4 million) of senior unsecured notes with European banks. The notes are guaranteed by Matthews and mature in November 2019. A portion of the notes (€5.0 million) have a fixed interest rate of 1.40%, and the remainder bear interest at Euro LIBOR plus 1.40%. The weighted-average interest rate on the notes at September 30, 2019 and 2018 was 1.40%.

Other debt, including capital leases totaled $395,000 and $5.4 million at September 30, 2019 and 2018, respectively. The weighted-average interest rate on these outstanding borrowings was 2.17% and 2.21% at September 30, 2019 and 2018, respectively. The Company was in compliance with all of its debt covenants as of September 30, 2019.

The Company uses certain foreign currency debt instruments as net investment hedges of foreign operations. Currency losses of $3.3 million (net of income taxes of $1.1 million), which represent effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment for the fiscal year 2019. The Company did not have any net investments hedges in the prior year.

In September 2014, a claim was filed seeking to draw upon a letter of credit issued by the Company of £8.6 million ($10.5 million at September 30, 2019) with respect to a performance guarantee on an environmental solutions project in Saudi Arabia. Management assessed the customer's demand to be without merit and initiated an action with the court in the United Kingdom (the "U.K. Court"). Pursuant to this action, an order was issued by the U.K. Court in January 2015 requiring that, upon receipt by the customer, the funds were to be remitted by the customer to the U.K. Court pending resolution of the dispute between the parties. As a result, the Company made payment on the draw to the financial institution for the letter of credit and the funds were ultimately received by the customer. The customer did not remit the funds to the U.K. Court as ordered. On June 14, 2016, the U.K Court ruled completely in favor of Matthews following a trial on the merits. However, the ongoing dispute involves litigation in multiple foreign jurisdictions because the contract between the parties includes a venue clause requiring the venue for any litigation to be in the United Kingdom, while the enforcement of any final judgment is required to be executed in Saudi Arabia. The Company is currently pursuing a trial on the merits in Saudi Arabia which may not finally be resolved until calendar year 2020. It is necessary to obtain an equivalent favorable ruling in the courts of Saudi Arabia to effectively enforce judgment and commence collection efforts. The Company remains confident regarding the pending trial on the merits in Saudi Arabia and expects to be in a position to enforce the judgment and initiate collection efforts following completion of that trial. However, as the customer has neither yet remitted the funds nor complied with the final, un-appealed orders of the U.K. Court, it is possible the resolution of this matter could have an unfavorable financial impact on Matthews' results of operations. The Company's level of success in recovering funds from the customer will depend upon a number of factors including, a successful completion of the pending trial on the merits in Saudi Arabia, the availability of recoverable funds, and the subsequent level of cooperation from the Saudi Arabian government to enforce a potential judgment against the creditor. The Company has determined that resolution of this matter may take an extended period of time and therefore has classified the funded letter of credit within other assets on the Consolidated Balance Sheets as of September 30, 2019 and 2018. The Company will continue to assess the accounting and collectability related to this matter as facts and circumstances evolve.

The Company has a stock repurchase program. Under the current authorization, the Company's Board of Directors has authorized the repurchase of a total of 5,000,000 shares of Matthews' common stock under the program, of which 712,312 shares remain available for repurchase as of September 30, 2019. The buy-back program is designed to increase shareholder value, enlarge the Company's holdings of its common stock, and add to earnings per share. Repurchased shares may be retained in treasury, utilized for acquisitions, or reissued to employees or other purchasers, subject to the restrictions set forth in the Company's Restated Articles of Incorporation.

Consolidated working capital was $303.8 million at September 30, 2019, compared to $328.7 million at September 30, 2018. Cash and cash equivalents were $35.3 million at September 30, 2019, compared to $41.6 million at September 30, 2018. The Company's current ratio was 2.1 at September 30, 2019 and 2018.

ENVIRONMENTAL MATTERS:

The Company's operations are subject to various federal, state and local laws and regulations relating to the protection of the environment. The Company is party to various environmental matters which include obligations to investigate and mitigate the effects on the environment of certain materials at various operating and non-operating sites. The Company is currently performing environmental assessments and remediation at certain sites, as appropriate. Refer to Note 17, "Environmental Matters" in Item 8 - "Financial Statements and Supplementary Data," for further details.

ACQUISITIONS AND DIVESTITURES:

Refer to Note 20, "Acquisitions and Divestitures" in Item 8 - "Financial Statements and Supplementary Data," for further details on the Company's acquisitions.

FORWARD-LOOKING INFORMATION:

The Company's current strategy to attain annual growth in earnings per share primarily consists of the following: internal growth (which includes organic growth, cost structure and productivity improvements, new product development and the expansion into new markets with existing products), acquisitions and integration activities to achieve synergy benefits and share repurchases.

The significant factors (excluding acquisitions) influencing sales growth in the SGK Brand Solutions segment are global economic conditions, brand innovation, the level of marketing spending by the Company's clients, and government regulation. Due to the global footprint of this segment, currency fluctuations can also be a significant factor. For the Memorialization segment, North America death rates, the cremation trend, and price realization impact sales growth for the Company's bronze and granite memorials, caskets and cremation and incineration-related products. For the Industrial Technologies segment, sales growth drivers include economic/industrial market conditions, new product development, and the e-commerce trend. At present, the Company is currently targeting revenue growth in fiscal 2020 in its Industrial Technologies and Memorialization segments, with relatively stable year-over-year revenues for the SGK Brand Solutions segment.

During fiscal 2019, the Company initiated a strategic evaluation to improve profitability and reduce the Company's cost structure. These actions leveraged the benefit of the Company's new global ERP platform, primarily targeted at the SGK Brand Solutions segment, both operational and commercial structure, and the Company's shared financial services and other administrative functions. This evaluation identified opportunities for significant cost structure improvements, which the Company expects to achieve over the next two fiscal years. The Company's recent strategic review has also resulted in improvements to the commercial structure within the SGK Brand Solutions segment, including the consolidation of several of the segment's trade names. As a result, the amortization of these intangible assets will significantly increase for the next three years.

CRITICAL ACCOUNTING POLICIES:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Therefore, the determination of estimates requires the exercise of judgment based on various assumptions and other factors such as historical experience, economic conditions, and in some cases, actuarial techniques. Actual results may differ from those estimates. A discussion of market risks affecting the Company can be found in Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," of this Annual Report on Form 10-K.

The Company's significant accounting policies are included in the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K. Management believes that the application of these policies on a consistent basis enables the Company to provide useful and reliable financial information about the Company's operating results and financial condition. The following accounting policies involve significant estimates, which were considered critical to the preparation of the Company's consolidated financial statements for the year ended September 30, 2019.

Long-Lived Assets, including Property, Plant and Equipment:

Long-lived assets are recorded at their respective cost basis on the date of acquisition. Depreciation on property, plant and equipment is computed primarily on the straight-line method over the estimated useful lives of the assets. Intangible assets with finite useful lives are amortized over their estimated useful lives. The Company reviews long-lived assets, including property, plant and equipment, and intangibles with finite useful lives, whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets is determined by evaluating the estimated undiscounted net cash flows of the operations to which the assets relate. An impairment loss would be recognized when the carrying amount of the assets exceeds the fair value, which is based on a discounted cash flow analysis. No such charges were recognized during the years presented.

Goodwill and Indefinite-Lived Intangibles:

Goodwill and intangible assets with indefinite useful lives are not amortized, but are tested annually for impairment, or when circumstances indicate that a possible impairment may exist. In general, when the carrying value of these assets exceeds the implied fair value, an impairment loss must be recognized. A significant decline in cash flows generated from these assets may result in a write-down of the carrying values of the related assets. For purposes of testing goodwill for impairment, the Company uses a combination of valuation techniques, including discounted cash flows and other market indicators. A number of assumptions and estimates are involved in the application of the discounted cash flow model to forecast operating cash flows, including sales volumes and pricing, costs to produce, tax rates, capital spending, working capital changes, and discount rates. The Company estimates future cash flows using volume and pricing assumptions based largely on existing customer relationships and contracts, and operating cost assumptions management believes are reasonable based on historical performance and projected future performance as reflected in its most recent operating plans and projections. The discount rates used in the discounted cash flow analyses are developed with the assistance of valuation experts and management believes the discount rates appropriately reflect the risks associated with the Company's operating cash flows. In order to further validate the reasonableness of the estimated fair values of the reporting units as of the valuation date, a reconciliation of the aggregate fair values of all reporting units to market capitalization is performed using a reasonable control premium.

The Company performed its annual impairment review of goodwill and indefinite-lived intangible assets in the second quarter of fiscal 2019. As a result of this review, the Company determined that the estimated fair value of all reporting units exceeded carrying value. Due to challenging market conditions affecting the Graphics Imaging reporting unit within the SGK Brand Solutions segment and the estimated fair value of this reporting unit exceeding its carrying value by approximately 10%, the Company provided additional disclosure in its Form 10-Q for the second and third quarters of fiscal 2019 indicating that further deterioration of conditions could result in a future goodwill write-down for this reporting unit.

In consideration of continued challenging market conditions affecting the SGK Brand Solutions segment throughout the remainder of fiscal 2019, the Company initiated an in-depth review of the commercial and cost structure of the segment during the fourth quarter. This review identified certain opportunities to improve the segment's profitability and reduce its operating cost structure and, as a result, the Company revised its estimates of future earnings and cash flows for the Graphics Imaging reporting unit. In response to these revised projections, the Company re-evaluated the goodwill for the Graphics Imaging reporting unit, as of September 1, 2019. As a result of this interim assessment, the Company recorded a goodwill write-down of $77.6 million during the fiscal 2019 fourth quarter. Subsequent to this write-down, the fair value of the Graphics Imaging reporting unit approximates carrying value at September 30, 2019. If current projections are not achieved or specific valuation factors outside the Company's control (such as discount rates) significantly change, additional goodwill write-downs may be necessary in future periods.

Pension and Postretirement Benefits:

Pension assets and liabilities are determined on an actuarial basis and are affected by the market value of plan assets, estimates of the expected return on plan assets and the discount rate used to determine the present value of benefit obligations. Actual changes in the fair market value of plan assets and differences between the actual return on plan assets, the expected return on plan assets and changes in the selected discount rate will affect the amount of pension cost.

The Company's principal pension plan maintains a substantial portion of its assets in equity securities in accordance with the investment policy established by the Company's pension board. Based on an analysis of the historical performance of the plan's assets and information provided by its independent investment advisor, the Company set the long-term rate of return assumption for these assets at 6.75% at September 30, 2018 for purposes of determining fiscal 2019 pension cost. The Company's discount rate assumption used in determining the present value of the projected benefit obligation is based upon published indices as of September 30, 2019 and September 30, 2018 for the fiscal year end valuation. The discount rate was 3.13%, 4.21% and 3.76% in fiscal 2019, 2018 and 2017, respectively. Refer to Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," of this Annual Report on Form 10-K, for disclosure about the hypothetical impact of changes in actuarial assumptions.

Income Taxes:

Deferred tax assets and liabilities are provided for the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the years in which the differences are expected to reverse. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Deferred income taxes have not been provided on undistributed earnings of foreign subsidiaries since they have either been previously taxed, or are now exempt from tax, under the U.S. Tax Cuts and Jobs Act, and such earnings are considered to be reinvested indefinitely in foreign operations.

LONG-TERM CONTRACTUAL OBLIGATIONS AND COMMITMENTS:

The following table summarizes the Company's contractual obligations at September 30, 2019, and the effect such obligations are expected to have on its liquidity and cash flows in future periods.

		Payments due in fiscal year:			
	Total	**2020***	**2021 to 2022**	**2023 to 2024**	**After 2024**
Contractual Cash Obligations:	(Dollar amounts in thousands)				
Revolving credit facilities	$ 476,132	$ 14,024	$ 462,108	$ —	$ —
Securitization facility	93,950	93,950	—	—	—
Senior secured term loan	53,497	25,000	28,497	—	—
2025 Senior Notes	399,091	15,750	31,500	31,500	320,341
Notes payable to banks	16,376	16,376	—	—	—
Short-term borrowings	395	395	—	—	—
Capital lease obligations	4,417	640	930	753	2,094
Non-cancelable operating leases	90,611	28,557	36,322	16,088	9,644
Other	10,525	2,861	5,724	947	993
Total contractual cash obligations	$ 1,144,994	$ 197,553	$ 565,081	$ 49,288	$ 333,072

* The Company maintains certain debt facilities with current maturity dates in fiscal 2020 that it intends and has the ability to extend beyond fiscal 2020 totaling $108.0 million. These balances have been classified as non-current on the Company's Consolidated Balance Sheet.

A significant portion of the loans included in the table above bear interest at variable rates. At September 30, 2019, the weighted-average interest rate was 2.65% on the Company's domestic credit facility, 2.77% on the Company's Securitization Facility, 1.25% on the credit facility through the Company's European subsidiaries, 1.40% on notes issued by the Company's wholly-owned subsidiary, Matthews Europe GmbH & Co. KG, and 2.17% on other outstanding debt.

Benefit payments under the Company's principal retirement plan are made from plan assets, while benefit payments under the supplemental retirement plan and postretirement benefit plan are funded from the Company's operating cash. Under I.R.S. regulations, the Company was not required to make any significant contributions to its principal retirement plan in fiscal 2019.

The Company is required to make cash contributions of approximately $4.3 million to its principal retirement plan in fiscal 2020. The Company estimates that benefit payments to participants under its retirement plans (including its supplemental retirement plan) and postretirement benefit payments will be approximately $10.7 million and $1.0 million, respectively, in fiscal 2020. The amounts are expected to increase incrementally each year thereafter, to $14.0 million and $1.1 million, respectively, in 2024. The Company believes that its current liquidity sources, combined with its operating cash flow and borrowing capacity, will be sufficient to meet its capital needs for the foreseeable future.

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. 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. As of September 30, 2019, the Company had unrecognized tax benefits, excluding penalties and interest, of approximately $15.5 million. The timing of potential future payments related to the unrecognized tax benefits is not presently determinable. The Company believes that its current liquidity sources, combined with its operating cash flow and borrowing capacity, will be sufficient to meet its capital needs for the foreseeable future.

INFLATION:

Except for the volatility in the cost of bronze ingot, steel, wood, granite and fuel (see "Results of Operations"), inflation has not had a material impact on the Company over the past three years nor is it anticipated to have a material impact for the foreseeable future.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS:

Refer to Note 3, "Accounting Pronouncements" in Item 8 - "Financial Statements and Supplementary Data," for further details on recently issued accounting pronouncements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK:

The following discussion about the Company's market risk involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. The Company has market risk related to changes in interest rates, commodity prices and foreign currency exchange rates. The Company does not generally use derivative financial instruments in connection with these market risks, except as noted below.

Interest Rates - The Company's most significant long-term instrument is the domestic credit facility, which bears interest at variable rates based on LIBOR (Euro-LIBOR for balances drawn in Euros).

The following table presents information related to interest rate contracts entered into by the Company and designated as cash flow hedges:

	September 30, 2019	September 30, 2018
	(Dollars in thousands)	
Pay fixed swaps - notional amount	$ 293,750	$ 343,750
Net unrealized (loss) gain	$ (534)	$ 11,309
Weighted-average maturity period (years)	1.9	2.7
Weighted-average received rate	2.02 %	2.26 %
Weighted-average pay rate	1.41 %	1.37 %

The interest rate swaps have been designated as cash flow hedges of the future variable interest payments which are considered probable of occurring. Based on the Company's assessment, all the critical terms of each of the hedges matched the underlying terms of the hedged debt and related forecasted interest payments, and as such, these hedges were considered highly effective.

The fair value of the interest rate swaps reflected an unrealized loss, net of unrealized gains, of $534,000 ($403,000 after-tax) at September 30, 2019 that is included in equity as part of AOCI. A decrease of 10% in market interest rates (e.g., a decrease from 5.0% to 4.5%) would result in a decrease of approximately $1.0 million in the fair value of the interest rate swaps.

Commodity Price Risks - In the normal course of business, the Company is exposed to commodity price fluctuations related to the purchases of certain materials and supplies (such as bronze ingot, steel, granite, fuel and wood) used in its manufacturing operations. The Company obtains competitive prices for materials and supplies when available. In addition, based on competitive market conditions and to the extent that the Company has established pricing terms with customers through contracts or similar arrangements, the Company's ability to immediately increase the price of its products to offset the increased costs may be limited.

Foreign Currency Exchange Rates - The Company is subject to changes in various foreign currency exchange rates, primarily including the Euro, British Pound, Canadian Dollar, and Australian Dollar in the conversion from local currencies to the U.S. dollar of the reported financial position and operating results of its non-U.S. based subsidiaries. An adverse change (strengthening U.S. dollar) of 10% in exchange rates would have resulted in a decrease in reported sales of $53.3 million and a decrease in reported operating income of $3.1 million for the year ended September 30, 2019.

Actuarial Assumptions - The most significant actuarial assumptions affecting pension expense and pension obligations include the valuation of retirement plan assets, the discount rates and the estimated return on plan assets. The estimated return on plan assets is currently based upon projections provided by the Company's independent investment advisor, considering the investment policy of the plan and the plan's asset allocation. The fair value of plan assets and discount rates are "point-in-time" measures, and volatility of the debt and equity markets makes estimating future changes in fair value of plan assets and discount rates challenging. The Company elected to value its principal retirement and other postretirement benefit plan liabilities using a modified assumption of future mortality that reflects a significant improvement in life expectancy over the previous mortality assumptions. Refer to Note 13, "Pension and Other Postretirement Plans" in Item 8 – "Financial Statements and Supplementary Data" for additional information.

The following table summarizes the impact on the September 30, 2019 actuarial valuations of changes in the primary assumptions affecting the Company's retirement plans and supplemental retirement plan.

