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, 2022
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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined 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, 2022, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $979.0 million.

As of October 31, 2022, shares of common stock outstanding were: Class A Common Stock 30,298,051 shares.

Documents incorporated by reference: Specified portions of the Proxy Statement for the 2023 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 interest 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 or other factors such as supply chain disruptions, labor shortages or labor cost increases, 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, impact of pandemics or similar outbreaks or other disruptions to our industries, customers or supply chains, the impact of global conflicts, such as the current war between Russia and Ukraine, 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. Matthews posts important information on its investor relations website, available at matw.com/investors. The Company's shareholders are encouraged to review the contents of such website. Notwithstanding the foregoing, the contents of such website are not incorporated into this Annual Report on Form 10-K.

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 memorialization products, industrial technologies and brand solutions. Memorialization products consist primarily of bronze and granite memorials and other memorialization products, caskets, cremation-related products, and cremation and incineration equipment primarily for the cemetery and funeral home industries. Industrial technologies includes the design, manufacturing, service and distribution of high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products. Brand solutions consists of brand management, pre-media services, printing plates and cylinders, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries.

The Company manages its business under three reporting segments, Memorialization, Industrial Technologies, and SGK Brand Solutions. Effective in the first quarter of fiscal 2022, the Company transferred its surfaces and engineered products businesses from the SGK Brand Solutions segment to the Industrial Technologies segment. This business segment change is consistent with internal management structure and reporting changes effective for fiscal 2022. Prior periods were revised to reflect retrospective application of this segment realignment. 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 20, "Segment Information" in Item 8 - "Financial Statements and Supplemental Data."

	Years Ended September 30,		
	2022	2021	2020
Sales to external customers:	*(Dollar amounts in thousands)*		
Memorialization	$ 840,124	$ 769,016	$ 656,035
Industrial Technologies	335,523	284,495	228,453
SGK Brand Solutions	586,756	617,519	613,818
Consolidated Sales	$ 1,762,403	$ 1,671,030	$ 1,498,306

In fiscal 2022, approximately 70% of the Company's sales were made from North America, 25% were made from Europe, 3% were made from Asia, and 2% were made from other regions. For further information on segments, see Note 20, "Segment Information" in Item 8 - "Financial Statements and Supplementary Data." 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. Products and services of the SGK Brand Solutions segment are sold throughout the world, with principal locations in North America, Europe and Asia.

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-related products, cremation and incineration 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, concrete burial vaults, 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 that 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. 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.

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

Customers of the Memorialization segment can purchase memorials and vases on a "pre-need" basis. This 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 a leading manufacturer and distributor of caskets and other funeral home products in North America, producing and marketing 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 and can also be personalized. Other specialized funeral home products such as urns, jewelry, interior panels, and stationery are also offered.

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 produces casket components, which include stamped metal parts, metal locking mechanisms for gasketed metal caskets and adjustable beds. 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 various species of uncured wood from sawmills and lumber distributors, which it dries and cures before being processed into casket components.

The segment provides product and service assortment planning, as well as merchandising and display products to funeral service businesses. The Memorialization segment develops and sells technology solutions that help funeral homes manage their businesses and serve families through these digital platforms. Solutions are delivered as software as a service and include funeral home management systems and web-based arrangement and presentation systems. These products assist funeral service professionals in providing information, value and satisfaction to their client families.

The segment offers 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, Africa, 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 workstations, loading systems, 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 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 retrofitting 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, stepped-hearth 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, as well as destruction of low-volume, high-value waste types such as contraband and pharmaceutical products. 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 that utilize incinerators for waste reduction and energy production.

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 based on 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 based on 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 75 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 based on 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 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 based on 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 and incineration equipment also serve the growing cremation market.

Industrial Technologies:

The Industrial Technologies segment includes the design, manufacturing, service and distribution of high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products.

The energy storage solutions business produces engineered calendering, laminating, and coating equipment used in the manufacturing of lithium-ion batteries and components of fuel cells. The segment currently delivers products to several major vehicle producers and is actively pursuing opportunities with several other electric vehicle and tier-one battery manufacturers. The segment also offers service, spare parts, calender- and coating-roller refurbishing and retrofits of complete production lines. Production capabilities are available in Germany and the Czech Republic, with design and assembly in Germany, Switzerland, Czech Republic, Canada and the United States. The business is globally active with well-established customer relations.