	Impact of Changes in Actuarial Assumptions					
	Change in Discount Rates		**Change in Expected Return**		**Change in Market Value of Assets**	
	+1%	**-1%**	**+1%**	**-1%**	**+5%**	**-5%**
	(Dollar amounts in thousands)					
(Decrease) increase in net benefit cost	$ (4,538)	$ 5,570	$ (1,513)	$ 1,513	$ (1,553)	$ 1,553
(Decrease) increase in projected benefit obligation	(36,762)	46,133	—	—	—	—
Increase (decrease) in funded status	36,762	(46,133)	—	—	7,766	(7,766)

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

MANAGEMENT'S REPORT TO SHAREHOLDERS

To the Shareholders and the Board of Directors of
Matthews International Corporation and Subsidiaries:

Management's Report on Financial Statements

The accompanying consolidated financial statements of Matthews International Corporation and its subsidiaries (collectively, the "Company") were prepared by management, which is responsible for their integrity and objectivity. The statements were prepared in accordance with generally accepted accounting principles and include amounts that are based on management's best judgments and estimates. The other financial information included in this Annual Report on Form 10-K is consistent with that in the financial statements.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company, as such term is defined in Exchange Act Rule 13a-15f. In order to evaluate the effectiveness of internal control over financial reporting management has conducted an assessment using the criteria in *Internal Control – Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Internal controls over financial reporting is a process under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by the Company's board of directors, management and other personnel 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 and 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.

Management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company's internal control over financial reporting based on criteria in *Internal Control – Integrated Framework (2013)* issued by the COSO, and has concluded that the Company maintained effective internal control over financial reporting as of September 30, 2019. The effectiveness of the Company's internal control over financial reporting as of September 30, 2019 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Management's Certifications

The certifications of the Company's Chief Executive Officer and Chief Financial Officer required by the Sarbanes-Oxley Act have been included as Exhibits 31 and 32 in this Annual Report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
Matthews International Corporation and Subsidiaries:

Opinion on Internal Control over Financial Reporting

We have audited Matthews International Corporation and Subsidiaries' internal control over financial reporting as of September 30, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Matthews International Corporation and Subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of September 30, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of September 30, 2019 and 2018, the related consolidated statements of income, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended September 30, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 and our report dated November 22, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible 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 an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ Ernst & Young LLP

Pittsburgh, Pennsylvania
November 22, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
Matthews International Corporation and Subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Matthews International Corporation and Subsidiaries (the Company) as of September 30, 2019 and 2018, the related consolidated statements of income, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended September 30, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at September 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of September 30, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated November 22, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter 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.

Valuation of Graphics Imaging Reporting Unit Goodwill

Description of the Matter	As more fully described in Note 21 to the consolidated financial statements, during 2019 the Company recorded a $77.6 million goodwill impairment charge attributable to its Graphics Imaging (Graphics) reporting unit within the Company's SGK Brand Solutions segment. The continuation of challenging market conditions affecting Graphics, combined with adverse foreign currency trends, unfavorably impacted the financial results and forecasts for this reporting unit. Because of these challenging market conditions, as of September 1, 2019, the Company evaluated the goodwill attributable to this reporting unit, determining that the reporting unit's carrying value exceeded its estimated fair value and, therefore, goodwill was impaired. Significant assumptions used in the Company's fair value estimate included revenue growth, operating profit margin, market participant assumptions, and the discount rate. Auditing the goodwill impairment charge was complex, as it included estimating the fair value of the reporting unit. In particular, the fair value estimates are sensitive to the significant assumptions named above, which are affected by expected future market or economic conditions.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design, and tested the operating effectiveness of internal controls over the Company's goodwill impairment review process. These controls include management's assessment of indicators of impairment, management's review of the assumptions utilized to develop the estimate, and management's verification of the completeness and accuracy of the underlying data utilized to project future operating results for the reporting unit. To test the fair value of the reporting unit, our audit procedures included, among others, involving our valuation specialists to assist in assessing the valuation methodologies utilized by the Company and its valuation expert and testing the significant assumptions and underlying data used by the Company. We compared the significant assumptions used by management to current industry and economic trends, changes in the Company's business model, and other relevant factors. We also assessed the historical accuracy of management's estimates. We performed sensitivity analyses of significant assumptions to evaluate the sensitivity of the fair value of the reporting unit resulting from changes in key assumptions. We reviewed the reconciliation of the fair value of the reporting units to the market capitalization of the Company and assessed the resulting control premium.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2016.

Pittsburgh, Pennsylvania
November 22, 2019

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
September 30, 2019 and 2018
(Dollar amounts in thousands, except per share data)

ASSETS	**2019**	**2018**
Current assets:		
Cash and cash equivalents	$ 35,302	$ 41,572
Accounts receivable, net of allowance for doubtful accounts of $10,846 and $11,158, respectively	318,756	331,463
Inventories	180,274	180,451
Other current assets	49,384	61,592
Total current assets	583,716	615,078
Investments	85,501	45,430
Property, plant and equipment, net	237,442	252,775
Deferred income taxes	5,032	1,837
Other assets	31,455	49,820
Goodwill	846,807	948,894
Other intangible assets, net	400,650	443,910
Total assets	$ 2,190,603	$ 2,357,744

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS, continued
September 30, 2019 and 2018
(Dollar amounts in thousands, except per share data)

LIABILITIES AND SHAREHOLDERS' EQUITY	**2019**	**2018**
Current liabilities:		
Long-term debt, current maturities	$ 42,503	$ 31,260
Trade accounts payable	74,558	70,044
Accrued compensation	42,545	51,490
Accrued income taxes	5,997	11,413
Other current liabilities	114,276	122,195
Total current liabilities	279,879	286,402
Long-term debt	898,194	929,342
Accrued pension	133,762	82,035
Postretirement benefits	19,963	17,753
Deferred income taxes	102,482	121,519
Other liabilities	37,087	51,979
Total liabilities	1,471,367	1,489,030
Shareholders' equity-Matthews:		
Class A common stock, $1.00 par value; authorized 70,000,000 shares; 36,333,992 shares issued	36,334	36,334
Preferred stock, $100 par value, authorized 10,000 shares, none issued	—	—
Additional paid-in capital	137,774	129,252
Retained earnings	972,594	1,040,378
Accumulated other comprehensive loss	(228,361)	(164,298)
Treasury stock, 4,985,508 and 4,259,206 shares, respectively, at cost	(200,235)	(173,315)
Total shareholders' equity-Matthews	718,106	868,351
Noncontrolling interests	1,130	363
Total shareholders' equity	719,236	868,714
Total liabilities and shareholders' equity	$ 2,190,603	$ 2,357,744

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
for the years ended September 30, 2019, 2018 and 2017
(Dollar amounts in thousands, except per share data)

	2019	2018	2017
Sales	$ 1,537,276	$ 1,602,580	$ 1,515,608
Cost of sales	(994,810)	(1,018,359)	(947,820)
Gross profit	542,466	584,221	567,788
Selling expense	(133,368)	(141,570)	(142,783)
Administrative expense	(275,467)	(272,532)	(280,316)
Intangible amortization	(45,756)	(31,562)	(23,313)
Goodwill write-down	(77,572)	—	—
Operating profit	10,303	138,557	121,376
Investment income	1,494	1,570	2,468
Interest expense	(40,962)	(37,427)	(26,371)
Other income (deductions), net	(8,918)	(4,707)	(1,186)
(Loss) income before income taxes	(38,083)	97,993	96,287
Income tax (provision) benefit	(806)	9,118	(22,354)
Net (loss) income	(38,889)	107,111	73,933
Net loss attributable to noncontrolling interests	901	260	435
Net (loss) income attributable to Matthews shareholders	$ (37,988)	$ 107,371	$ 74,368
(Loss) earnings per share attributable to Matthews shareholders:			
Basic	$ (1.21)	$ 3.39	$ 2.31
Diluted	$ (1.21)	$ 3.37	$ 2.28

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
for the years ended September 30, 2019, 2018 and 2017
(Dollar amounts in thousands)

	Year Ended September 30, 2019		
	Matthews	**Noncontrolling Interest**	**Total**
Net loss	$ (37,988)	$ (901)	$ (38,889)
Other comprehensive loss, net of tax:			
Foreign currency translation adjustment	(21,254)	(92)	(21,346)
Pension plans and other postretirement benefits	(33,867)	—	(33,867)
Unrecognized loss on derivatives:			
Net change from periodic revaluation	(6,540)	—	(6,540)
Net amount reclassified to earnings	(2,402)	—	(2,402)
Net change in unrecognized loss on derivatives	(8,942)	—	(8,942)
Other comprehensive loss, net of tax	(64,063)	(92)	(64,155)
Comprehensive loss	$ (102,051)	$ (993)	$ (103,044)

	Year Ended September 30, 2018		
	Matthews	**Noncontrolling Interest**	**Total**
Net income (loss)	$ 107,371	$ (260)	$ 107,111
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment	(22,053)	71	(21,982)
Pension plans and other postretirement benefits	15,631	—	15,631
Unrecognized gain (loss) on derivatives:			
Net change from periodic revaluation	6,095	—	6,095
Net amount reclassified to earnings	(1,042)	—	(1,042)
Net change in unrecognized gain (loss) on derivatives	5,053	—	5,053
Other comprehensive (loss) income, net of tax	(1,369)	71	(1,298)
Comprehensive income (loss)	$ 106,002	$ (189)	$ 105,813

	Year Ended September 30, 2017		
	Matthews	**Noncontrolling Interest**	**Total**
Net income (loss)	$ 74,368	$ (435)	$ 73,933
Other comprehensive income, net of tax:			
Foreign currency translation adjustment	9,352	119	9,471
Pension plans and other postretirement benefits	12,427	—	12,427
Unrecognized gain (loss) on derivatives:			
Net change from periodic revaluation	7,043	—	7,043
Net amount reclassified to earnings	(1,069)	—	(1,069)
Net change in unrecognized gain (loss) on derivatives	5,974	—	5,974
Other comprehensive income, net of tax	27,753	119	27,872
Comprehensive income (loss)	$ 102,121	$ (316)	$ 101,805

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
for the years ended September 30, 2019, 2018 and 2017
(Dollar amounts in thousands, except per share data)

	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income (net of tax)	Treasury Stock	Non-controlling Interests	Total
Balance, September 30, 2016	$ 36,334	$ 117,088	$ 896,224	$ (181,868)	$ (159,113)	$ 669	$ 709,334
Net income	—	—	74,368	—	—	(435)	73,933
Pension plans and other postretirement benefits	—	—	—	12,427	—	—	12,427
Translation adjustment	—	—	—	9,352	—	119	9,471
Fair value of derivatives	—	—	—	5,974	—	—	5,974
Total comprehensive income							101,805
Stock-based compensation	—	14,562	—	—	—	—	14,562
Purchase of 212,424 shares of treasury stock	—	—	—	—	(14,025)	—	(14,025)
Issuance of 221,958 shares of treasury stock	—	(8,397)	—	—	8,543	—	146
Cancellation of 2,640 shares of treasury stock	—	179	—	—	(179)	—	—
Dividends	—	—	(21,762)	—	—	—	(21,762)
Transactions with noncontrolling interests	—	—	—	—	—	199	199
Balance, September 30, 2017	$ 36,334	$ 123,432	$ 948,830	$ (154,115)	$ (164,774)	$ 552	$ 790,259
Net income	—	—	107,371	—	—	(260)	107,111
Pension plans and other postretirement benefits	—	—	—	15,631	—	—	15,631
Translation adjustment	—	—	—	(22,053)	—	71	(21,982)
Fair value of derivatives	—	—	—	5,053	—	—	5,053
Total comprehensive income							105,813
Stock-based compensation	—	13,460	—	—	—	—	13,460
Purchase of 393,864 shares of treasury stock	—	—	—	—	(21,181)	—	(21,181)
Issuance of 326,827 shares of treasury stock	—	(8,040)	—	—	13,040	—	5,000
Cancellation of 6,756 shares of treasury stock	—	400	—	—	(400)	—	—
Dividends	—	—	(24,637)	—	—	—	(24,637)
Reclassification of accumulated other comprehensive (loss) income ("AOCI") tax effects	—	—	8,814	(8,814)	—	—	—
Balance, September 30, 2018	$ 36,334	$ 129,252	$ 1,040,378	$ (164,298)	$ (173,315)	$ 363	$ 868,714
Net loss	—	—	(37,988)	—	—	(901)	(38,889)
Pension plans and other postretirement benefits	—	—	—	(33,867)	—	—	(33,867)
Translation adjustment	—	—	—	(21,254)	—	(92)	(21,346)
Fair value of derivatives	—	—	—	(8,942)	—	—	(8,942)
Total comprehensive loss							(103,044)
Stock-based compensation	—	7,729	—	—	—	—	7,729
Purchase of 709,970 shares of treasury stock	—	—	—	—	(26,127)	—	(26,127)
Issuance of 3,782 shares of treasury stock	—	(154)	—	—	154	—	—
Cancellation of 20,114 shares of treasury stock	—	947	—	—	(947)	—	—
Dividends	—	—	(25,620)	—	—	—	(25,620)
Acquisition	—	—	—	—	—	1,760	1,760
Cumulative tax adjustment for intra-entity transfers	—	—	(4,176)	—	—	—	(4,176)
Balance, September 30, 2019	$ 36,334	$ 137,774	$ 972,594	$ (228,361)	$ (200,235)	$ 1,130	$ 719,236

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
for the years ended September 30, 2019, 2018 and 2017
(Dollar amounts in thousands)

	2019	2018	2017
Cash flows from operating activities:			
Net (loss) income	$ (38,889)	$ 107,111	$ 73,933
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	90,793	76,974	67,981
Stock-based compensation expense	7,729	13,460	14,562
Deferred tax (benefit) provision	(6,783)	(23,125)	9,725
Gain on sale of assets, net	(8,567)	(2,190)	(776)
Loss on divestitures	6,469	—	—
Unrealized gain on investments in mutual funds	(305)	(1,304)	(2,660)
Losses from equity-method investments	2,050	—	—
Realized loss (gain) on cost-method investments	4,731	(3,771)	—
Goodwill write-down	77,572	—	—
Changes in working capital items	(12,482)	(9,934)	5,784
Decrease (increase) in other assets	4,677	(9,872)	(17,256)
Increase in other liabilities	7,540	5,406	2,539
Other operating activities, net	(3,452)	(5,181)	(4,533)
Net cash provided by operating activities	131,083	147,574	149,299
Cash flows from investing activities:			
Capital expenditures	(37,688)	(43,200)	(44,935)
Acquisitions, net of cash acquired	(11,504)	(121,065)	(98,235)
Proceeds from sale of assets	13,253	4,705	3,764
Proceeds from sale of investments	—	9,158	—
Proceeds from divestiture	8,254	—	—
Purchases of investments	(33,074)	(11,934)	(2,211)
Net cash used in investing activities	(60,759)	(162,336)	(141,617)
Cash flows from financing activities:			
Proceeds from long-term debt	503,693	704,188	417,043
Payments on long-term debt	(519,731)	(651,166)	(388,447)
Acquisition holdback and contingent consideration payments	(4,421)	—	—
Purchases of treasury stock	(26,127)	(21,181)	(14,025)
Proceeds from the exercise of stock options	—	—	14
Dividends	(25,620)	(24,637)	(21,762)
Other financing activities	(2,836)	(6,303)	—
Net cash (used in) provided by financing activities	(75,042)	901	(7,177)
Effect of exchange rate changes on cash	(1,552)	(2,082)	1,299
Net change in cash and cash equivalents	(6,270)	(15,943)	1,804
Cash and cash equivalents at beginning of year	41,572	57,515	55,711
Cash and cash equivalents at end of year	$ 35,302	$ 41,572	$ 57,515
Cash paid during the year for:			
Interest	$ 41,453	$ 37,232	$ 26,271
Income taxes	15,467	11,014	8,472
Non-cash investing and financing activities:			
Acquisition of long-term asset under financing arrangement	$ —	$ 14,544	$ —

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

1. NATURE OF OPERATIONS:

Matthews International Corporation ("Matthews" or the "Company"), founded in 1850 and incorporated in Pennsylvania in 1902, is a global provider of brand solutions, memorialization products and industrial technologies. Brand solutions consists of brand management, pre-media services, printing plates and cylinders, engineered products, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries. Memorialization products consist primarily of bronze and granite memorials and other memorialization products, caskets and cremation equipment primarily for the cemetery and funeral home industries. Industrial technologies include marking and coding equipment and consumables, industrial automation products and order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products.

The Company has facilities in the North America, Europe, Asia, Australia, and Central and South America.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Principles of Consolidation:

The consolidated financial statements include all domestic and foreign subsidiaries in which the Company maintains an ownership interest and has operating control. Investments in certain companies over which the Company exerts significant influence, but does not control the financial and operating decisions, are accounted for as equity method investments. Investments in certain companies over which the Company does not exert significant influence are accounted for as cost-method investments. All intercompany accounts and transactions have been eliminated.

Use of Estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications:

Certain reclassifications have been made to the prior year financial statements to conform to the current year presentation. These reclassifications are not material to the prior year presentation.

Cash and Cash Equivalents:

The Company considers all investments purchased with a remaining maturity of three months or less to be cash equivalents. The carrying amount of cash and cash equivalents approximates fair value due to the short-term maturities of these instruments.

Trade Receivables and Allowance for Doubtful Accounts:

Trade receivables are carried at their estimated collectible amounts. Trade credit is generally extended on a short-term basis; thus trade receivables do not bear interest, although a finance charge may be applied to such receivables that are more than 30 days past due. The allowance for doubtful accounts is based on an evaluation of specific customer accounts for which available facts and circumstances indicate collectability may be uncertain.