The energy storage solutions business has experienced significant growth primarily reflecting expanded use of electric vehicles, as well as the expansion of renewable energy production globally. The segment has nearly a decade of experience in developing dry electrode lithium-ion battery solutions. Dry electrode technology makes producing lithium-ion batteries easier and less expensive than the wet electrode process, and dry electrode manufacturing is also less impactful on the environment. These factors could contribute to increased utilization of dry electrode batteries in the electric vehicle market, and thus greater demand for this form of battery in the future.

Product identification 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. The segment also develops innovative, custom solutions to address specific customer requirements in a variety of industries, including oil field services and security scanning.

Warehouse automation systems complement the tracking and distribution of a customer's products with automated order fulfillment technologies, and controls for material handling systems. Material handling customers include some of the largest retail, e-commerce, and third-party logistics companies in the United States.

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, sourced through the Company's subsidiaries in Sweden, Germany, Malaysia 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, chemicals, steel, copper, and film 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. In the energy storage solutions business, the Company has patents and pending patent applications on its dry electrode calendering equipment. The Company believes that, in general, its Industrial Technologies segment offers one of the broadest lines of products to address a wide variety of high-tech custom energy storage solutions, product identification and warehouse automation applications.

SGK Brand Solutions:

The SGK Brand Solutions segment provides packaging and brand experience solutions that simplify marketing, amplify brands and deliver value. Matthews has more than 100 years in the packaging business, which is comprised of broad technical, engineering, and artistic expertise relating to the creation and production of graphics, their workflows and best practices for the commercial packaging and retail channels. This combination of knowledge, experience and skill helps the SGK Brand Solutions segment differentiate itself from competitors.

The SGK Brand Solutions segment helps companies to define, create, produce and transform their packaging and marketing supply chains and the brand assets that flow through them. By simplifying marketing, the segment helps deliver greater speed through workflow efficiency, enabling clients to get new product introductions and campaigns to market faster which can result in a competitive advantage for the brand. By amplifying brands, the segment helps brands create meaningful experiences online and offline that enable them to stand out in the marketplace which can result in a stronger connection between consumers and the brand. The SGK Brand Solutions segment also helps clients deliver improved marketing productivity and profitability through innovative technology solutions.

The packaging solutions part of its business integrates all packaging-related services from the beginning to the end of the packaging development workflow process. Clients may purchase stand-alone services or a combination of services that are designed to fulfill larger, more strategic objectives. These services include design and adaptive packaging design, production art, photography, retouching, the creation of e-commerce assets, premedia, print technical services, cylinder and flexo printing plate production, workflow efficiency consulting, change management and technology workflow solutions. Historically a print media based business, the business leverages their 100+ years of packaging expertise to create packaging assets required for the e-commerce channel. The business has evolved from creating and delivering graphic brand assets for a single medium (package on shelf) which required output for printing, into one that is deeply entrenched in a brand's journey across multiple mediums, requiring an almost infinite array of digital asset output across an ever-expanding multi-channel universe.

The brand experience part of the business integrates all marketing-related services from the beginning to the end of the marketing development workflow process. Clients may purchase stand-alone services or a combination of services that are designed to fulfill larger, more strategic objectives. These services include all the services that help create brand experiences: consumer insights, brand strategy, brand identity, content marketing strategy, marketing content creation, campaign strategy and development, online and in-store retail experiences and merchandising fabrication, creative process management and technology workflow solutions. Largely, an ideation and digital media-based business, the business leverages its branding expertise to drive the creation of digital experiences that "stick" with consumers.

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 that 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 that 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 marketplace covering both national and private label brands with numerous packaging and marketing requirements. The segment is also a leading international supplier of pre-press, rotogravure and embossing tooling, with principal clients representing brand manufacturers, printers and converters.

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, corrugated materials, structural steel, plastic, laminates, inks and graphic art supplies. All such materials are presently available in adequate supply from various industry sources. 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's ability to offer consistent service on a global basis is a key differentiator.

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. Increasingly, with the growing awareness and commitment by its clients to environmental sustainability, the SGK Brand Solutions segment is providing solutions that enable its clients to advance their own sustainability initiatives.