Inventories:

Inventories are stated at the lower of cost or net realizable value with cost generally determined under the average cost method. Inventory costs include material, labor, and applicable manufacturing overhead (including depreciation) and other direct costs. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

Property, Plant and Equipment:

Property, plant and equipment are carried at cost. Depreciation is computed primarily on the straight-line method over the estimated useful lives of the assets, which generally range from 10 to 45 years for buildings and 3 to 12 years for machinery and equipment. Gains or losses from the disposition of assets are reflected in operating profit. The cost of maintenance and repairs is charged to expense as incurred. Renewals and betterments of a nature considered to extend the useful lives of the assets are capitalized. Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets is determined by evaluating the estimated undiscounted net cash flows of the operations to which the assets relate. An impairment loss would be recognized when the carrying amount of the assets exceeds the fair value, which is based on a discounted cash flow analysis. No such charges were recognized during the years presented.

Goodwill and Other Intangible Assets:

Intangible assets with finite useful lives are amortized over their estimated useful lives, ranging from 2 to 15 years, and are reviewed when appropriate for possible impairment, similar to property, plant and equipment. Goodwill and intangible assets with indefinite lives are not amortized, but are tested annually for impairment, or when circumstances indicate that a possible impairment may exist. In general, when the carrying value of these assets exceeds the implied fair value, an impairment loss must be recognized. A significant decline in cash flows generated from these assets may result in a write-down of the carrying values of the related assets. For purposes of testing goodwill for impairment, the Company uses a combination of valuation techniques, including discounted cash flows and other market indicators. For purposes of testing indefinite-lived intangible assets, the Company generally uses a relief from royalty method.

Pension and Other Postretirement Plans:

Pension assets and liabilities are determined on an actuarial basis and are affected by the market value of plan assets, estimates of the expected return on plan assets and the discount rate used to determine the present value of benefit obligations. Actual changes in the fair market value of plan assets and differences between the actual return on plan assets, the expected return on plan assets and changes in the selected discount rate will affect the amount of pension cost. Differences between actual and expected results or changes in the value of the obligations and plan assets are initially recognized through other comprehensive income and subsequently amortized to the Consolidated Statement of Income.

Environmental:

Costs that mitigate or prevent future environmental issues or extend the life or improve equipment utilized in current operations are capitalized and depreciated on a straight-line basis over the estimated useful lives of the related assets. Costs that relate to current operations or an existing condition caused by past operations are expensed. Environmental liabilities are recorded when the Company's obligation is probable and reasonably estimable. Accruals for losses from environmental remediation obligations do not consider the effects of inflation, and anticipated expenditures are not discounted to their present value.

Derivatives and Hedging:

Derivatives are held as part of a formal documented hedging program. All derivatives are held for purposes other than trading. Matthews measures effectiveness by formally assessing, at least quarterly, the historical and probable future high correlation of changes in the fair value or future cash flows of the hedged item. If the hedging relationship ceases to be highly effective or it becomes probable that an expected transaction will no longer occur, gains and losses on the derivative will be recorded in other income (deductions) at that time.

Changes in the fair value of derivatives designated as cash flow hedges are recorded in other comprehensive income (loss) ("OCI"), net of tax, and are reclassified to earnings in a manner consistent with the underlying hedged item. The cash flows from derivative activities are recognized in the statement of cash flows in a manner consistent with the underlying hedged item.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

Foreign Currency:

The functional currency of the Company's foreign subsidiaries is generally the local currency. Balance sheet accounts for foreign subsidiaries are translated into U.S. dollars at exchange rates in effect at the consolidated balance sheet date. Gains or losses that result from this process are recorded in accumulated other comprehensive income (loss). The revenue and expense accounts of foreign subsidiaries are translated into U.S. dollars at the average exchange rates that prevailed during the period. Realized gains and losses from foreign currency transactions are presented in the Statement of Income in a consistent manner with the underlying transaction based upon the provisions of Accounting Standards Codification ("ASC") 830 "Foreign Currency Matters."

Comprehensive Income (Loss):

Comprehensive income (loss) consists of net income adjusted for changes, net of any related income tax effect, in cumulative foreign currency translation, the fair value of derivatives, unrealized investment gains and losses and remeasurement of pension and other postretirement liabilities.

Treasury Stock:

Treasury stock is carried at cost. The cost of treasury shares sold is determined under the average cost method.

Revenue Recognition:

Revenue is recognized when control of a good or service promised in a contract (i.e., performance obligation) is transferred to a customer. Control is obtained when a customer has the ability to direct the use of and obtain substantially all of the remaining benefits from that good or service. For substantially all transactions, control passes in accordance with agreed upon delivery terms, including in certain circumstances, customer acceptance. This approach is consistent with the Company's historical revenue recognition methodology. In limited instances revenue is recognized over time as critical milestones are met and as services are provided. Transaction price, for revenue recognition, is allocated to each performance obligation consisting of the stand alone selling price, estimates of rebates and other sales or contract renewal incentives, and cash discounts and sales returns ("Variable Consideration"). Estimates are made for Variable Consideration based on contract terms and historical experience of actual results and are applied to the performance obligations as they are satisfied. Each product or service delivered to a third-party customer is considered to satisfy a performance obligation. Performance obligations generally occur at a point in time and are satisfied when control of the goods passes to the customer. Certain revenue related to mausoleum construction and significant engineering projects, including cremation and incineration projects, and marking and industrial automation projects, are recognized over time using the input method measuring progress toward completion of such projects. Amounts recognized using the over time method were less than 5% of the Company's consolidated revenue for the years ended September 30, 2019, 2018 and 2017. The Company is entitled to collection of the sales price under normal credit terms in the regions in which it operates. Refer to Note 4, "Revenue Recognition," for a further discussion.

Shipping and Handling Fees and Costs:

All fees billed to the customer for shipping and handling are classified as a component of net revenues. All costs associated with shipping and handling are classified as a component of cost of sales or selling expense.

Research and Development Expenses:

Research and development costs are expensed as incurred and were approximately $26,176, $24,984 and $20,722 for the years ended September 30, 2019, 2018 and 2017, respectively.

Stock-Based Compensation:

Stock-based compensation cost is measured at grant date, based on the fair value of the award, and is recognized as expense over the employee requisite service period. A binomial lattice model is utilized to determine the fair value of awards that have vesting conditions based on market targets.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

Income Taxes:

Deferred tax assets and liabilities are provided for the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the years in which the differences are expected to reverse. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Deferred income taxes have not been provided on undistributed earnings of foreign subsidiaries since they have either been previously taxed, or are now exempt from tax, under the U.S. Tax Cuts and Jobs Act, and such earnings are considered to be reinvested indefinitely in foreign operations.

Earnings Per Share:

Basic earnings per share is computed by dividing net income by the average number of common shares outstanding. Diluted earnings per share is computed using the treasury stock method, which assumes the issuance of common stock for all dilutive securities.

3. ACCOUNTING PRONOUNCEMENTS:

Issued

In August 2018, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20)*, which modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. This ASU is effective for the Company beginning in interim periods starting in fiscal year 2021. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820), Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements on fair value measurements including the consideration of costs and benefits. This ASU is effective for the Company beginning in interim periods starting in fiscal year 2020. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815)*, which provides new guidance intended to improve the financial reporting of hedging relationships to better portray the economic results of an entity’s risk management activities in its financial statements. This ASU is effective for the Company beginning in fiscal year 2020. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326)*, which provides financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each report date. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which provides new guidance on how an entity should account for leases and recognize associated lease assets and liabilities. This ASU requires lessees to recognize assets and liabilities that arise from financing and operating leases on the Consolidated Balance Sheet. Subsequently, the FASB issued several ASUs that address implementation issues and correct or improve certain aspects of the new lease guidance, including ASU 2017-13, *Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840), and Leases (Topic 842),* ASU 2018-01, *Leases (Topic 842) Land Easement Practical Expedient for Transition to Topic 842*, ASU 2018-10, *Codification Improvements to Topic 842, Leases*, ASU 2018-11, *Leases (Topic 842): Targeted Improvements,* ASU 2018-20, *Leases (Topic 842): Narrow-Scope Improvements for Lessors,* and ASU 2019-01, *Leases (Topic 842): Codification Improvements*. These ASUs do not change the core principles in the lease guidance outlined above. ASU No. 2018-11 provides an additional transition method to adopt ASU No. 2016-02. Under the new transition method, an entity initially applies the new leases standard at the adoption date versus at the beginning of the earliest period presented and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company has elected to use this transition method at the adoption date of October 1, 2019. ASU No. 2016-02 and the related ASUs referenced above are effective for the Company beginning in interim periods starting in fiscal year 2020. The Company expects the estimated right-of-use asset and related lease liability recognized

3. ACCOUNTING PRONOUNCEMENTS, (continued)

on the Consolidated Balance Sheet to approximate $85 million. The Company does not expect the adoption to have a material impact to its Consolidated Statement of Cash Flows or Consolidated Statement of Income.

Adopted

In May 2017, the FASB issued ASU No. 2017-09, *Compensation - Stock Compensation (Topic 718)*, which provides new guidance intended to clarify and reduce complexities in applying stock compensation guidance to a change to the terms or conditions of share-based payment awards. The adoption of this ASU in the first quarter ended December 31, 2018 had no impact on the Company's consolidated financial statements.

In February 2017, the FASB issued ASU No. 2017-07, *Compensation - Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which provides new guidance intended to improve the disclosure requirements related to the service cost component of net benefit cost. ASU 2017-07 requires a company to present the service cost components of net periodic benefit cost in the same income statement line as other employee compensation costs, with the remaining components of net periodic benefit cost presented separately from the service cost components and outside of any subtotal of operating income, if one is presented. The Company adopted this standard on October 1, 2018 applying the presentation requirements retrospectively. For the year ended September 30, 2018, the Company reclassified net benefit costs of $2,871, $907 and $1,945, from cost of sales, selling expense and administrative expense, respectively, to other income (deductions), net. For the year ended September 30, 2017, the Company reclassified net benefit costs of $4,401, $1,391 and $2,981, from cost of sales, selling expense and administrative expense, respectively, to other income (deductions), net.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment*, which provides new guidance intended to simplify the subsequent measurement of goodwill and removing Step 2 from the goodwill impairment process. The Company early adopted this ASU in the first quarter ended December 31, 2017. The adoption of this ASU had no impact on the Company's consolidated financial statements, but modifies the methodology to assess and measure goodwill impairment prospectively.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805), Clarifying the Definition of a Business*, which provides new guidance intended to make the definition of a business more operable and allow for more consistency in application. The adoption of this ASU in the first quarter ended December 31, 2018 had no impact on the Company's consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes - Intra-Entity Transfers of Assets Other Than Inventory (Topic 740)*, which will require an entity to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The Company adopted ASU 2016-16 on October 1, 2018 using the modified retrospective method which resulted in a decrease to retained earnings and other assets of $4,176.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)*, which provides new guidance intended to clarify the presentation of certain cash flow items including debt prepayments, debt extinguishment costs, contingent considerations payments, and insurance proceeds, among other things. The adoption of this ASU in the first quarter ended December 31, 2018 did not have a material impact on the Company's consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which provides new guidance intended to improve the recognition, measurement, presentation and disclosure of financial instruments. In February 2018, the FASB issued ASU 2018-03, *Technical Corrections and Improvements to Financial Instruments—Overall (Subtopic 825-10),* that provides guidance related to implementation issues and corrects or improves certain aspects of the financial instruments guidance. The adoption of these ASUs in the first quarter ended December 31, 2018 had no impact on the Company's consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*, which provides new guidance to simplify the measurement of inventory valuation at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The adoption of this ASU in the first quarter ended December 31, 2017 had no impact on the Company's consolidated financial statements.

3. ACCOUNTING PRONOUNCEMENTS, (continued)

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: Topic 606.* This ASU replaces nearly all existing U.S. GAAP guidance on revenue recognition. The standard prescribes a five-step model for recognizing revenue, the application of which will require significant judgment. The FASB issued ASU 2015-14 in August 2015 which resulted in a deferral of the original effective date of ASU 2014-09. During 2016 and 2017, the FASB issued six ASUs that address implementation issues and correct or improve certain aspects of the new revenue recognition guidance, including ASU 2016-08, *Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, ASU 2016-10, *Identifying Performance Obligations and Licensing*, ASU 2016-12, *Narrow-Scope Improvements and Practical Expedients,* ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, ASU 2017-13, *Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840), and Leases (Topic 842)* and ASU 2017-14, *Income Statement—Reporting Comprehensive Income (Topic 220), Revenue Recognition (Topic 605), and Revenue from Contracts with Customers (Topic 606)* . These ASUs do not change the core principles in the revenue recognition guidance outlined above. The Company adopted the provisions of these ASUs in the first fiscal quarter of 2019, using the modified retrospective method. The adoption of these ASUs did not impact the Company's consolidated financial statements and therefore, there was no cumulative effect adjustment recognized to retained earnings on October 1, 2018. Refer to Note 4, "Revenue Recognition," for a further discussion.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220)*, which provides new guidance to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the U.S. Tax Cuts and Jobs Act. The amount of reclassification is the difference between the Company's historical U.S. income tax rate and the newly enacted 21% corporate income tax rate. The Company early adopted this ASU in the third quarter ended June 30, 2018. The adoption of this ASU resulted in a decrease to AOCI and corresponding increase to retained earnings of $8,814.

4. REVENUE RECOGNITION:

The Company delivers a variety of products and services through its business segments. The SGK Brand Solutions segment delivers brand management, pre-media services, printing plates and cylinders, engineered products, and imaging services for consumer goods and retail customers, merchandising display systems, and marketing and design services primarily to the consumer goods and retail industries. The Memorialization segment produces and delivers bronze and granite memorials and other memorialization products, caskets and cremation equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment delivers marking and coding equipment and consumables, industrial automation products and order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products for the warehousing and industrial industries.

(Dollar amounts in thousands, except per share data)

4. REVENUE RECOGNITION, (continued)

The Company disaggregates revenue from contracts with customers by geography, as it believes geographic regions best depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. Disaggregated sales by segment and region for the years ended September 30,2019, 2018 and 2017 were as follows:

	North America	Central and South America	Europe	Australia	Asia	Consolidated
SGK Brand Solutions:						
2019	$ 320,553	$ 5,853	$ 362,088	$ 11,767	$ 43,608	$ 743,869
2018	351,631	6,171	389,151	12,599	45,722	805,274
2017	371,961	6,518	338,988	10,558	42,156	770,181
Memorialization:						
2019	$ 590,575	$ —	$ 37,199	$ 9,118	$ —	$ 636,892
2018	583,942	—	36,773	10,677	—	631,392
2017	569,662	—	35,271	10,949	—	615,882
Industrial Technologies:						
2019	$ 127,140	$ —	$ 26,966	$ —	$ 2,409	$ 156,515
2018	130,794	—	30,154	—	4,966	165,914
2017	102,301	—	21,983	—	5,261	129,545
Consolidated:						
2019	$ 1,038,268	$ 5,853	$ 426,253	$ 20,885	$ 46,017	$ 1,537,276
2018	1,066,367	6,171	456,078	23,276	50,688	1,602,580
2017	1,043,924	6,518	396,242	21,507	47,417	1,515,608

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. A three level fair value hierarchy is used to prioritize the inputs used in valuations, as defined below:

Level 1: Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3: Unobservable inputs for the asset or liability.

(Dollar amounts in thousands, except per share data)

5. FAIR VALUE MEASUREMENTS, (continued)

As of September 30, 2019 and 2018, the fair values of the Company's assets and liabilities measured on a recurring basis were categorized as follows:

	September 30, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 845	$ —	$ 845
Equity and fixed income mutual funds	—	22,986	—	22,986
Life insurance policies	—	4,030	—	4,030
Total assets at fair value	$ —	$ 27,861	$ —	$ 27,861
Liabilities:				
Derivatives [1]	$ —	$ 1,379	$ —	$ 1,379
Total liabilities at fair value	$ —	$ 1,379	$ —	$ 1,379

[1] Interest rate swaps are valued based on observable market swap rates and are classified within Level 2 of the fair value hierarchy.

	September 30, 2018			
	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 11,309	$ —	$ 11,309
Equity and fixed income mutual funds	—	22,758	—	22,758
Life insurance policies	—	5,894	—	5,894
Total assets at fair value	$ —	$ 39,961	$ —	$ 39,961
Liabilities:				
Derivatives [1]	$ —	$ —	$ —	$ —
Total liabilities at fair value	$ —	$ —	$ —	$ —

[1] Interest rate swaps are valued based on observable market swap rates and are classified within Level 2 of the fair value hierarchy.

6. INVENTORIES:

Inventories at September 30, 2019 and 2018 consisted of the following:

	2019	2018
Raw materials	$ 35,616	$ 34,880
Work in process	76,297	67,827
Finished goods	68,361	77,744
	$ 180,274	$ 180,451

(Dollar amounts in thousands, except per share data)

7. INVESTMENTS:

Equity and fixed income mutual funds are classified as trading securities and recorded at fair value. The market value of these investments exceeded cost by $941 and $838 at September 30, 2019 and 2018, respectively. Realized and unrealized gains and losses are recorded in investment income. Realized gains (losses) for fiscal 2019, 2018 and 2017 were not material. Cost-method investments include ownership interests in various entities of less than 20%.

At September 30, 2019 and 2018, non-current investments were as follows:

	2019	2018
Equity and fixed income mutual funds	$ 22,986	$ 22,758
Life insurance policies	4,030	5,894
Equity-method investments	39,761	—
Cost-method investments	18,724	16,778
	$ 85,501	$ 45,430

During fiscal 2019, the Company completed the sale of a 51% ownership interest in a small Memorialization business. Immediately following the transaction, the Company retained a non-controlling interest in this business, which was accounted for as an equity-method investment. The Company made additional capital contributions to this non-consolidated subsidiary totaling $29,148 during fiscal 2019 and continued to account for this non-controlling interest as an equity method investment. Changes in cost-method investments during fiscal 2019 resulted from additional purchases of investments in the SGK Brand Solutions segment, partially offset by losses from certain investments in the SGK Brand Solutions and Memorialization segments.