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. In addition, the Company maintains numerous trade secrets that further comprise its portfolio of intellectual property assets. The Company continues to assess, refine and expand its intellectual property portfolio, considering options to pursue additional patent filings and to further develop and continue to maintain processes to identify, inventory and safeguard evolving trade secrets.

HUMAN CAPITAL RESOURCES:

Introduction:

The Company’s culture of *Inspired Possibilities* empowers global teams to think creatively to inspire change that favorably impacts outcomes for the Company's customers, clients, and one another. Matthews’ human resource strategies align with the business strategies to enable and optimize internal talent to achieve business and financial performance. At every stage of the employee lifecycle, the Company’s people programs are rooted in a set of organizational competencies and capabilities, aligned with the Company's core values, that collectively build talent, enhance employee engagement, sustain retention, inspire innovation and drive results.

Workforce Composition:

As of October 31, 2022, the Company and its majority-owned subsidiaries employed approximately 12,000 people globally in 6 continents and more than 300 locations and 30 countries around the world. Its diverse team of talented employees possess a vast array of skills including engineering, manufacturing, research and development, plant operations, production, logistics, creative design, photography and corporate functional services, including legal, information technology, human resources and finance. Many of Matthews’ employees have highly specialized skills and subject-matter expertise in their respective disciplines, enabling the Company to deliver industry leading products and services to its customers throughout the world.

Diversity and Inclusion:

Matthews views diversity and inclusion (“D&I”) as a priority to be valued and promoted in every aspect of its business. The Company understands and firmly believes in the value that diverse experiences, perspectives, and ideas bring to the workforce and offer to clients. Matthews knows its employees deserve equal opportunities regardless of race, gender, gender expression, age, disability, religion, sexual orientation and more.

As an organization with a history that spans more than 170 years, Matthews has always believed that mutual respect, valuing the worth of all people, doing what's right and celebrating diversity is essential to how the Company operates and the way it does business. Matthews’ D&I strategy focuses on four pillars: Infrastructure, Talent Acquisition, Employee Engagement and Community Engagement. A global council representative of a diverse workforce exists to help shape plans and program priorities across these pillars and to champion the work to build a more inclusive culture, and a full time D&I leader is actively focused on driving progress in this area. Matthews is a unique organization, diverse in culture, talent and geography. The Company stands committed to a culture reflecting the people, clients, customers, and communities it serves.

Talent Acquisition and Total Rewards:

To continue to grow and compete in a highly competitive labor market, Matthews works hard to attract and select top talent through a compelling employment value proposition. The Company’s employment brand highlights its values, commitment to people culture, diversity, equity and inclusion, employee development and the efforts to ensure cultural alignment, and the selection process includes key behavioral questions that help select the right people for the right roles.

Matthews understands the highly competitive market for talent and believes that to attract and retain top talent, it must offer competitive pay and benefit programs. The Company evaluates roles to ensure pay is at market rate, and offers annual incentive pay and a competitive benefit package. As a global company, adjustments are made for global and regional market demands.

Talent Development/Management:

From onboarding to leadership development, Matthews believes investing in its people leads to greater success.The Company’s onboarding program reinforces its values and culture, supports its managers in creating a positive employee experience during the first 90 days and builds early commitment with all new hires.

Matthews knows that when employees have opportunities to learn and grow, see how their goals and objectives lead to something greater and understand their part in the organization’s success, it helps build a place where people want to stay. Matthews’ competency-based learning center helps employees select learning programs to continue their growth, and the Company facilitates both formal and informal mentoring that reinforces and supports its leaders during key developmental periods and beyond.

The Company’s future success depends upon tomorrow’s leaders. Matthews has implemented a robust talent review process that identifies critical talent and serves as the basis for succession planning. Each year, at the conclusion of this review, the executive team selects a cohort of critical talent to participate in a comprehensive leadership program designed to prepare leaders for enterprise roles. The Company believes this investment, which includes classroom learning, assessments, coaching/mentoring and project application, both prepares and strengthens the organization for the future, while deepening the commitment of its top talent.

Performance Management:

Connecting employees to the strategy ensures individual effort to a larger goal and strengthens commitment to the organization. The Company supports an annual leadership strategy cascade where each segment, division, group and team identify and align goals and objectives which serve as the basis for individual performance objectives, keeping employees firmly connected to the work and the Company’s collective success. This process is rooted in ongoing coaching and feedback, and measures not just what was accomplished, but how it was accomplished because Matthews believes staying true to its values and key behaviors serves clients better, strengthens culture and keeps employees engaged.

Change Management:

Matthews is a constantly evolving multi-national company, leveraging new ways of working to improve its quality, service and delivery systems to better help customers and clients succeed. Building change capability to support employees through changes accelerates new ways of working, minimizes productivity loss, and accelerates improvement measures.

Health and Safety:

Employee health and safety in the workplace remains the Company’s highest priority and is one of the Company’s core values. Safety efforts are led by the global health and safety team and supported by individuals at the local site level. Hazards in the workplace are timely identified and management actively tracks incidents so remedial actions may be implemented to improve workplace safety.

BACKLOG:

Because the nature of the Company's Memorialization, Industrial Technologies, and SGK Brand Solutions businesses are primarily custom products made to order and services with short lead times, backlogs are not generally material except for mausoleums and cremation and incineration equipment in the Memorialization segment, and purpose-built machinery, warehouse automation and order fulfillment projects in the Industrial Technologies segment. Cremation and incineration equipment sales backlogs vary in a range of ten to twelve months of sales. Backlogs vary in a range of approximately twelve to eighteen months of sales for mausoleums. Backlogs are generally in excess of a year for purpose-built machinery projects. Backlogs for warehouse automation and fulfillment systems generally vary in a range of up to four weeks for standard products, and are currently in the range of ten to twelve months for custom systems. The Company's current backlog is expected to be substantially filled in fiscal 2023.

REGULATORY MATTERS:

The Company's operations are subject to various federal, state and local laws and regulations requiring strict compliance, including, but not limited to, the protection of the environment. The Company has established numerous internal compliance programs to further ensure lawful satisfaction of the applicable regulations. In addition, the Company is party to specific environmental matters which include obligations to investigate and mitigate the effects on the environment of certain materials at operating and non-operating sites. The Company is currently performing environmental assessments and remediation at certain sites, as applicable.

AVAILABLE INFORMATION:

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.

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.

Company-Specific Risk Factors:

Foreign Operations. The Company conducts business in more than 30 countries around the world, and in fiscal 2022 approximately 32% 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. Production 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.

Changes in Interest Rates. Interest rate fluctuations could increase the Company's financing costs to the extent such interest rates are not hedged, or limit the Company's ability to obtain additional indebtedness or debt refinancing to be offered on terms that the Company deems attractive, if at all, which could have a material and adverse effect on the Company's borrowing costs, profitability, liquidity and capital resources. Borrowings under the Company's credit facilities, including the domestic credit facility, are subject to variable rates of interest and expose the Company to interest rate risk. The Company enters into interest rate swaps in order to achieve a mix of fixed and variable rate debt that it deems appropriate. To the extent that some or all of the Company's variable interest rate debt is not subject to interest rate swaps, if interest rates were to increase, the Company's interest expense would increase, negatively affecting earnings and reducing cash flows available for working capital, capital expenditures and other investments.

The Company also previously issued $300.0 million 5.25% senior unsecured notes due December 1, 2025 (the “2025 Senior Notes”). In the event the Company seeks to refinance indebtedness under the domestic credit facility or the 2025 Senior Notes, or obtain additional financing, higher interest rates may limit the Company’s ability to incur such indebtedness on terms that it deems attractive, if at all. If the Company is unable to incur indebtedness on terms that it deems attractive, it could have a material and adverse effect on the Company’s borrowing costs, profitability, liquidity and capital resources.

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. In addition, disruptions in the global supply chain may cause prices for raw materials to increase. See "Disruptions to the global supply chain."

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, absent events related to pandemics or similar outbreaks. 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 SGK 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 each of its business 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.

Disruptions to the global supply chain. The Company purchases components and materials to manufacture its products from a large number of suppliers, some of which may be critical to operations. The Company’s product offerings are impacted by such suppliers' lead times, volume constraints and increasing costs. The Company has experienced and may continue to experience extended lead times and product unavailability due to manufacturing disruptions or closures as well as delays and unanticipated costs associated with the sourcing of materials. Matthews’ supply chain operations span several geographies globally and are heavily dependent upon third party logistics and transportation services to deliver the Company’s products to customers. Extended lead times and shortages could impair the Company’s ability to meet its customer requirements, require the Company to pay higher prices or incur expedite fees or cause its customers to delay or forgo projects, which would harm Matthews’ business and negatively impact the Company’s gross margin and results of operations.