During fiscal 2018, the Company purchased an $11,747 ownership interest in a company in the SGK Brand Solutions segment, which was recorded as a cost-method investment. In fiscal 2018, the Company also sold certain of its cost-method investments for net proceeds totaling $9,159. In connection with these dispositions, the Company recognized $3,771 of pre-tax gains within other income (deductions), net.

8. PROPERTY, PLANT AND EQUIPMENT:

Property, plant and equipment and the related accumulated depreciation at September 30, 2019 and 2018 were as follows:

	2019	2018
Buildings	$ 114,276	$ 113,027
Machinery, equipment and other	446,356	452,846
	560,632	565,873
Less accumulated depreciation	(361,193)	(357,827)
	199,439	208,046
Land	17,310	18,017
Construction in progress	20,693	26,712
	$ 237,442	$ 252,775

Depreciation expense, including amortization of assets under capital lease, was $45,037, $45,412 and $44,668 for each of the three years ended September 30, 2019, 2018 and 2017, respectively.

(Dollar amounts in thousands, except per share data)

9. LONG-TERM DEBT:

Long-term debt at September 30, 2019 and 2018 consisted of the following:

	2019	2018
Revolving credit facilities	$ 476,132	$ 322,711
Securitization facility	93,950	102,250
Senior secured term loan	53,497	212,086
2025 Senior Notes	296,716	296,176
Notes payable to banks	16,376	17,895
Short-term borrowings	395	4,915
Capital lease obligations	3,631	4,569
	940,697	960,602
Less current maturities	(42,503)	(31,260)
	$ 898,194	$ 929,342

The Company has a domestic credit facility with a syndicate of financial institutions that includes a $900,000 senior secured revolving credit facility and a $250,000 senior secured amortizing term loan. A portion of the revolving credit facility (not to exceed $150,000) can be drawn in foreign currencies. The term loan requires scheduled principal payments of 5.0% of the outstanding principal in year one, 7.5% in year two, and 10.0% in years three through five, payable in quarterly installments. Pursuant to the terms of the domestic credit facility agreement, principal payments may be made on the term loan prior to the scheduled due date. The balance of the revolving credit facility and the term loan are due on the maturity date of April 26, 2021. Borrowings under both the revolving credit facility and the term loan bear interest at LIBOR (Euro LIBOR for balances drawn in Euros) plus a factor ranging from 0.75% to 2.00% (1.50% at September 30, 2019) based on the Company's secured leverage ratio. The secured leverage ratio is defined as net secured indebtedness divided by EBITDA (earnings before interest, income taxes, depreciation and amortization) as defined within the domestic credit facility agreement. The Company is required to pay an annual commitment fee ranging from 0.15% to 0.25% (based on the Company's leverage ratio) of the unused portion of the revolving credit facility.

The domestic credit facility requires the Company to maintain certain leverage and interest coverage ratios. A portion of the facility (not to exceed $35,000) is available for the issuance of trade and standby letters of credit. Outstanding U.S. dollar denominated borrowings on the revolving credit facility at September 30, 2019 and 2018 were $325,638 and $319,500, respectively. During the third quarter of fiscal 2019, the Company borrowed €125.0 million on the revolving credit facility. Proceeds from the Euro denominated borrowing were used to make a principal payment of $140,000 on the outstanding balance of the term loan. Outstanding Euro denominated borrowings on the revolving credit facility at September 30, 2019 were €125.0 million ($136,470). There were no Euro denominated borrowings on the revolving credit facility at September 30, 2018. Outstanding borrowings on the term loan at September 30, 2019 and 2018 were $53,497 and $212,086, respectively. The weighted-average interest rate on outstanding borrowings for the domestic credit facility (including the effects of interest rate swaps and Euro denominated borrowings) at September 30, 2019 and 2018 was 2.65% and 3.12%, respectively.

The Company has $300,000 of 5.25% senior unsecured notes due December 1, 2025 (the "2025 Senior Notes"). The 2025 Senior Notes bear interest at a rate of 5.25% per annum with interest payable semi-annually in arrears on June 1 and December 1 of each year. The Company's obligations under the 2025 Senior Notes are guaranteed by certain of the Company's direct and indirect wholly-owned domestic subsidiaries. The Company is subject to certain covenants and other restrictions in connection with the 2025 Senior Notes. The Company incurred direct financing fees and costs in connection with 2025 Senior Notes of $4,127, which are being deferred and amortized over the term of the 2025 Senior Notes.

(Dollar amounts in thousands, except per share data)

9. LONG-TERM DEBT, (continued)

The Company has a $115,000 accounts receivable securitization facility (the "Securitization Facility") with certain financial institutions which matures on April 11, 2020, and the Company intends to extend this facility. Under the Securitization Facility, the Company and certain of its domestic subsidiaries sell, on a continuous basis without recourse, their trade receivables to Matthews Receivables Funding Corporation, LLC ("Matthews RFC"), a wholly-owned bankruptcy-remote subsidiary of the Company. Matthews RFC in turn assigns a collateral interest in these receivables to certain financial institutions, and then may borrow funds under the Securitization Facility. The Securitization Facility does not qualify for sale treatment. Accordingly, the trade receivables and related debt obligations remain on the Company's Consolidated Balance Sheet. Borrowings under the Securitization Facility bear interest at LIBOR plus 0.75%. The Company is required to pay an annual commitment fee ranging from 0.25% to 0.35% of the unused portion of the Securitization Facility. Outstanding borrowings under the Securitization Facility at September 30, 2019 and 2018 were $93,950 and $102,250, respectively. The interest rate on borrowings under this facility at September 30, 2019 and 2018 was 2.77% and 3.01%, respectively.

The following table presents information related to interest rate contracts entered into by the Company and designated as cash flow hedges:

	September 30, 2019	September 30, 2018
Pay fixed swaps - notional amount	$ 293,750	$ 343,750
Net unrealized (loss) gain	$ (534)	$ 11,309
Weighted-average maturity period (years)	1.9	2.7
Weighted-average received rate	2.02%	2.26%
Weighted-average pay rate	1.41%	1.37%

The Company enters into interest rate swaps in order to achieve a mix of fixed and variable rate debt that it deems appropriate. The interest rate swaps have been designated as cash flow hedges of future variable interest payments which are considered probable of occurring. Based on the Company's assessment, all of the critical terms of each of the hedges matched the underlying terms of the hedged debt and related forecasted interest payments, and as such, these hedges were considered highly effective.

The fair value of the interest rate swaps reflected an unrealized loss, net of unrealized gains, of $534 ($403 after tax) and an unrealized gain of $11,309 ($8,538 after tax) at September 30, 2019 and 2018, respectively, that is included in shareholders' equity as part of accumulated other comprehensive income ("AOCI"). Assuming market rates remain constant with the rates at September 30, 2019, a gain (net of tax) of approximately $48 included in AOCI is expected to be recognized in earnings over the next twelve months.

At September 30, 2019 and 2018, the interest rate swap contracts were reflected on a gross-basis in the consolidated balance sheets as follows:

Derivatives:	2019	2018
Current assets:		
Other current assets	$ 548	$ 3,867
Long-term assets:		
Other assets	297	7,442
Current liabilities:		
Other current liabilities	(484)	—
Long-term liabilities:		
Other liabilities	(895)	—
Total derivatives	$ (534)	$ 11,309

(Dollar amounts in thousands, except per share data)

9. LONG-TERM DEBT, (continued)

The gains recognized on derivatives was as follows:

Derivatives in Cash Flow Hedging Relationships	Location of Gain Recognized in Income on Derivatives	Amount of Gain Recognized in Income on Derivatives		
		2019	2018	2017
Interest rate swaps	Interest expense	$3,181	$1,380	$1,752

The Company recognized the following gains (losses) in AOCI:

Derivatives in Cash Flow Hedging Relationships	Amount of (Loss) Gain Recognized in AOCI on Derivatives			Location of Gain Reclassified from AOCI into Income	Amount of Gain Reclassified from AOCI into Income (Effective Portion*)		
	2019	2018	2017	(Effective Portion*)	2019	2018	2017
Interest rate swaps	$(6,540)	$6,095	$7,043	Interest expense	$2,402	$1,042	$1,069

* There is no ineffective portion or amount excluded from effectiveness testing.

The Company, through certain of its European subsidiaries, has a credit facility with a European bank, which is guaranteed by Matthews. The maximum amount of borrowings available under this facility is €35.0 million ($38,212). The credit facility matures in December 2019 and the Company intends to extend this facility. Outstanding borrowings under this facility were €12.8 million ($14,024) and €2.8 million ($3,211) at September 30, 2019 and 2018, respectively. The weighted-average interest rate on outstanding borrowings under this facility was 1.25% and 1.75% at September 30, 2019 and 2018, respectively.

The Company's German subsidiary, Matthews Europe GmbH & Co. KG, has €15.0 million ($16,376) of senior unsecured notes with European banks. The notes are guaranteed by Matthews and mature in November 2019. A portion of the notes (€5.0 million) have a fixed interest rate of 1.40%, and the remainder bear interest at Euro LIBOR plus 1.40%. The weighted-average interest rate on the notes at September 30, 2019 and 2018 was 1.40%.

Other debt totaled $395 and $5,399 at September 30, 2019 and 2018, respectively. The weighted-average interest rate on these outstanding borrowings was 2.17% and 2.21% at September 30, 2019 and 2018, respectively.

The Company uses certain foreign currency debt instruments as net investment hedges of foreign operations. Currency losses of $3,320 (net of income taxes of $1,077), which represent effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment for the fiscal year 2019. The Company did not have any net investments hedges in the prior year.

In September 2014, a claim was filed seeking to draw upon a letter of credit issued by the Company of £8,570,000 ($10,541 at September 30, 2019) with respect to a performance guarantee on an environmental solutions project in Saudi Arabia. Management assessed the customer's demand to be without merit and initiated an action with the court in the United Kingdom (the "U.K. Court"). Pursuant to this action, an order was issued by the U.K. Court in January 2015 requiring that, upon receipt by the customer, the funds were to be remitted by the customer to the U.K. Court pending resolution of the dispute between the parties. As a result, the Company made payment on the draw to the financial institution for the letter of credit and the funds were ultimately received by the customer. The customer did not remit the funds to the U.K. Court as ordered. On June 14, 2016, the U.K Court ruled completely in favor of Matthews following a trial on the merits. However, the ongoing dispute involves litigation in multiple foreign jurisdictions because the contract between the parties includes a venue clause requiring the venue for any litigation to be in the United Kingdom, while the enforcement of any final judgment is required to be executed in Saudi Arabia. The Company is currently pursuing a trial on the merits in Saudi Arabia which may not finally be resolved until calendar year 2020. It is necessary to obtain an equivalent favorable ruling in the courts of Saudi Arabia to effectively enforce judgment and commence collection efforts. The Company remains confident regarding the pending trial on the merits in Saudi Arabia and expects to be in a position to enforce the judgment and initiate collection efforts following completion of that trial. However, as the customer has neither yet remitted the funds nor complied with the final, un-appealed orders of the U.K. Court, it is possible the resolution of this matter could have an unfavorable financial impact on Matthews' results of operations. The Company's level of success in recovering funds from the customer will depend upon a number of factors including, a successful completion of the pending trial on the merits in Saudi Arabia, the availability of recoverable funds, and the subsequent level of cooperation from the Saudi Arabian government to enforce a potential judgment against the creditor. The Company has determined that resolution of this matter may take an extended period of time and therefore

(Dollar amounts in thousands, except per share data)

9. LONG-TERM DEBT, (continued)

has classified the funded letter of credit within other assets on the Consolidated Balance Sheets as of September 30, 2019 and 2018. The Company will continue to assess the accounting and collectability related to this matter as facts and circumstances evolve.

As of September 30, 2019 and 2018, the fair value of the Company's long-term debt, including current maturities, which is classified as Level 2 in the fair value hierarchy, approximated the carrying value included in the Consolidated Balance Sheets. The Company was in compliance with all of its debt covenants as of September 30, 2019.

Aggregate maturities of long-term debt, including short-term borrowings and capital leases, is as follows:

2020	$	150,477	*
2021		490,957	
2022		353	
2023		313	
2024		258	
Thereafter		298,339	
	$	940,697	

* The Company maintains certain debt facilities with current maturity dates in fiscal 2020 that it intends and has the ability to extend beyond fiscal 2020 totaling $107,974. These balances have been classified as non-current on the Company's Consolidated Balance Sheet.

10. SHAREHOLDERS' EQUITY:

The authorized common stock of the Company consists of70,000,000 shares of Class A Common Stock,$1.00 par value.

The Company has a stock repurchase program. The buy-back program is designed to increase shareholder value, enlarge the Company's holdings of its common stock, and add to earnings per share. Repurchased shares may be retained in treasury, utilized for acquisitions, or reissued to employees or other purchasers, subject to the restrictions set forth in the Company's Restated Articles of Incorporation. Under the current authorization, the Company's Board of Directors has authorized the repurchase of a total of 5,000,000 shares of Matthews' common stock under the program, of which712,312 shares remain available for repurchase as ofSeptember 30, 2019.

11. SHARE-BASED PAYMENTS:

The Company maintains an equity incentive plan (the "2017 Equity Incentive Plan") that provides for grants of stock options, restricted shares, restricted share units, stock-based performance units and certain other types of stock-based awards. Under the 2017 Equity Incentive Plan, which has a ten-year term, the maximum number of shares available for grants or awards is an aggregate of 1,700,000. At September 30, 2019, there were 1,700,000 shares reserved for future issuance under the 2017 Equity Incentive Plan, including 262,000 restricted share units that were granted during fiscal2019. The 2017 Equity Incentive Plan is administered by the Compensation Committee of the Board of Directors.

With respect to outstanding restricted share grants, generally one-half of the shares vest on the third anniversary of the grant, one-quarter of the shares vest in one-third increments upon the attainment of pre-defined levels of adjusted earnings per share, and the remaining one-quarter of the shares vest in one-third increments upon attainment of pre-defined levels of appreciation in the market value of the Company's Class A Common Stock. Additionally, restricted shares cannot vest until the first anniversary of the grant date. Unvested restricted shares generally expire on the earlier of three or five years from the date of grant, upon employment termination, or within specified time limits following voluntary employment termination (with the consent of the Company), retirement or death. The Company issues restricted shares from treasury shares.

With respect to the restricted share unit grants, units generally vest on the third anniversary of the grant date. The number of units that vest depend on certain time and performance thresholds. Approximately forty percent of the shares vest based on time, while the remaining vest based on pre-defined performance thresholds. The Company issues common stock from treasury shares once vested.

11. SHARE-BASED PAYMENTS, (continued)

For the years ended September 30, 2019, 2018 and 2017, stock-based compensation cost totaled $7,729, $13,460 and $14,562, respectively. The years ended September 30, 2019, 2018, and 2017 included $1,849, $2,850, and $3,337 respectively, of stock-based compensation cost that was recognized at the time of grant for retirement-eligible employees. The associated future income tax benefit recognized was $1,535, $2,826 and $5,534 for the years ended September 30, 2019, 2018 and 2017, respectively.

The transactions for restricted stock for the year ended September 30, 2019 were as follows:

	Shares	Weighted-average Grant-date Fair Value
Non-vested at September 30, 2018	554,233	$ 55.71
Granted	262,200	42.21
Vested	(180,661)	57.93
Expired or forfeited	(20,137)	46.56
Non-vested at September 30, 2019	615,635	$ 49.61

As of September 30, 2019, the total unrecognized compensation cost related to unvested restricted stock was $7,482 which is expected to be recognized over a weighted-average period of 1.9 years.

The Company maintains the 2019 Director Fee Plan, the Amended and Restated 2014 Director Fee Plan and the 1994 Director Fee Plan (collectively, the "Director Fee Plans"). The 2019 Director Fee Plan was approved by the Company's shareholders at the 2019 Annual Meeting of Shareholders on February 21, 2019. There will be no further fees or share-based awards granted under the Amended and Restated 2014 Director Fee Plan and the 1994 Director Fee Plan. Under the 2019 Director Fee Plan, non-employee directors (except for the Chairman of the Board) each receive, as an annual retainer fee for fiscal 2019, either cash or shares of the Company's Class A Common Stock with a value equal to $85. The annual retainer fee for fiscal 2019 paid to a non-employee Chairman of the Board is $185. Where the annual retainer fee is provided in shares, each director may elect to be paid these shares on a current basis or have such shares credited to a deferred stock account as phantom stock, with such shares to be paid to the director subsequent to leaving the Board. The total number of shares of stock that have been authorized to be issued under the 2019 Director Fee Plan or credited to a deferred stock compensation account for subsequent issuance is 150,000 shares of Common Stock (subject to adjustment upon certain events such as stock dividends or stock splits). The value of deferred shares is recorded in other liabilities. A total of 25,682 shares had been deferred under the Director Fee Plans at September 30, 2019. Additionally, non-employee directors each receive an annual stock-based grant (non-statutory stock options, stock appreciation rights and/or restricted shares or units) with a value of $125 for fiscal year 2019. 196,266 restricted shares and restricted share units have been granted under the Director Fee Plans, 23,037 of which were issued under the 2019 Director Fee Plan. 34,542 restricted shares and restricted share units are unvested at September 30, 2019.

12. EARNINGS PER SHARE:

The information used to compute (loss) earnings per share attributable to Matthews' common shareholders was as follows:

	2019	2018	2017
Net (loss) income available to Matthews shareholders	$ (37,988)	$ 107,371	$ 74,368
Weighted-average shares outstanding (in thousands):			
Basic shares	31,416	31,674	32,240
Effect of dilutive securities	—	187	330
Diluted shares	31,416	31,861	32,570

Anti-dilutive securities excluded from the dilutive calculation were insignificant for the fiscal years ended September 30, 2019, 2018, and 2017.