Pandemics or similar outbreaks. Pandemics or similar outbreaks could adversely affect the economies of developed and emerging markets, potentially resulting in an economic downturn that could affect customers' demand for the Company's products and services, as well as the Company's ability to access capital at acceptable interest rates. The spread of pandemics or similar outbreaks may also disrupt the Company's manufacturing and production operations, as well as its distribution systems, which include import and export for delivery of the Company's products to its customers. These factors could materially and adversely affect the Company's business, financial condition and results of operations. See also "Disruptions to the global supply chain."

Due to the uncertainty relating to a pandemic or similar outbreak, the Company, its customers or its suppliers may be required, or believe that it is advantageous, to take precautionary measures intended to minimize the risk of a virus or disease spreading to employees, customers, and the communities in which they operate, and these measures could negatively impact the Company's business. Further, if the scope and severity of an outbreak worsens and the Company's contingency plans prove ineffective, its global operations could potentially experience disruptions, such as temporary closure of facilities or delays or suspensions in product offerings and services, which may materially and adversely affect the Company's business, financial condition and results of operations.

Global conflicts may impact the business of the Company and the markets in which it operates. Global conflicts, such as the war in Ukraine, could impact the Company and its operations in a number of different ways, which are yet to be fully assessed and are therefore uncertain. The Company's principal concern is for the safety of its employees and other personnel, specifically those who are based in the affected region. The Company has employees who are based in Eastern Europe, including Russia and Ukraine, who may be affected by the ongoing hostilities. The Company additionally has property, plant and equipment in or around the affected region. The continuing impact of this war and the response of the United States and other countries to it by means of trade and economic sanctions, or other actions, is still evolving and unknown; however it could disrupt the Company's ability to work with certain parties. Similarly, the Company has employees based in the affected region and works with third-party providers from other parts of the world that may be affected by hostilities.

Due to the uncertainty relating to war or similar conflicts, the current war between Russia and Ukraine may adversely affect the Company's business, of which could materially and adversely affect the Company's results of operations. Such risks include, but are not limited to, adverse effects on macroeconomic conditions, including inflation and business and consumer spending; disruptions to the Company's global technology infrastructure, including through cyberattack, ransom attack, or cyber-intrusion; adverse changes in international trade policies and relations; disruptions in global supply chains; exposure to foreign currency fluctuations; and constraints, volatility, or disruption in the capital markets. Similar uncertainties may arise in connection with other ongoing hostilities or future hostilities.

For so long as the hostilities continue, and perhaps even thereafter as the situation unfolds, the Company may see increased volatility in financial markets, which may impact equity markets generally, including the Company's stock price, and make it more difficult for the Company to raise additional capital at a strategically advantageous time, or for financing to be available upon acceptable terms. All or any of these risks separately, or in combination could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

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. The Company's pre-acquisition diligence review may not discover or accurately quantify certain undisclosed liabilities, and the Company may not be indemnified for such liabilities which could have an adverse effect on the acquired business. 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.

Intellectual property infringement assertions by third parties could result in significant costs and adversely affect the Company's business, financial condition, operating results and reputation. The Company cannot guarantee that the operation of its business does not infringe, misappropriate or otherwise violate the intellectual property rights of third parties. The Company cannot predict whether other assertions of third-party intellectual property rights or claims arising from such assertions would substantially adversely affect the Company's business, financial condition and operating results. The defense of these claims and any future infringement claims, whether they are with or without merit or are determined in the Company's favor, may result in costly litigation and diversion of technical and management personnel. Further, an adverse outcome of a dispute may require the Company to pay damages, cease making, licensing, or using products or offering services that are alleged to incorporate the intellectual property of others, expend additional development resources to redesign the Company's offerings, or enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary intellectual property, which may be unavailable on terms acceptable to the Company, or at all. Even if these matters do not result in litigation or are resolved in the Company's favor or without significant cash settlements, the time and resources necessary to resolve them could adversely affect the Company's business, reputation, financial condition and operating results.

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.

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's General Data Protection Regulation (the "GDPR"), which became effective in May of 2018, and the California Consumer Privacy Act (the "CCPA"), which became effective in January 2020. The GDPR and the CCPA contain comprehensive data protection compliance requirements. Complying with the GDPR and the CCPA may continue to cause the Company to incur substantial operational costs or require the Company to change certain of its business practices in certain jurisdictions. The Company's measures to assess the requirements of, and to comply with, the GDPR and the CCPA, 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 litigation or 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. Matthews is subject to domestic and international tax laws and cannot predict the scope or effect of future tax law changes. Domestically, the U.S. Department of Treasury has broad authority to issue regulations and interpretive guidance. The Company has applied available guidance to estimate its tax obligations, but new guidance 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 and regulations regarding trade compliance, economic sanctions, anti-money laundering, 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, economic sanctions, anti-money laundering, 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.

General Risk Factors:

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, global pandemics, 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.

Labor shortages, turnover and labor cost increases. Labor is a significant component of the Company's operations. Several factors may adversely affect the labor force available to Matthews or increase labor costs (i.e., labor rates and overtime levels), including high employment levels, unemployment subsidies, increased wages offered by other employers, vaccine mandates and other government regulations and the Company’s responses thereto. An overall labor shortage, lack of skilled labor, increased turnover, or labor inflation, caused by pandemics or as a result of general macroeconomic factors, could have a material adverse impact on the Company’s business and operating results.

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, detect and timely remediate 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.

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.

The Company's facilities provide adequate space for meeting its near-term production requirements. Significant principal properties of the Company and its majority-owned subsidiaries as of October 31, 2022 were as follows (properties, which are unencumbered, are owned by the Company except as noted):

Location	Description of Property	
Memorialization:		
Pittsburgh, PA	Manufacturing / Division Offices	
Apopka, FL	Manufacturing / Division Offices	
Aurora, IN	Manufacturing	
Colorno, Italy	Manufacturing	
Dallas, TX	Distribution Hub	(1)
Dandenong, Australia	Manufacturing	(1)
Elberton, GA	Manufacturing	
Fontana, CA	Distribution Hub	(1)
Harrisburg, PA	Distribution Hub	(1)
Hyde, England	Manufacturing	(1)
Indianapolis, IN	Distribution Hub	(1)
Monterrey, Mexico	Manufacturing	(1)
Orlando, FL	Manufacturing	(1)
Richmond, IN	Manufacturing	
Searcy, AR	Manufacturing	
Stone Mountain, GA	Distribution Hub	(1)
York, PA	Manufacturing	
Industrial Technologies:		
Cranberry Township, PA	Manufacturing / Division Offices	
Bocholt, Germany	Manufacturing / Division Offices	
Cincinnati, OH	Manufacturing / Distribution	
Fribourg, Switzerland	Manufacturing	(1)
Gothenburg, Sweden	Manufacturing / Distribution	(1)
Holoubkov, Czech Republic	Manufacturing	
Lima, Costa Rica	Manufacturing	(1)
Mönchengladbach, Germany	Manufacturing	(1)
Pewaukee, WI	Manufacturing	(1)
Wilsonville, OR	Manufacturing	
Vreden, Germany	Manufacturing	(2)
SGK Brand Solutions:		
Chennai, India	Production Facility	(1)
Dachnow, Poland	Manufacturing	(1)
East Butler, PA	Production Facility	(1)
Goslar, Germany	Production Facility	(1)
Grenzach-Wyhlen, Germany	Manufacturing	
Izmir, Turkey	Manufacturing	
Manchester, England	Production Facility	(1)
Minneapolis, MN	Production Facility	
Mississauga, Canada	Production Facility	(1)
Penang, Malaysia	Production Facility	
Tigard, OR	Production Facility	(1)
Corporate and Administrative Offices:		
Pittsburgh, PA	General Offices	

(1) These properties are leased by the Company under operating lease arrangements.
(2) The Vreden, Germany location represents a shared facility for both the Industrial Technologies and SGK Brand Solutions segments.