(Dollar amounts in thousands, except per share data)

13. PENSION AND OTHER POSTRETIREMENT PLANS:

The Company provides defined benefit pension and other postretirement plans to certain employees. Effective January 1, 2014, the Company's principal retirement plan was closed to new participants. The following provides a reconciliation of benefit obligations, plan assets and funded status of the plans as of the Company's actuarial valuation as of September 30, 2019 and 2018:

	Pension		Other Postretirement	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation, beginning of year	$ 241,553	$ 259,672	$ 18,826	$ 20,316
Service cost	7,998	8,159	244	335
Interest cost	9,202	8,210	718	631
Actuarial loss (gain)	43,198	(15,229)	2,212	(907)
Exchange gain	(581)	(180)	—	—
Benefit payments	(11,413)	(19,079)	(1,048)	(1,549)
Benefit obligation, end of year	289,957	241,553	20,952	18,826
Change in plan assets:				
Fair value, beginning of year	158,662	155,634	—	—
Actual return	6,852	10,914	—	—
Benefit payments (1)	(11,413)	(19,079)	(1,048)	(1,549)
Employer contributions	1,212	11,193	1,048	1,549
Fair value, end of year	155,313	158,662	—	—
Funded status	(134,644)	(82,892)	(20,952)	(18,828)
Unrecognized actuarial loss (gain)	95,741	53,405	(106)	(2,376)
Unrecognized prior service cost	(367)	(552)	(330)	(525)
Net amount recognized	$ (39,270)	$ (30,039)	$ (21,388)	$ (21,729)
Amounts recognized in the consolidated balance sheet:				
Current liability	$ (882)	$ (857)	$ (989)	$ (1,075)
Noncurrent benefit liability	(133,762)	(82,035)	(19,963)	(17,753)
Accumulated other comprehensive loss (income)	95,374	52,853	(436)	(2,901)
Net amount recognized	$ (39,270)	$ (30,039)	$ (21,388)	$ (21,729)
Amounts recognized in accumulated other comprehensive loss (income):				
Net actuarial loss (income)	$ 95,741	$ 53,405	$ (106)	$ (2,376)
Prior service cost	(367)	(552)	(330)	(525)
Net amount recognized	$ 95,374	$ 52,853	$ (436)	$ (2,901)

(1) Pension benefit payments in fiscal 2018 included approximately $6,800 of lump sum distributions that were made to certain terminated vested employees as settlements of the employees' pension obligations. These distributions did not meet the threshold to qualify as settlements under U.S. GAAP and therefore, no unamortized actuarial losses were recognized in the Statements of Income upon completion of the lump sum distributions.

(Dollar amounts in thousands, except per share data)

13. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

Based upon actuarial valuations performed as of September 30, 2019 and 2018, the accumulated benefit obligation for the Company's defined benefit pension plans was $270,140 and $224,265 at September 30, 2019 and 2018, respectively, and the projected benefit obligation for the Company's defined benefit pension plans was $289,957 and $241,553 at September 30, 2019 and 2018, respectively.

Net periodic pension and other postretirement benefit cost for the plans included the following:

	Pension			Other Postretirement		
	2019	2018	2017	2019	2018	2017
Service cost	$ 7,998	$ 8,159	$ 8,553	$ 244	$ 335	$ 392
Interest cost *	9,202	8,210	7,362	718	631	626
Expected return on plan assets *	(10,304)	(10,136)	(9,249)	—	—	—
Amortization:						
Prior service cost	(186)	(138)	(181)	(195)	(195)	(195)
Net actuarial loss *	4,245	7,018	10,034	(59)	—	—
Net benefit cost	$ 10,955	$ 13,113	$ 16,519	$ 708	$ 771	$ 823

* Non-service components of pension and postretirement expense are included in other income (deductions), net.

Matthews has elected to utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic benefit cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows.

Benefit payments under the Company's principal retirement plan are made from plan assets, while benefit payments under the supplemental retirement plan and postretirement benefit plan are made from the Company's operating cash. Under I.R.S. regulations, the Company was not required to make any significant contributions to its principal retirement plan in fiscal 2019. The Company is required to make contributions of approximately $4,333 to its principal retirement plan in fiscal 2020.

Contributions made in fiscal 2019 are as follows:

Contributions	Pension	Other Postretirement
Supplemental retirement plan	$ 793	$ —
Other retirement plans	419	—
Other postretirement plan	—	1,048

Amounts of AOCI expected to be recognized in net periodic benefit costs in fiscal 2020 include:

	Pension Benefits	Other Postretirement Benefits
Net actuarial loss	$ 9,790	$ —
Prior service cost	(186)	(94)

(Dollar amounts in thousands, except per share data)

13. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

The weighted-average assumptions in the following table represent the rates used to develop the actuarial present value of the projected benefit obligation for the year listed and also the net periodic benefit cost for the following year. The measurement date of annual actuarial valuations for the Company's principal retirement and other postretirement benefit plans was September 30, for fiscal 2019, 2018 and 2017. The weighted-average assumptions for those plans were:

	Pension			Other Postretirement		
	2019	2018	2017	2019	2018	2017
Discount rate	3.13%	4.21%	3.76%	3.10%	4.19%	3.72%
Return on plan assets	6.75%	6.75%	6.75%	—	—	—
Compensation increase	3.50%	3.50%	3.50%	—	—	—

In October 2014, the Society of Actuaries' Retirement Plans Experience Committee ("RPEC") released new mortality tables known as RP 2014. Each year, RPEC releases an update to the mortality improvement assumption that was released with the RP 2014 tables. The Company considered the RPEC mortality and mortality improvement tables and performed a review of its own mortality history to assess the appropriateness of the RPEC tables for use in generating financial results. In fiscal years 2019, 2018 and 2017, the Company elected to value its principal retirement and other postretirement benefit plan liabilities using the base RP 2014 mortality table and a slightly modified fully generational mortality improvement assumption. The revised assumption uses the most recent RPEC mortality improvement table for all years where the RPEC tables are based on finalized data, and the most recently published Social Security Administration Intermediate mortality improvement for subsequent years.

The underlying basis of the investment strategy of the Company's defined benefit plans is to ensure the assets are invested to achieve a positive rate of return over the long term sufficient to meet the plans' actuarial interest rate and provide for the payment of benefit obligations and expenses in perpetuity in a secure and prudent fashion, maintain a prudent risk level that balances growth with the need to preserve capital, diversify plan assets so as to minimize the risk of large losses or excessive fluctuations in market value from year to year, achieve investment results over the long term that compare favorably with other pension plans and appropriate indices. The Company's investment policy, as established by the Company's pension board, specifies the types of investments appropriate for the plans, asset allocation guidelines, criteria for the selection of investment managers, procedures to monitor overall investment performance as well as investment manager performance. It also provides guidelines enabling plan fiduciaries to fulfill their responsibilities.

The Company's defined benefit pension plans' weighted-average asset allocation atSeptember 30, 2019 and 2018 and weighted-average target allocation were as follows:

	Plan Assets at		Target
Asset Category	2019	2018	Allocation*
Equity securities	$ 105,297	$ 92,745	65%
Fixed income, cash and cash equivalents	39,156	44,250	25%
Other investments	10,860	21,667	10%
	$ 155,313	$ 158,662	100%

* Target allocation relates to the Company's primary defined benefit pension plan as of September 30, 2019.

Based on an analysis of the historical and expected future performance of the plan's assets and information provided by its independent investment advisor, the Company set the long-term rate of return assumption for its primary defined benefit pension plans' assets at 6.75% in 2019 for purposes of determining pension cost and funded status under current guidance. The Company's discount rate assumption used in determining the present value of the projected benefit obligation is based upon published indices.

The Company categorizes plan assets within a three level fair value hierarchy (see Note 5 for a further discussion of the fair value hierarchy). The valuation methodologies used to measure the fair value of pension assets, including the level in the fair value hierarchy in which each type of pension plan asset is classified as follows.

Equity securities consist of direct investments in the stocks of publicly traded companies. Such investments are valued based on the closing price reported in an active market on which the individual securities are traded. As such, the direct investments are classified as Level 1.

(Dollar amounts in thousands, except per share data)

13. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

Mutual funds are valued at the closing price of shares held by the Plan at year end. As such, these mutual fund investments are classified as Level 1.

Fixed income securities consist of publicly traded fixed interest obligations (primarily U.S. government notes and corporate and agency bonds). Such investments are valued through consultation and evaluation with brokers in the institutional market using quoted prices and other observable market data. As such, U.S. government notes are included in Level 1, and the remainder of the fixed income securities are included in Level 2.

Cash and cash equivalents consist of direct cash holdings and short-term money market mutual funds. These values are valued based on cost, which approximates fair value, and as such, are classified as Level 1.

Other investments consist primarily of real estate, commodities, private equity holdings and hedge fund investments. These holdings are valued by investment managers based on the most recent information available. The valuation information used by investment managers may not be readily observable. As such, these investments are classified as Level 3.

The Company's defined benefit pension plans' asset categories atSeptember 30, 2019 and 2018 were as follows:

	September 30, 2019			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Equity securities - stocks	$ 54,985	$ —	$ —	$ 54,985
Equity securities - mutual funds	50,312	—	—	50,312
Fixed income securities	15,829	18,968	—	34,797
Cash and cash equivalents	4,359	—	—	4,359
Other investments	—	—	10,860	10,860
Total	$ 125,485	$ 18,968	$ 10,860	$ 155,313

	September 30, 2018			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Equity securities - stocks	$ 46,628	$ —	$ —	$ 46,628
Equity securities - mutual funds	46,117	—	—	46,117
Fixed income securities	26,789	14,785	—	41,574
Cash and cash equivalents	2,676	—	—	2,676
Other investments	11,552	—	10,115	21,667
Total	$ 133,762	$ 14,785	$ 10,115	$ 158,662

Changes in the fair value of Level 3 assets at September 30, 2019 and 2018 are summarized as follows:

Asset Category	Fair Value, Beginning of Period	Acquisitions	Dispositions	Realized Gains	Unrealized Gains (Losses)	Fair Value, End of Period
Other investments:						
Fiscal Year Ended:						
September 30, 2019	$ 10,115	$ 4,162	$ (2,786)	$ 685	$ (1,316)	$ 10,860
September 30, 2018	9,480	—	(149)	261	523	10,115

(Dollar amounts in thousands, except per share data)

13. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

Benefit payments expected to be paid are as follows:

Years ending September 30:	Pension Benefits	Other Postretirement Benefits
2020	$ 10,733	$ 989
2021	11,057	1,021
2022	12,360	1,051
2023	12,690	1,082
2024	14,038	1,127
2025-2029	75,514	5,832
	$ 136,392	$ 11,102

For measurement purposes, a rate of increase of7.3% in the per capita cost of health care benefits was assumed for2020; the rate was assumed to decrease gradually to 4.0% for 2070 and remain at that level thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported. An increase in the assumed health care cost trend rates by one percentage point would have increased the accumulated postretirement benefit obligation as of September 30, 2019 by $718 and the aggregate of the service and interest cost components of net periodic postretirement benefit cost for the year then ended by $39. A decrease in the assumed health care cost trend rates by one percentage point would have decreased the accumulated postretirement benefit obligation as of September 30, 2019 by $629 and the aggregate of the service and interest cost components of net periodic postretirement benefit cost for the year then ended by $34.

The Company sponsors defined contribution plans for hourly and salary employees. The expense associated with the contributions made to these plans was $8,176, $8,685, and $8,620 for the fiscal years endedSeptember 30, 2019, 2018 and 2017, respectively.

(Dollar amounts in thousands, except per share data)

14. ACCUMULATED OTHER COMPREHENSIVE INCOME:

The changes in AOCI by component, net of tax, for the years endedSeptember 30, 2019, 2018, and 2017 were as follows:

	Postretirement Benefit Plans	Currency Translation Adjustment	Derivatives	Total
Attributable to Matthews:				
Balance, September 30, 2016	$ (56,050)	$ (122,259)	$ (3,559)	$ (181,868)
OCI before reclassification	6,536	9,352	7,043	22,931
Amounts reclassified from AOCI	5,891 (a)	—	(1,069) (b)	4,822
Net current-period OCI	12,427	9,352	5,974	27,753
Balance, September 30, 2017	$ (43,623)	$ (112,907)	$ 2,415	$ (154,115)
OCI before reclassification	10,584	(22,053)	6,095	(5,374)
Amounts reclassified from AOCI	5,047 (a)	—	(1,042) (b)	4,005
Net current-period OCI	15,631	(22,053)	5,053	(1,369)
Reclassification of AOCI tax effects	(9,884) (c)	—	1,070 (c)	(8,814)
Balance, September 30, 2018	$ (37,876)	$ (134,960)	$ 8,538	$ (164,298)
OCI before reclassification	(36,784)	(21,254)	(6,540)	(64,578)
Amounts reclassified from AOCI	2,917 (a)	—	(2,402) (b)	515
Net current-period OCI	(33,867)	(21,254)	(8,942)	(64,063)
Balance, September 30, 2019	$ (71,743)	$ (156,214)	$ (404)	$ (228,361)
Attributable to noncontrolling interest:				
Balance, September 30, 2016	$ —	$ 277	$ —	$ 277
OCI before reclassification	—	119	—	119
Net current-period OCI	—	119	—	119
Balance, September 30, 2017	$ —	$ 396	$ —	$ 396
OCI before reclassification	—	71	—	71
Net current-period OCI	—	71	—	71
Balance, September 30, 2018	$ —	$ 467	$ —	$ 467
OCI before reclassification	—	(92)	—	(92)
Net current-period OCI	—	(92)	—	(92)
Balance, September 30, 2019	$ —	$ 375	$ —	$ 375

(a) Amounts were included in net periodic benefit cost for pension and other postretirement benefit plans (see Note 13).
(b) Amounts were included in interest expense in the periods the hedged item affected earnings (see Note 9).
(c) Amounts were reclassified from AOCI to retained earnings through adoption of ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220)* (see Note 3).

(Dollar amounts in thousands, except per share data)

14. ACCUMULATED OTHER COMPREHENSIVE INCOME, (continued)

Accumulated other comprehensive loss at September 30, 2019 and 2018 consisted of the following:

	2019	2018
Cumulative foreign currency translation	$ (156,214)	$ (134,960)
Fair value of derivatives, net of tax of $131 and $2,771, respectively	(404)	8,538
Minimum pension liabilities, net of tax of $23,195 and $12,076, respectively	(71,743)	(37,876)
	$ (228,361)	$ (164,298)

Reclassifications out of AOCI for the years ended September 30, 2019, 2018 and 2017 were as follows:

Details about AOCI Components	September 30, 2019	September 30, 2018	September 30, 2017	Affected line item in the Statement of Income
Postretirement benefit plans				
Prior service (cost) credit	$ 381 (a)	$ 333	$ 376	
Actuarial losses	(4,245) (a)	(7,018)	(10,034)	
	(3,864) (b)	(6,685)	(9,658)	Income before income tax
	947	1,638	3,767	Income taxes
	$ (2,917)	$ (5,047)	$ (5,891)	Net income
Derivatives				
Interest rate swap contracts	$ 3,181	$ 1,380	$ 1,752	Interest expense
	3,181 (b)	1,380	1,752	Income before income tax
	(779)	(338)	(683)	Income taxes
	$ 2,402	$ 1,042	$ 1,069	Net income

(a) Prior service cost amounts are included in the computation of pension and other postretirement benefit expense, which is reported in both cost of goods sold and selling and administrative expenses. Actuarial losses are reported in other income (deductions), net. For additional information, see Note 13.

(b) For pre-tax items, positive amounts represent income and negative amounts represent expense.

15. INCOME TAXES:

The income tax provision (benefit) consisted of the following:

	2019	2018	2017
Current:			
Federal	$ 3,308	$ (2,577)	$ 1,542
State	2,232	1,051	628
Foreign	2,049	15,533	10,459
	7,589	14,007	12,629
Deferred:			
Federal	(5,472)	(24,094)	11,887
State	(2,782)	1,315	905
Foreign	1,471	(346)	(3,067)
	(6,783)	(23,125)	9,725
Total	$ 806	$ (9,118)	$ 22,354

The U.S. Tax Cuts and Jobs Act (the “Act”) was enacted on December 22, 2017. The Act reduced the U.S. federal corporate tax rate from 35.0% to 21.0% effective January 1, 2018, which resulted in a blended U.S. statutory tax rate of 24.5% for the Company

(Dollar amounts in thousands, except per share data)

15. INCOME TAXES, (continued)

in fiscal 2018, and a 21.0% rate for the Company in 2019. The Act also required a one-time transition tax on earnings of certain foreign subsidiaries that were previously deferred, and created new taxes on certain foreign-sourced earnings.

Foreign tax effects: The Company completed the estimate for its one-time transition tax for all of its foreign subsidiaries, resulting in a decrease in income tax expense of $300 for the year ended September 30, 2019. The one-time transition tax was calculated using an estimate of the Company's total post-1986 earnings and profits ("E&P") that were previously deferred from U.S. income taxes.

Global intangible low taxed income ("GILTI"): The Act also created a new requirement that certain income earned by foreign subsidiaries must be included currently in the gross income of the U.S. shareholder. Under U.S. GAAP, the Company is permitted to make an accounting policy election to either treat taxes due on future inclusions in U.S. taxable income related to GILTI as a current-period expense when incurred or to factor such amounts into the Company's measurement of its deferred taxes. The Company has made the election to treat taxes due on future inclusions related to GILTI as current period expense. The Company was able to make reasonable estimates to calculate a provision that is included in the current period expense.

The reconciliation of the federal statutory tax rate to the consolidated effective tax rate was as follows:

	2019	2018	2017
Federal statutory tax rate	21.0 %	24.5 %	35.0 %
Effect of state income taxes, net of federal deduction	2.7 %	2.2 %	1.4 %
Foreign statutory taxes compared to federal statutory rate	(0.8)%	1.4 %	(7.2)%
Share-based compensation	(3.1)%	(0.6)%	(1.2)%
U.S. manufacturing incentive	— %	(1.3)%	(1.8)%
Tax credits	4.9 %	(2.7)%	(2.6)%
Tax basis difference	9.8 %	(1.5)%	— %
Transition tax	— %	9.0 %	— %
U.S. statutory tax rate change on temporary differences	— %	(38.7)%	— %
Goodwill write-down	(40.2)%	— %	— %
Other	3.6 %	(1.6)%	(0.4)%
Effective tax rate	(2.1)%	(9.3)%	23.2 %

The Company's consolidated income taxes for the year ended September 30, 2019 were a charge of $806, compared to income tax benefit of $9,118 for fiscal 2018. The increase in the fiscal 2019 effective tax rate, compared to fiscal 2018, primarily reflected the fiscal 2018 U.S. deferred tax benefit from the Act enactment. For 2019 the Company's effective tax rate was unfavorable compared to the U.S. federal statutory rate primarily due to the 2019 goodwill write-down, the majority of which did not have an accompanying tax benefit. The 2019 effective tax rate benefited from research and development and foreign tax credits and the elimination, achieved through tax planning, of a taxable basis difference.

The Company's foreign subsidiaries had income before income taxes for the years ended September 30, 2019, 2018 and 2017 of approximately $11,042, $56,424 and $24,118, respectively. Deferred income taxes have not been provided on undistributed earnings of foreign subsidiaries since they have either been previously taxed, or are now exempt from tax, under the U.S. Tax Cuts and Jobs Act, and such earnings are considered to be reinvested indefinitely in foreign operations. At September 30, 2019, undistributed earnings of foreign subsidiaries for which deferred income taxes have not been provided approximated $256,695.

(Dollar amounts in thousands, except per share data)

15. INCOME TAXES, (continued)

The components of deferred tax assets and liabilities atSeptember 30, 2019 and 2018 are as follows:

	2019	2018
Deferred tax assets:		
Pension and postretirement benefits	$ 37,587	$ 24,597
Accruals and reserves not currently deductible	10,400	9,596
Income tax credit carryforward	3,204	3,216
Operating and capital loss carryforwards	21,896	21,858
Stock options	4,778	5,157
Other	5,381	3,963
Total deferred tax assets	83,246	68,387
Valuation allowances	(15,352)	(15,188)
Net deferred tax assets	67,894	53,199
Deferred tax liabilities:		
Depreciation	(24,792)	(16,156)
Unrealized gains and losses	(565)	(8,637)
Goodwill and intangible assets	(138,952)	(147,571)
Other	(1,035)	(517)
	(165,344)	(172,881)
Net deferred tax liability	$ (97,450)	$ (119,682)

At September 30, 2019, the Company had foreign net operating loss carryforwards of $65,002 and foreign capital loss carryforwards of $19,223. The Company has recorded deferred tax assets of $4,033 for state net operating loss carryforwards, which will be available to offset future income tax liabilities. If not used, state net operating losses will begin to expire in 2020. Certain of the foreign net operating losses begin to expire in 2020 while the majority of the Company's foreign net operating losses have no expiration period. Certain of these carryforwards are subject to limitations on use due to tax rules affecting acquired tax attributes, loss sharing between group members, and business continuation. Therefore, the Company has established tax-effected valuation allowances against these tax benefits in the amount of $15,352 at September 30, 2019.

Changes in the total amount of gross unrecognized tax benefits (excluding penalties and interest) are as follows:

	2019	2018	2017
Balance, beginning of year	$ 14,827	$ 7,968	$ 13,820
Increases for tax positions of prior years	—	7,886	839
Decreases for tax positions of prior years	—	—	(5,890)
Increases based on tax positions related to the current year	1,420	882	378
Decreases due to lapse of statute of limitation	(721)	(1,909)	(1,179)
Balance, end of year	$ 15,526	$ 14,827	$ 7,968

The Company had unrecognized tax benefits of $11,417 at September 30, 2019, which would impact the annual effective tax rate. It is reasonably possible that the amount of unrecognized tax benefits could decrease by approximately $4,910 in the next 12 months primarily due to the completion of audits and the expiration of the statute of limitation related to specific tax positions.

The Company classifies interest and penalties on tax uncertainties as a component of the provision for income taxes. Total penalties and interest accrued were $2,880 and $2,229 at September 30, 2019 and 2018, respectively. These accruals may potentially be applicable in the event of an unfavorable outcome of uncertain tax positions.

(Dollar amounts in thousands, except per share data)

15. INCOME TAXES, (continued)

The Company is currently under examination in several tax jurisdictions and remains subject to examination until the statute of limitation expires for those tax jurisdictions.

As of September 30, 2019, the tax years that remain subject to examination by major jurisdiction generally are:

United States - Federal	2015 and forward
United States - State	2015 and forward
Canada	2015 and forward
Germany	2015 and forward
United Kingdom	2018 and forward
Australia	2015 and forward
Singapore	2014 and forward

16. COMMITMENTS AND CONTINGENT LIABILITIES:

The Company operates various production, warehouse and office facilities and equipment under operating lease agreements. Annual rentals under these and other operating leases were $38,015, $38,934 and $36,400 in fiscal 2019, 2018 and 2017, respectively. Future minimum rental commitments under non-cancelable operating lease arrangements for fiscal years 2020 through 2024 are $28,557, $21,567, $14,755, $9,394 and $6,694, respectively.

The Company is party to various legal proceedings, the eventual outcome of which are not predictable. Although the ultimate disposition of these proceedings is not presently determinable, management is of the opinion that they should not result in liabilities in an amount which would materially affect the Company's consolidated financial position, results of operations or cash flows.

The Company has employment agreements with certain employees, the terms of which expire at various dates between fiscal 2020 and 2023. The agreements generally provide for base salary and bonus levels and include non-compete provisions. The aggregate commitment for salaries under these agreements at September 30, 2019 was $2,349.

The Company is involved in a dispute with a customer related to a project in Saudi Arabia. It is possible the resolution of this matter could have an unfavorable financial impact on Matthews’ results of operations. See further discussion in Note 9.

17. ENVIRONMENTAL MATTERS:

The Company's operations are subject to various federal, state and local laws and regulations relating to the protection of the environment. These laws and regulations impose limitations on the discharge of materials into the environment and require the Company to obtain and operate in compliance with conditions of permits and other government authorizations. As such, the Company has developed environmental, health and safety policies and procedures that include the proper handling, storage and disposal of hazardous materials.

The Company is party to various environmental matters. These include obligations to investigate and mitigate the effects on the environment of non-operating former manufacturing sites acquired through corporate acquisitions and the disposal of certain materials at non-owned waste management facilities. The Company is currently performing environmental assessments and remediation at these sites, as appropriate.

At September 30, 2019, an accrual of $1,400 had been recorded for environmental remediation (of which $583 was classified in other current liabilities), related to the non-operating former manufacturing sites representing management's best estimate of the probable and reasonably estimable costs of known remediation obligations for one of the Company's subsidiaries. The accrual does not consider the effects of inflation and anticipated expenditures are not discounted to their present value. While final resolution of these contingencies could result in costs different than current accruals, management believes the ultimate outcome will not have a significant effect on the Company's consolidated results of operations or financial position.

(Dollar amounts in thousands, except per share data)

18. SUPPLEMENTAL CASH FLOW INFORMATION:

Changes in working capital items as presented in the Consolidated Statements of Cash Flows consisted of the following:

	2019	2018	2017
Current assets:			
Accounts receivable	$ 8,779	$ (790)	$ (7,045)
Inventories	830	(2,869)	(2,289)
Other current assets	10,317	(16,293)	4,447
	19,926	(19,952)	(4,887)
Current liabilities:			
Trade accounts payable	3,715	2,516	5,672
Accrued compensation	(8,832)	(10,940)	(2,469)
Accrued income taxes	(5,416)	(9,973)	5,054
Other current liabilities	(21,875)	28,415	2,414
	(32,408)	10,018	10,671
Net change	$ (12,482)	$ (9,934)	$ 5,784

19. SEGMENT INFORMATION:

The Company manages its businesses under three segments: SGK Brand Solutions, Memorialization and Industrial Technologies. The SGK Brand Solutions segment consists of brand management, pre-media services, printing plates and cylinders, engineered products, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries. The Memorialization segment consists primarily of bronze and granite memorials and other memorialization products, caskets and cremation equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment includes marking and coding equipment and consumables, industrial automation products and order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products.

Beginning in fiscal 2019, the Company changed its primary measure of segment profitability from operating profit to adjusted earnings before interest, income taxes, depreciation and amortization ("adjusted EBITDA"). Adjusted EBITDA is defined by the Company as earnings before interest, income taxes, depreciation, amortization and certain non-cash and/or non-recurring items that do not contribute directly to management's evaluation of its operating results. These items include stock-based compensation, the non-service portion of pension and postretirement expense, acquisition costs, ERP integration costs, and strategic initiatives and other charges. This presentation is consistent with how the Company's chief operating decision maker (the "CODM") evaluates the results of operations and makes strategic decisions about the business. For these reasons, the Company believes that adjusted EBITDA represents the most relevant measure of segment profit and loss.

In addition, the CODM manages and evaluates the operating performance of the segments, as described above, on a pre-corporate cost allocation basis. Accordingly, for segment reporting purposes, the Company has discontinued allocating corporate costs to its reportable segments beginning in fiscal 2019. Corporate costs include management and administrative support to the Company, which consists of certain aspects of the Company's executive management, legal, compliance, human resources, information technology (including operational support) and finance departments. These costs are included within "Corporate and Non-Operating" in the following table to reconcile to consolidated adjusted EBITDA and are not considered a separate reportable segment. Management does not allocate non-operating items such as investment income, other income (deductions), net and noncontrolling interest to the segments. The accounting policies of the segments are the same as those described in Summary of Significant Accounting Policies (Note 2). Intersegment sales are accounted for at negotiated prices. Segment assets include those assets that are used in the Company's operations within each segment. Assets classified under "Corporate and Non-Operating" principally consist of cash and cash equivalents, investments, deferred income taxes and corporate headquarters' assets. Long-lived assets include property, plant and equipment (net of accumulated depreciation), goodwill, and other intangible assets (net of accumulated amortization).

Information about the Company's segments follows: (Segment financial information for the fiscal years ended September 30, 2018 and 2017 has been revised to present the prior period information on a comparable basis.)

(Dollar amounts in thousands, except per share data)

19. SEGMENT INFORMATION, (continued)

	SGK Brand Solutions	Memorialization	Industrial Technologies	Corporate and Non-Operating	Consolidated
Sales to external customers:					
2019	$ 743,869	$ 636,892	$ 156,515	$ —	$ 1,537,276
2018	805,274	631,392	165,914	—	1,602,580
2017	770,181	615,882	129,545	—	1,515,608
Intersegment sales:					
2019	703	25	48	—	776
2018	310	2	9	—	321
2017	356	—	2	—	358
Depreciation and amortization:					
2019	59,684	19,731	6,195	5,183	90,793
2018	46,300	20,005	5,796	4,873	76,974
2017	41,941	19,808	2,863	3,369	67,981
Adjusted EBITDA:					
2019	119,493	134,286	24,082	(56,989)	220,872
2018	150,233	145,487	25,864	(66,470)	255,114
2017	144,783	139,192	18,481	(63,773)	238,683
Total assets:					
2019	1,106,276	830,377	191,533	62,417	2,190,603
2018	1,285,053	814,800	196,855	61,036	2,357,744
2017	1,276,295	741,148	161,472	65,734	2,244,649
Capital expenditures:					
2019	22,310	9,352	2,382	3,644	37,688
2018	22,133	15,513	2,577	2,977	43,200
2017	22,941	8,078	4,622	9,294	44,935

(Dollar amounts in thousands, except per share data)

19. SEGMENT INFORMATION, (continued)

A reconciliation of adjusted EBITDA to net income follows:

	2019	2018	2017
Total Adjusted EBITDA	220,872	255,114	238,683
Acquisition costs [1]**	$ (10,872)	$ (10,918)	$ (17,722)
ERP integration costs [2]**	(7,508)	(10,864)	(8,026)
Strategic initiatives and other charges [3]**	(13,449)	(5,266)	(9,209)
Loss recoveries, net of costs [4]	—	—	10,683
Joint Venture depreciation, amortization and interest expense [5]	(1,514)	—	—
Goodwill write-down [6]	(77,572)	—	—
Net realized (losses) gains on divestitures and asset dispositions:			
Loss on divestitures [7]	(6,469)	—	—
Realized (loss) gain on cost-method investments [8]	(4,731)	3,771	—
Net gains from the sale of buildings and vacant properties [9]	7,347	—	—
Stock-based compensation	(7,729)	(13,460)	(14,562)
Non-service pension and postretirement expense [10]	(3,802)	(5,723)	(8,773)
Depreciation and amortization *	(90,793)	(76,974)	(67,981)
Interest expense	(40,962)	(37,427)	(26,371)
Net loss attributable to noncontrolling interests	(901)	(260)	(435)
(Loss) income before income taxes	$ (38,083)	97,993	96,287
Income tax (provision) benefit	(806)	9,118	(22,354)
Net (loss) income	(38,889)	107,111	73,933

[1] Includes certain non-recurring costs associated with recent acquisition activities.

[2] Represents costs associated with global ERP system integration efforts.

[3] Includes certain non-recurring costs primarily associated with productivity and cost-reduction initiatives intended to result in improved operating performance, profitability and working capital levels.

[4] Represents loss recoveries, net of related costs, related to the theft of funds by a former employee.

[5] Represents the Company's portion of depreciation, intangible amortization and interest expense incurred by non-consolidated subsidiaries accounted for as equity-method investments within the Memorialization segment.

[6] Represents the goodwill write-down for a reporting unit within the SGK Brand Solutions segment.

[7] Represents a loss on the sale of a controlling interest in a subsidiary and divestiture of a business within the Memorialization segment.

[8] Includes gains/losses related to cost-method investments, and related assets, within SGK Brand Solutions and Memorialization segments.

[9] Includes significant building and vacant property transactions resulting in a gain of $8,663 within the Industrial Technologies segment and losses of $915 and $401 within the SGK Brand Solutions and Memorialization segments, respectively.

[10] Non-service pension and postretirement expense includes interest cost, expected return on plan assets and amortization of actuarial gains and losses. These benefit cost components are excluded from adjusted EBITDA since they are primarily influenced by external market conditions that impact investment returns and interest (discount) rates. The service cost and prior service cost components of pension and postretirement expense are included in the calculation of adjusted EBITDA, since they are considered to be a better reflection of the ongoing service-related costs of providing these benefits. Please note that GAAP pension and postretirement expense or the adjustment above are not necessarily indicative of the current or future cash flow requirements related to these employee benefit plans.

* Depreciation and amortization was $59,684, $46,300, and $41,941 for the SGK Brand Solutions segment, $19,731, $20,005, and $19,808 for the Memorialization segment, $6,195, $5,796, and $2,863 for the Industrial Technologies segment, and $5,183, $4,873, and $3,369 for Corporate and Non-Operating, for the fiscal years ended September 30, 2019, 2018, and 2017, respectively.

** Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $8,903, $11,044, and $14,453 for the SGK Brand Solutions segment, $3,073, $613, and $612 for the Industrial Technologies segment, and $19,853, $13,961, and $19,050 for Corporate and Non-Operating, for the fiscal years ended September 30, 2019, 2018, and 2017, respectively. Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $1,430, and $842 for the Memorialization segment for the fiscal years ended September 30, 2018, and 2017, respectively.

(Dollar amounts in thousands, except per share data)

19. SEGMENT INFORMATION, (continued)

Information about the Company's operations by geographic area follows:

	North America	Central and South America	Europe	Australia	Asia	Consolidated
Sales to external customers:						
2019	$ 1,038,268	$ 5,853	$ 426,253	$ 20,885	$ 46,017	$ 1,537,276
2018	1,066,367	6,171	456,078	23,276	50,688	1,602,580
2017	1,043,924	6,518	396,242	21,507	47,417	1,515,608
Long-lived assets:						
2019	1,047,505	15,585	342,802	21,278	57,729	1,484,899
2018	1,182,250	16,535	365,455	23,037	58,302	1,645,579
2017	1,069,862	13,882	382,940	24,887	66,138	1,557,709

20. ACQUISITIONS AND DIVESTITURES:

Fiscal 2019:

On November 1, 2018 the Company acquired 80% ownership of Frost Converting Systems, Inc. (“Frost”) for a purchase price of approximately $7,162 (net of cash acquired and holdback amounts, subject to working capital adjustments). Frost is a leading global supplier of high-performance rotary dies for embossing, creasing and cutting of paperboard packaging and is included in the Company's SGK Brand Solutions segment. The Company finalized the allocation of the purchase price related to the Frost acquisition in the fourth quarter of fiscal 2019, resulting in an immaterial adjustment to certain working capital accounts.

During fiscal 2019, the Company completed small acquisitions in the Memorialization segment for a combined purchase price of $3,094 (net of cash acquired and holdback amounts, subject to working capital adjustments). The preliminary purchase price allocations are not finalized as of September 30, 2019 and are subject to changes as the Company obtains additional information related to fixed assets, intangible assets, and other assets and liabilities.

During fiscal 2019, the Company completed the sale of a 51% ownership interest in a small Memorialization business. Net proceeds from this sale totaled approximately $8,254, and the transaction resulted in the recognition of a $5,587 loss, which is included as a component of administrative expenses for the year ended September 30, 2019. Immediately following the transaction, the Company retained a non-controlling interest in this business, which will be accounted for as an equity-method investment. The Company also divested of a small, fully owned Memorialization business, resulting in the recognition of a $882 loss, which is included as a component of administrative expenses for the year ended September 30, 2019.

Fiscal 2018:

On February 1, 2018, the Company acquired certain net assets of Star Granite and Bronze International, Inc. ("Star Granite") for a total purchase price of $35,961, consisting of cash of $30,961 (net of cash acquired and holdback amounts) and shares of Matthews common stock valued at $5,000. Star Granite manufactures and distributes granite and other memorialization products to cemetery and other customers across the United States and is included in the Company's Memorialization segment. Annual sales for this business were approximately $31,000 prior to the acquisition. The Company finalized the allocation of the purchase price related to the Star Granite acquisition in the second quarter of fiscal 2019, resulting in an immaterial adjustment to certain working capital accounts.

On November 28, 2017, the Company acquired Compass Engineering Group, Inc. ("Compass") for $51,887 (net of cash acquired). Compass provides high-quality material handling control solutions and is included in the Company's Industrial Technologies segment. Annual sales for this business were approximately $24,000 prior to the acquisition. The Company finalized the allocation of purchase price related to the Compass acquisition in the fourth quarter of fiscal 2018, resulting in an immaterial adjustment to certain working capital and intangible asset amounts.

20. ACQUISITIONS AND DIVESTITURES, (continued)

During fiscal 2018, the Company completed several additional smaller acquisitions for an aggregate purchase price of $39,465 (net of cash acquired and holdback amounts). These additional acquisitions strengthen the Company's operations across the SGK Brand Solutions and Memorialization segments. The Company finalized the allocation of purchase price related to certain of these acquisitions in the fourth quarter of fiscal 2018, resulting in an immaterial adjustment to certain working capital amounts. The Company finalized the allocation of the purchase price related to the remaining acquisitions in the third quarter of 2019, resulting in an immaterial adjustment to certain working capital accounts.

Fiscal 2017:

On March 1, 2017, the Company acquired GJ Creative Limited ("Equator") for £30.5 million ($37,596) (net of cash acquired). Equator provides design expertise capable of taking brands from creation to shelf under one roof, and is included in the Company's SGK Brand Solutions segment. Annual sales for this business were approximately $30,000 prior to the acquisition. The Company finalized the allocation of purchase price related to the Equator acquisition in the second quarter of fiscal 2018, resulting in an immaterial adjustment to certain working capital and intangible asset amounts.

On February 28, 2017, the Company acquired certain net assets of RAF Technology, Inc. ("RAF") for $8,717 (net of cash acquired). RAF is a global leader in pattern and optical character recognition software, and is included in the Company's Industrial Technologies segment. The Company finalized the allocation of purchase price related to the RAF acquisition in the fourth quarter of fiscal 2017, resulting in an immaterial adjustment to certain working capital accounts.

On January 13, 2017, the Company acquired VCG (Holdings) Limited ("VCG") for £8.8 million ($10,695) (net of cash acquired). VCG is a leading graphics, plate-making, and creative design company and is included in the Company's SGK Brand Solutions segment. The Company finalized the allocation of purchase price related to the VCG acquisition in the first quarter of fiscal 2018, resulting in an immaterial adjustment to certain working capital and intangible asset amounts.

On January 3, 2017, the Company acquired A. + E. Ungricht GmbH + Co KG ("Ungricht") for €24.0 million ($25,185) (net of cash acquired). Ungricht is a leading European provider of pre-press services and gravure printing forms, located in Germany, and is included in the Company's SGK Brand Solutions segment. Annual sales for this business were approximately $35,000 prior to the acquisition. The Company finalized the allocation of purchase price related to the Ungricht acquisition in the first quarter of fiscal 2018, resulting in an immaterial adjustment to certain working capital and intangible asset amounts.

On November 30, 2016, the Company acquired Guidance Automation Limited ("Guidance") for £8.0 million ($9,974) (net of cash acquired). Guidance provides technological solutions for autonomous warehouse vehicles and is included in the Company's Industrial Technologies segment. The Company finalized the allocation of purchase price related to the Guidance acquisition in the fourth quarter of fiscal 2017, resulting in an immaterial adjustment to certain working capital and intangible asset accounts.

(Dollar amounts in thousands, except per share data)

21. GOODWILL AND OTHER INTANGIBLE ASSETS:

Changes to goodwill during the years ended September 30, 2019 and 2018, follow.

	SGK Brand Solutions	Memorialization	Industrial Technologies	Consolidated
Goodwill	$ 491,895	$ 347,507	$ 69,144	$ 908,546
Accumulated impairment losses	(5,752)	(5,000)	—	(10,752)
Balance at September 30, 2017	486,143	342,507	69,144	897,794
Additions during period	8,743	29,059	22,877	60,679
Translation and other adjustments	(9,568)	(16)	5	(9,579)
Goodwill	491,070	376,550	92,026	959,646
Accumulated impairment losses	(5,752)	(5,000)	—	(10,752)
Balance at September 30, 2018	485,318	371,550	92,026	948,894
Additions during period	1,506	3,592	—	5,098
Divestiture during period	—	(14,970)	—	(14,970)
Translation and other adjustments	(13,548)	(435)	(660)	(14,643)
Goodwill	479,028	364,737	91,366	935,131
Accumulated impairment losses	(5,752)	(5,000)	—	(10,752)
Goodwill write-down	$ (77,572)	$ —	$ —	$ (77,572)
Balance at September 30, 2019	$ 395,704	$ 359,737	$ 91,366	$ 846,807

The Company performed its annual impairment review of goodwill and indefinite-lived intangible assets in the second quarter of fiscal 2019. As a result of this review, the Company determined that the estimated fair value of all reporting units exceeded carrying value. Due to challenging market conditions affecting the Graphics Imaging reporting unit within the SGK Brand Solutions segment and the estimated fair value of this reporting unit exceeding its carrying value by approximately 10%, the Company provided additional disclosure in its Form 10-Q for the second and third quarters of fiscal 2019 indicating that further deterioration of conditions could result in a future goodwill write-down for this reporting unit.

In consideration of continued challenging market conditions affecting the SGK Brand Solutions segment throughout the remainder of fiscal 2019, the Company initiated an in-depth review of the commercial and cost structure of the segment during the fourth quarter. This review identified certain opportunities to improve the segment's profitability and reduce its operating cost structure and, as a result, the Company revised its estimates of future earnings and cash flows for the Graphics Imaging reporting unit. In response to these revised projections, the Company re-evaluated the goodwill for the Graphics Imaging reporting unit, as of September 1, 2019. As a result of this interim assessment, the Company recorded a goodwill write-down of $77,572 during the fiscal 2019 fourth quarter. Subsequent to this write-down, the fair value of the Graphics Imaging reporting unit approximates carrying value at September 30, 2019. The fair value for this reporting unit was determined using level 3 inputs (including estimates of revenue growth, EBITDA contribution and the discount rate) and a combination of the income approach using the estimated discounted cash flows and a market-based valuation methodology. If current projections are not achieved or specific valuation factors outside the Company's control (such as discount rates) significantly change, additional goodwill write-downs may be necessary in future periods.

In fiscal 2019, the additions to SGK Brand Solutions goodwill reflects the acquisition of Frost. The changes in Memorialization goodwill primarily reflect small acquisitions and divestitures completed in fiscal 2019.

In fiscal 2018, the additions to SGK Brand Solutions goodwill reflects several smaller acquisitions. The additions to Memorialization goodwill reflects the acquisitions of Star Granite and several additional smaller acquisitions. The addition to Industrial Technologies goodwill reflects the acquisition of Compass.

(Dollar amounts in thousands, except per share data)

21. GOODWILL AND OTHER INTANGIBLE ASSETS, (continued)

The following tables summarize the carrying amounts and related accumulated amortization for intangible assets as ofSeptember 30, 2019 and 2018, respectively.

	Carrying Amount	Accumulated Amortization	Net
September 30, 2019			
Trade names	$ 30,540	$ — *	$ 30,540
Trade names	148,628	(22,653)	125,975
Customer relationships	374,515	(137,330)	237,185
Copyrights/patents/other	20,463	(13,513)	6,950
	$ 574,146	$ (173,496)	$ 400,650
September 30, 2018			
Trade names	$ 126,047	$ — *	$ 126,047
Trade names	53,523	(5,444)	48,079
Customer relationships	372,382	(110,760)	261,622
Copyrights/patents/other	20,848	(12,686)	8,162
	$ 572,800	$ (128,890)	$ 443,910

* Not subject to amortization

The net change in intangible assets during fiscal 2019 included the impact of foreign currency fluctuations during the period, additional amortization, additions related to the Frost acquisition, and reductions from the divestiture of a Memorialization business. In the fourth quarter of fiscal 2019, the Company reassessed its trade name strategy for the SGK Brand Solutions segment, in conjunction with an overall assessment and shift of its commercial structure and strategy for this segment, and initiated a plan to reduce its global trade names for its core brand solutions businesses. As a result of this change, the Company has begun to discontinue the use of certain trade names within the SGK Brand Solutions segment. Accordingly, the remaining useful lives of the impacted trade names have been reduced to three years, reflecting the Company's brand migration plans and an estimated time period when the discontinued trade names will be classified as defensive assets.

Amortization expense on intangible assets was $45,756, $31,562, and $23,313 in fiscal 2019, 2018 and 2017, respectively. Fiscal year amortization expense is estimated to be approximately $71,500 in 2020, $60,100 in 2021, $46,700 in 2022, $27,800 in 2023 and $26,200 in 2024.

22. LEGAL MATTER:

During fiscal 2017, the Company recognized loss recoveries of$11,325 related to the previously disclosed theft of funds by a former employee initially identified in fiscal 2015.

SUPPLEMENTARY FINANCIAL INFORMATION

Selected Quarterly Financial Data (Unaudited):

The following table sets forth certain items included in the Company's unaudited consolidated financial statements for each quarter of fiscal 2019 and fiscal 2018.

	Quarter Ended				Year Ended
	December 31	**March 31**	**June 30**	**September 30**	**September 30**
	(Dollar amounts in thousands, except per share data)				
FISCAL YEAR 2019:					
Sales	$ 374,177	$ 391,400	$ 379,294	$ 392,405	$ 1,537,276
Gross profit	126,411	136,281	137,178	142,596	542,466
Operating profit (loss)	16,166	24,264	29,691	(59,818)	10,303
Net income (loss) attributable to Matthews shareholders	3,097	15,417	14,629	(71,131)	(37,988)
Earnings (loss) per share:					
Basic	$ 0.10	$ 0.49	$ 0.47	$ (2.28)	$ (1.21)
Diluted	0.10	0.48	0.46	(2.28)	(1.21)
FISCAL YEAR 2018:					
Sales	$ 369,454	$ 414,061	$ 411,621	$ 407,444	$ 1,602,580
Gross profit [(1)]	131,413	150,680	152,615	149,513	584,221
Operating profit [(1)]	19,349	31,216	39,320	48,672	138,557
Net income attributable to Matthews shareholders	35,180	18,182	24,414	29,595	107,371
Earnings per share:					
Basic	$ 1.11	$ 0.57	$ 0.77	$ 0.94	$ 3.39
Diluted	1.10	0.57	0.77	0.93	3.37

(1) Amounts were revised to reflect retrospective application for adoption of ASU No. 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" on October 1, 2018. As a result, gross profit increased $714, $714, $714 and $729, respectively for each quarter in 2018, and operating profit increased $1,425, $1,425, $1,425 and $1,448, respectively for each quarter in 2018.

FINANCIAL STATEMENT SCHEDULE

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Additions: Charged to Expense	Additions: Charged to other Accounts (1)	Deductions (2)	Balance at End of Period
	(Dollar amounts in thousands)				
Allowance for Doubtful Accounts:					
Fiscal Year Ended:					
September 30, 2019	$ 11,158	$ 2,787	$ 20	$ (3,119)	$ 10,846
September 30, 2018	11,622	855	762	(2,081)	11,158
September 30, 2017	11,516	1,733	642	(2,269)	11,622

(1) Amount comprised principally of acquisitions and purchase accounting adjustments in connection with acquisitions, and amounts reclassified to other accounts.

(2) Amounts determined not to be collectible (including direct write-offs), net of recoveries.

Description	Balance at Beginning of Period	Provision Charged (Credited) To Expense (1)	Allowance Changes (2)	Other Deductions (3)	Balance at End of Period
	(Dollar amounts in thousands)				
Deferred Tax Asset Valuation Allowance:					
Fiscal Year Ended:					
September 30, 2019	$ 15,188	$ 821	$ —	$ (657)	$ 15,352
September 30, 2018	21,917	2,482	(8,510)	(701)	15,188
September 30, 2017	23,463	(1,279)	—	(267)	21,917

(1) Amounts relate primarily to adjustments in net operating loss carryforwards which are precluded from use.

(2) Fiscal 2018 amounts primarily reflect the release of valuation allowances due to the termination of net operating loss carryforwards upon the liquidation of non-U.S. holding companies as part of an entity reduction plan.

(3) Consists principally of adjustments related to foreign exchange.

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 disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) are designed to provide reasonable assurance that information required to be disclosed in the Company's reports filed under the Exchange Act, such as this Annual Report on Form 10-K, are recorded, processed, summarized and reported within the time periods specified in the rules of the Securities and Exchange Commission ("SEC"). These disclosure controls and procedures also are designed to provide reasonable assurance that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

Management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures in effect as of September 30, 2019. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2019, the Company's disclosure controls and procedures were effective to provide reasonable assurance that material information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, and that such information is recorded, processed, summarized and properly reported within the appropriate time period, relating to the Company and its consolidated subsidiaries, required to be included in the Exchange Act reports, including this Annual Report on Form 10-K.

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

Management's Report on Internal Control over Financial Reporting is included in Management's Report to Shareholders in Item 8 of this Annual Report on Form 10-K.

(c) Report of Independent Registered Public Accounting Firm.

The Company's internal control over financial reporting as of September 30, 2019 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8 of this Annual Report on Form 10-K.

(d) Changes in Internal Control over Financial Reporting.

There have been no changes in the Company's internal controls over financial reporting that occurred during the fourth fiscal quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

In addition to the information reported in Part I of this Annual Report on Form 10-K, under the caption "Officers and Executive Management of the Registrant," the information required by this item as to the directors of the Company is hereby incorporated by reference from the information appearing under the captions "General Information Regarding Corporate Governance – Audit Committee," "Proposal No. 1 – Elections of Directors" and "Compliance with Section 16(a) of the Exchange Act" in the Company's definitive proxy statement, which involves the election of the directors and is to be filed with the Securities and Exchange Commission (the "SEC") pursuant to the Exchange Act, within 120 days of the end of the Company's fiscal year ended September 30, 2019.

The Company's Code of Ethics Applicable to Executive Management is set forth in Exhibit 14.1 hereto. Any amendment to the Company's Code of Ethics or waiver of the Company's Code of Ethics for senior financial officers, executive officers or directors will be posted on the Company's website within four business days following the date of the amendment or waiver, and such information will remain available on the website for at least a twelve-month period.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item as to the compensation of directors and executive management of the Company is hereby incorporated by reference from the information appearing under the captions "Compensation of Directors" and "Executive Compensation and Retirement Benefits" in the Company's definitive proxy statement which involves the election of directors and is to be filed with the SEC pursuant to the Exchange Act, within 120 days of the end of the Company's fiscal year ended September 30, 2019. The information contained in the "Compensation Committee Report" is specifically not incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The information required by this item as to the ownership by management and others of securities of the Company is hereby incorporated by reference from the information appearing under the caption "Stock Ownership" in the Company's definitive proxy statement, which involves the election of directors and is to be filed with the SEC pursuant to the Exchange Act, within 120 days of the end of the Company's fiscal year ended September 30, 2019.

Equity Compensation Plans:

The Company maintains an equity incentive plan (the "2017 Equity Incentive Plan") that provides for grants of stock options, restricted shares, restricted share units, stock-based performance units and certain other types of stock-based awards. The Company also maintains equity incentive plans (the "2012 Equity Incentive Plan" and "2007 Equity Incentive Plan") and a stock incentive plan (the "1992 Incentive Stock Plan") that previously provided for grants of stock options, restricted shares, stock-based performance units and certain other types of stock-based awards. Under the 2017 Equity Incentive Plan, which has a ten-year term, the maximum number of shares available for grants or awards is an aggregate of 1,700,000. There will be no further grants under the 2012 Equity Incentive Plan, the 2007 Equity Incentive Plan, or the 1992 Incentive Stock Plan. At September 30, 2019, there were 1,700,000 shares reserved for future issuance under the 2017 Equity Incentive Plan, including262,000 restricted share units that were granted during fiscal 2019. All plans are administered by the Compensation Committee of the Board of Directors.

With respect to outstanding restricted share grants, generally one-half of the shares vest on the third anniversary of the grant, one-quarter of the shares vest in one-third increments upon the attainment of pre-defined levels of adjusted earnings per share, and the remaining one-quarter of the shares vest in one-third increments upon attainment of pre-defined levels of appreciation in the market value of the Company's Class A Common Stock. Additionally, restricted shares cannot vest until the first anniversary of the grant date. Unvested restricted shares generally expire on the earlier of three or five years from the date of grant, upon employment termination, or within specified time limits following voluntary employment termination (with the consent of the Company), retirement or death. The Company issues restricted shares from treasury shares.

With respect to the restricted share unit grants, units generally vest on the third anniversary of the grant date. The number of units that vest depend on certain time and performance thresholds. Approximately forty percent of the shares vest based on time, while the remaining vest based on pre-defined performance thresholds. The Company issues common stock from treasury shares once vested.

The Company maintains the 2019 Director Fee Plan, the Amended and Restated 2014 Director Fee Plan and the 1994 Director Fee Plan (collectively, the "Director Fee Plans"). The 2019 Director Fee Plan was approved by the Company's shareholders at the 2019 Annual Meeting of Shareholders on February 21, 2019. There will be no further fees or share-based awards granted under the Amended and Restated 2014 Director Fee Plan and the 1994 Director Fee Plan. Under the 2019 Director Fee Plan, non-employee directors (except for the Chairman of the Board) each receive, as an annual retainer fee for fiscal 2019, either cash or shares of the Company's Class A Common Stock with a value equal to $85,000. The annual retainer fee for fiscal 2019 paid to a non-employee Chairman of the Board is $185,000. Where the annual retainer fee is provided in shares, each director may elect to be paid these shares on a current basis or have such shares credited to a deferred stock account as phantom stock, with such shares to be paid to the director subsequent to leaving the Board. The total number of shares of stock that have been authorized to be issued under the 2019 Director Fee Plan or credited to a deferred stock compensation account for subsequent issuance is 150,000 shares of Common Stock (subject to adjustment upon certain events such as stock dividends or stock splits). The value of deferred shares is recorded in other liabilities. A total of 25,682 shares had been deferred under the Director Fee Plans at September 30, 2019. Additionally, non-employee directors each receive an annual stock-based grant (non-statutory stock options, stock appreciation rights and/or restricted shares or units) with a value of $125,000 for fiscal year 2019. 196,266 restricted shares and restricted share units have been granted under the Director Fee Plans, 23,037 of which were issued under the 2019 Director Fee Plan. 34,542 restricted shares and restricted share units are unvested at September 30, 2019.

The following table provides information about grants under the Company's equity compensation plans as of September 30, 2019:

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	25,682	$ —	3,159,776 [1]
Equity compensation plans not approved by security holders	None	None	None
Total	25,682	$ —	3,159,776

[1] Includes the 2017 Equity Incentive Plan, which provides for the grant or award of stock options, restricted shares, stock-based performance units and certain other typer of stock based awards, with a maximum of 1,700,000 shares available for grants and awards, as well as shares under the Employee Stock Purchase Plan that are purchased in the open market by employees at the fair market value of the Company's stock. The Company provides a matching contribution of 10% of such purchases subject to certain limitations under the Employee Stock Purchase Plan. As the Employee Stock Purchase Plan is an open market purchase plan, it does not have a dilutive effect.

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

The information required by this item as to certain relationships and transactions with management and other related parties of the Company is hereby incorporated by reference from the information appearing under the captions "Proposal No. 1 – Election of Directors" and "Certain Transactions" in the Company's definitive proxy statement, which involves the election of directors and is to be filed with the SEC pursuant to the Exchange Act, within 120 days of the end of the Company's fiscal year ended September 30, 2019.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this item as to the fees billed and the services provided by the principal accounting firm of the Company is hereby incorporated by reference from the information appearing under the caption "Relationship with Independent Registered Public Accounting Firm" in the Company's definitive proxy statement, which involves the election of directors and is to be filed with the SEC pursuant to the Exchange Act within 120 days of the end of the Company's fiscal year ended September 30, 2019.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K.

(a) 1. Financial Statements:

The following items are included in Part II, Item 8:

2. Financial Statement Schedules:

The following item is included in Part II, Item 8:

3. Exhibits Filed:

The following Exhibits to this report are filed herewith or, if marked with an asterisk (*), are incorporated by reference. Exhibits marked with an "a" represent a management contract or compensatory plan, contract or arrangement required to be filed by Item 601(b)(10)(iii) of Regulation S-K.

Exhibit No.	Description	Prior Filing or Sequential Page Numbers Herein
3.1	Restated Articles of Incorporation*	Exhibit Number 3.1 to the Annual Report on Form 10-K for the year ended September 30, 1994
3.2	Restated By-laws, Amended July 20, 2017*	Exhibit Number 3.1 to the Current Report on Form 8-K filed on July 26, 2017
4.1 a	Form of Revised Option Agreement of Repurchase (effective October 1, 1993)*	Exhibit Number 4.5 to the Annual Report on Form 10-K for the year ended September 30, 1993
4.2	Form of Share Certificate for Class A Common Stock*	Exhibit Number 4.9 to the Annual Report on Form 10-K for the year ended September 30, 1994
4.3	Indenture, dated as of December 6, 2017, by and among Matthews, the Guarantors, and the Bank of New York Mellon Trust Company, as trustee*	Exhibit Number 4.1 to the Current Report on Form 8-K filed on December 7, 2017
4.4	5.25% Senior Notes due December 1, 2025*	Exhibit Number 4.2 to the Current Report on Form 8-K filed on December 7, 2017
10.1	Second Amended and Restated Loan Agreement*	Exhibit Number 10.1 to the Current Report on Form 8-K filed on April 28, 2016
10.2	First Amendment to Second Amended and Restated Loan Agreement*	Exhibit Number 10.1 to the Current Report on Form 8-K filed on November 22, 2017
10.3	Purchase Agreement dated December 1, 2017 by and among Matthews International Corporation Guarantors and J.P. Morgan Securities LLC*	Exhibit Number 10.1 to the Current Report on Form 8-K filed on December 7, 2017
10.4	Shareholder's Agreement, dated as of March 16, 2014, by and among Matthews International Corporation, the Shareholders named therein and David A. Schawk, in his capacity as the Family Representative*	Exhibit Number 10.2 to the Current Report on Form 8-K filed on March 19, 2014
10.5 a	Employment Agreement as of the 29th day of July 2014, by and between Matthews International Corporation, a Pennsylvania corporation, and David Schawk	Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on January 20, 2015
10.6 a	Form of Schawk Family Share Purchase Agreement	Exhibit Number 10.1 to the Current Report on Form 8-K filed on May 16, 2016
10.7 a	Supplemental Retirement Plan (as amended through April 23, 2009)*	Exhibit Number 10.5 to the Annual Report on Form 10-K for the year ended September 30, 2010
10.8 a	Officers Retirement Restoration Plan (effective April 23, 2009)*	Exhibit Number 10.6 to the Annual Report on Form 10-K for the year ended September 30, 2009

Exhibit No.	Description	Prior Filing or Sequential Page Numbers Herein
10.9 a	1992 Stock Incentive Plan (as amended through April 25, 2006)*	Exhibit Number 10.1 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2006
10.10 a	Form of Stock Option Agreement*	Exhibit Number 10.7 to the Annual Report on Form 10-K for the year ended September 30, 2008
10.11 a	Form of Restricted Stock Agreement*	Exhibit Number 10.8 to the Annual Report on Form 10-K for the year ended September 30, 2008
10.12 a	1994 Director Fee Plan (as amended through April 22, 2010)*	Exhibit Number 10.7 to the Annual Report on Form 10-K for the year ended September 30, 2013
10.13 a	Amended and Restated 2014 Director Fee Plan*	Exhibit Number 10.1 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2017
10.14 a	1994 Employee Stock Purchase Plan*	Exhibit Number 10.2 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 1995
10.15 a	2007 Equity Incentive Plan (as amended through September 26, 2008)*	Exhibit Number 10.11 to the Annual Report on Form 10-K for the year ended September 30, 2008
10.16 a	2012 Equity Incentive Plan*	Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on January 22, 2013
10.17 a	2015 Incentive Compensation Plan*	Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on January 19, 2016
10.18 a	2017 Equity Incentive Plan*	Exhibit Number 99.1 to the Registration Statement on Form S-8 filed on May 3, 2019
10.19 a	Form of Restricted Stock Unit Agreement under the 2017 Equity Incentive Plan*	Exhibit Number 99.2 to the Registration Statement on Form S-8 filed on May 3, 2019
10.20 a	2019 Director Fee Plan*	Exhibit Number 99.3 to the Registration Statement on Form S-8 filed on May 3, 2019
10.21 a	Form of Restricted Stock Unit Agreement under the 2019 Director Fee Plan*	Exhibit Number 99.4 to the Registration Statement on Form S-8 filed on May 3, 2019
10.22 a	Form of Change in Control Agreement*	Exhibit Number 10.1 to Current Report on Form 8-K filed on October 3, 2019
14.1	Form of Code of Ethics Applicable to Executive Management*	Exhibit Number 14.1 to the Annual Report on Form 10-K for the year ended September 30, 2004
21	Subsidiaries of the Registrant	Filed Herewith
23.1	Consent of Independent Registered Public Accounting Firm	Filed Herewith

Exhibit No.	Description	Prior Filing or Sequential Page Numbers Herein
31.1	Certification of Principal Executive Officer for Joseph C. Bartolacci	Filed Herewith
31.2	Certification of Principal Financial Officer for Steven F. Nicola	Filed Herewith
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of Joseph C. Bartolacci	Furnished Herewith
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of Steven F. Nicola	Furnished Herewith
101.INS	XBRL Instance Document- the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	Filed Herewith
101.SCH	XBRL Taxonomy Extension Schema	Filed Herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	Filed Herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase	Filed Herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase	Filed Herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	Filed Herewith

Copies of any Exhibits will be furnished to shareholders upon written request. Requests should be directed to Mr. Steven F. Nicola, Chief Financial Officer and Secretary of the Registrant.

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, on November 22, 2019.

MATTHEWS INTERNATIONAL CORPORATION
(Registrant)

By **/s/ Joseph C. Bartolacci**
Joseph C. Bartolacci
President and Chief Executive Officer

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 indicated on November 22, 2019:

/s/ Joseph C. Bartolacci
Joseph C. Bartolacci
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Steven F. Nicola
Steven F. Nicola
Chief Financial Officer and Secretary
(Principal Financial and Accounting Officer)

/s/ John D. Turner
John D. Turner, Chairman of the Board

/s/ Morgan K. O'Brien
Morgan K. O'Brien, Director

/s/ Gregory S. Babe
Gregory S. Babe, Director

/s/ Don W. Quigley, Jr.
Don W. Quigley, Jr., Director

/s/ Katherine E. Dietze
Katherine E. Dietze, Director

/s/ David A. Schawk
David A. Schawk, Director

/s/ Terry L. Dunlap
Terry L. Dunlap, Director

/s/ Jerry R. Whitaker
Jerry R. Whitaker, Director

/s/ Alvaro Garcia-Tunon
Alvaro Garcia-Tunon, Director

EXHIBIT 21

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
SUBSIDIARIES OF THE REGISTRANT
(as of October 31, 2019)

Name	Percentage Ownership
IDL Worldwide, Inc.	100
The SLN Group, Inc.	100
Therm-Tec, Inc.	100
Frost Converting Systems, Inc.	80
Equator Design, Inc.	100
Kenuohua Matthews Electronic (Beijing) Company, Ltd.	60
Kenuohua Matthews Marking Products (Tianjin) Co., Ltd.	100
Matthews Canada Ltd.	100
Matthews Industries, Inc.	100
Matthews Bronze Pty. Ltd.	100
C. Morello (Australia) Pty Ltd.	100
Matthews International S.p.A.	100
Caggiati Espana S.A.	100
Matthews International Sarl	100
Gem Matthews International s.r.l.	95
Rottenecker-Caggiati GmbH	82
Tyche SpA	51
Matthews Resources, Inc.	100
Matthews Marking Systems Sweden AB	100
Matthews Kodiersysteme GmbH	100
Innovative Branding Technology Solutions, LLC	100
The York Group, Inc.	100
York Agency, Inc.	100
Milso Industries Corporation	100
New Liberty Casket Company LLC	50
York Casket Development Company, Inc.	100
Matthews Granite Company	100
Matthews Aurora, LLC	100
Aurora Casket Company, LLC	100
Aurora Logistics, Inc.	100
Aurora Casket de Mexico S. de R.L. de C.V.	100
Aurora St. Laurent, Inc.	100
Matthews Gibraltar Mausoleum & Construction Company	100
SGK LLC	100
Schawk Japan Ltd.	100
Schawk Thailand Ltd.	100
Schawk Worldwide Holdings, Inc.	100
Schawk Holdings Inc.	100
Miramar Equipment, Inc.	100
Schawk USA Inc.	100

Name	Percentage Ownership
Kedzie Aircraft, LLC	100
Schawk LLC	100
Schawk de Mexico SRL de CV	100
Schawk Servicios Administrativos, S. de R.L. de CV	100
Schawk Latin America Holdings, LLC	100
Schawk do Brasil Gestao de Marcas Ltda.	100
Schawk Panama Services, S de RL	100
Schawk Digital Solutions, Inc.	100
Seven Worldwide (UK) Limited	100
MATW North America Holding LLC	100
MATW UK Holding LLP	100
Schawk Wace Group	100
Matthews International Corporation Costa Rica S.R.L.	100
Matthews Holding Germany LLP & Co. KG	100
Matthews Singapore Holding Pte. Ltd.	100
The InTouch Group Limited	100
Guidance Automation Limited	100
GJ Creative Limited	100
Absolute 2 Design Limited	100
Equator (GJ) Limited	100
Equator (SA) Limited	100
Equator SA Limited	100
Equator Design Agency Australia PTY LIMITED	100
MATW Holding LLC	100
Matthews Corporation Holding Company (UK) Limited	100
Furnace Construction Cremators Limited	100
Matthews Environmental Solutions Limited	100
Schawk Canada Inc.	100
Protopak Innovations, Inc.	100
Schawk Germany GmbH	100
Desgrippes Gobe Group (Yuan Hosea)	100
Schawk UK Ltd.	100
M3dia Limited	100
Matthews Brands Solutions (UK) Limited	100
PM Colour Limited	100
InTouch Reprographic Limited	100
M3dia Projects Limited	51
VCG (Holdings) Limited	100
VCG Colourlink Limited	100
VCG Connect Limited	100
VCG Catapult Ltd.	100
VCG Kestrel Limited	100
VCG Oasis Ltd.	100
Schawk UK Corporate Packaging	100
Schawk UK Holdings Ltd.	100

Name	Percentage Ownership
Schawk Luxembourg SARL	100
Brandimage Degrippes and LAGA SAS	100
Brandimage Belgique Holding SA	100
Brandimage Desgrippes and LAGA SA	100
Brandmark International Holding B.V.	100
Anthem NL BV	100
Schawk Imaging Sdn. Bhd.	100
Schawk Spain S.L.	100
Schawk Poland Sp z.o.o.	100
Schawk Belgium BVBA	100
Schawk Asia Pacific Pte Ltd.	100
Schawk India Pvt Ltd.	100
Schawk Holdings Australia Pty Ltd.	100
Anthem! Design Pty. Limited	100
Marque Brand Consultants Pty Ltd.	100
Schawk Australia Pty. Limited	100
Schawk Hong Kong Ltd.	100
Desgripes Gobe Group (HK) Ltd.	100
Desgrippes (Shanghai) Brand Consulting Co Ltd.	100
Schawk Anthem Shenzhen Co Ltd.	100
Schawk Imaging (Shanghai) Co.	100
MATW Netherlands Holding B.V.	100
Matthews Brand Solutions, S. de R.L. de CV	100
Saueressig Baski Oncesi Hazirlik Sistemier Sanaji ve Tricarct Amonin Sirketi	100
Matthews International Brasil Servicos de Marketing e Branding Ltda.	100
Matthews Europe GmbH	100
5flow GmbH	100
PT. Saueressig Engraving Indonesia	100
S+T Reprotechnick GmbH	100
Reproservice Eurodigital GmbH	100
Repro Busek Druckvorstufentechnick GmbH	100
Repro Busek Druckvorstufentechnick GmbH & Co. KG	100
Rudolf Reproflex GmbH	100
IDL Crack Europe GmbH	100
Klischeewerkstatt Scholler GmbH	100
Tact Group Ltd.	100
Shenzen Jun Ye Design & Production Ltd.	100
Reproflex Vietnam Limited Company	60
TWL Nyomdaipari es Kereskedeimi Koriatolt Felelossegu Tarsasag	100
Matthews International GmbH	100
Matthews Verwaltungs GmbH	100
Ungricht GmbH + Co KG	100
Saueressig Polska Sp. z.o.o.	67
Saueressig 000	100
Saueressig Flexo Geschaftsfuhrungs GmbH	100

Name	Percentage Ownership
Wetzel Holding AG	100
Wetzel Service AG	100
Wetzel GmbH	100
Saueressig Polska Sp. z.o.o.	33

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-231192, 333-194456, 333-190366, 333-157132, 333-131496, 333-83731, 033-57793, 033-57795, and 033-57797) of our reports dated November 22, 2019, with respect to the consolidated financial statements and schedule of Matthews International Corporation and Subsidiaries and the effectiveness of internal control over financial reporting of Matthews International Corporation and Subsidiaries included in this Annual Report (Form10-K) of Matthews International Corporation and Subsidiaries for the year ended September 30, 2019.

/s/ Ernst & Young LLP

Pittsburgh, Pennsylvania
November 22, 2019

EXHIBIT 31.1

CERTIFICATION
PRINCIPAL EXECUTIVE OFFICER

I, Joseph C. Bartolacci, certify that:
1. I have reviewed this annual report on Form 10-K of Matthews International Corporation;
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 registrant's board of directors (or persons performing the equivalent functions):
a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 22, 2019

/s/Joseph C. Bartolacci

Joseph C. Bartolacci
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION
PRINCIPAL FINANCIAL OFFICER

I, Steven F. Nicola, certify that:

1. I have reviewed this annual report on Form 10-K of Matthews International Corporation;

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 registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 22, 2019

/s/Steven F. Nicola

Steven F. Nicola
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 Matthews International Corporation (the "Company") on Form 10-K for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph C. Bartolacci, President and Chief Executive Officer, certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(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 results of operations of the Company.

/s/Joseph C. Bartolacci

Joseph C. Bartolacci,
President and Chief Executive Officer

November 22, 2019

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Matthews International Corporation and will be retained by Matthews International Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

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 Matthews International Corporation (the "Company") on Form 10-K for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Steven F. Nicola, Chief Financial Officer, certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(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 results of operations of the Company.

/s/Steven F. Nicola

Steven F. Nicola,
Chief Financial Officer

November 22, 2019

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Matthews International Corporation and will be retained by Matthews International Corporation and furnished to the Securities and Exchange Commission or its staff upon request.