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, 2022:

Name	Age	Positions with Registrant
Joseph C. Bartolacci	62	President and Chief Executive Officer
Ronald C. Awenowicz	53	Senior Vice President, Global Compliance, Operations and N.A. Human Resources
Gregory S. Babe	65	Chief Technology Officer
Davor Brkovich	54	Head of IT and Chief Information Officer
Brian J. Dunn	65	Executive Vice President, Strategy and Corporate Development
Steven D. Gackenbach	59	Group President, Memorialization
Reena Gurtner	48	Senior Vice President, Global Talent and EMEA/APAC Human Resources
Gary R. Kohl	59	President, SGK Brand Solutions
Lee Lane	54	Group President, Matthews Industrial Automation and Matthews Environmental Solutions
Steven F. Nicola	62	Chief Financial Officer and Secretary
Brian D. Walters	53	Senior Vice President and General Counsel

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

Ronald C. Awenowicz was appointed Senior Vice President, Global Compliance, Operations and North America Human Resources effective July 2021. Prior thereto, he served as Vice President of Americas Human Resources since May 2020 and prior thereto he served as Global Head of Human Resources Operations since February 2015, when he joined the Company.

Gregory S. Babe was appointed Chief Technology Officer effective November 2015.

Davor Brkovich was appointed Head of IT and Chief Information Officer effective November 2019. Prior thereto, he had been interim Head of IT and Chief Information Officer since February 2019 and prior thereto he served as Director, Global IT Infrastructure since January 2017, when he joined the Company.

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.

Reena Gurtner was appointed Senior Vice President, Global Talent and EMEA/APAC Human Resources effective July 2021. Prior thereto, she served as Vice President, Human Resources APAC, Middle East and Africa since May 2020 and prior thereto she served as Regional Director of Human Resources APAC since January 2013.

Gary R. Kohl was appointed President, SGK Brand Solutions effective May 2017.

Lee Lane was appointed Group President for Matthews' Product Identification and Warehouse Automation businesses as well as Matthews Environmental Solutions effective October 2022. Prior thereto, he served as Senior Vice President of Matthews Automation since June 2022. Prior to joining the Company, he served as Vice President General Manager Sensing, Safety & Industrial Components Business at Rockwell Automation, Inc. since October 2020, and prior thereto he served as Vice President / General Manager Safety, Sensing & Connectivity Business at Rockwell Automation, Inc. since March 2017.

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

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.

PART II

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. At September 30, 2022, 30,298,051 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, 1,294,842 shares remain available for repurchase as of September 30, 2022. All purchases of the Company's common stock during fiscal 2022 were part of this repurchase program.

The following table shows the monthly fiscal 2022 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 2021	—	$ —	—	2,658,627
November 2021	—	—	—	2,658,627
December 2021	62,746	38.79	62,746	2,595,881
January 2022	—	—	—	2,595,881
February 2022	105,035	34.23	105,035	2,490,846
March 2022	184,149	33.17	184,149	2,306,697
April 2022	20,000	32.46	20,000	2,286,697
May 2022	422,736	30.69	422,736	1,863,961
June 2022	261,795	31.42	261,795	1,602,166
July 2022	—	—	—	1,602,166
August 2022	106,000	26.22	106,000	1,496,166
September 2022	201,324	24.59	201,324	1,294,842
Total	1,363,785	$ 30.59	1,363,785	

Holders:

Based on records available to the Company, the number of record holders of the Company's common stock wa 521 at October 31, 2022.

Securities Authorized for Issuance Under Equity Compensation Plans:

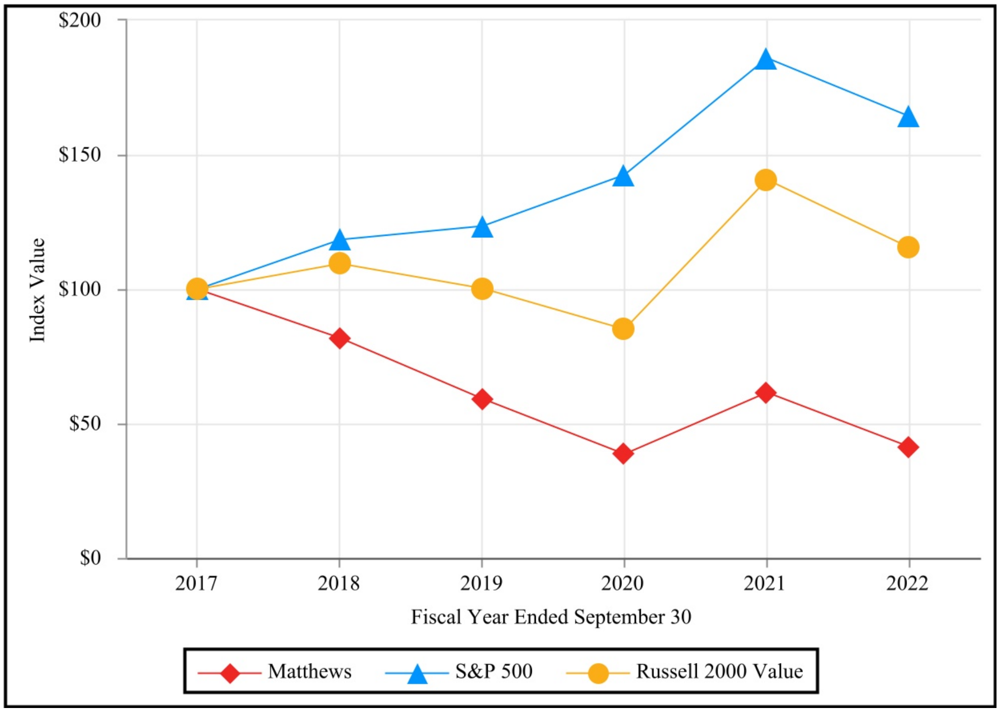
See Equity Compensation Plans in Item 12 "Security Ownership of Certain Beneficial Owners and Management."

PERFORMANCE GRAPH

COMPARISON OF FIVE-YEAR CUMULATIVE RETURN *
AMONG MATTHEWS INTERNATIONAL CORPORATION,
S&P 500 INDEX AND RUSSELL 2000 VALUE INDEX

This graph compares the return on Matthews' Common Stock with that of the Standard & Poor's 500 Index and Russell 2000 Value Index for the period from October 1, 2017 through September 30, 2022. The graph assumes that on October 1, 2017, $100 was invested in each of the Company's Common Stock, Standard & Poor's 500 Index and Russell 2000 Value Index. The graph measures total stockholder return, which takes into account both changes in stock price and dividends. It assumes that dividends paid are invested in like securities.

The following graph compares the total return on the Company's Common Stock with that of the Standard & Poor's 500 Index and the Russell 2000 Value Index. The results are not necessarily indicative of future performance.



* Total return assumes dividend reinvestment

ITEM 6. [Reserved].

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: Memorialization, Industrial Technologies and SGK Brand Solutions. Effective in the first quarter of fiscal 2022, the Company transferred its surfaces and engineered products businesses from the SGK Brand Solutions segment to the Industrial Technologies segment. This business segment change is consistent with internal management structure and reporting changes effective for fiscal 2022. Prior periods were revised to reflect retrospective application of this segment realignment. The Memorialization segment consists primarily of bronze and granite memorials and other memorialization products, caskets, cremation-related products, and cremation and incineration equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment includes the design, manufacturing, service and distribution of high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products. The SGK Brand Solutions segment consists of brand management, pre-media services, printing plates and cylinders, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries.

The Company's primary measure of segment profitability is 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 does not allocate corporate costs to its reportable segments. 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 Memorialization, Industrial Technologies and SGK Brand Solutions segments for each of the last three fiscal years. Refer to Note 20, "Segment Information" in Item 8 - "Financial Statements and Supplemental Data" for the Company's financial information by segment.

	Years Ended September 30,		
	2022	2021	2020
		(Dollar amounts in thousands)	
Sales to external customers:			
Memorialization	$ 840,124	$ 769,016	$ 656,035
Industrial Technologies	335,523	284,495	228,453
SGK Brand Solutions	586,756	617,519	613,818
Consolidated Sales	$ 1,762,403	$ 1,671,030	$ 1,498,306
Adjusted EBITDA:			
Memorialization	$ 151,849	$ 165,653	$ 146,285
Industrial Technologies	56,762	34,889	23,055
SGK Brand Solutions	60,120	91,435	90,342
Corporate and Non-Operating	(58,323)	(64,227)	(56,602)
Total Adjusted EBITDA(1)	$ 210,408	$ 227,750	$ 203,080

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

Comparison of Fiscal 2022 and Fiscal 2021:

Sales for the year ended September 30, 2022 were $1.76 billion, compared to $1.67 billion for the year ended September 30, 2021, representing an increase of $91.4 million. The increase in fiscal 2022 sales reflected higher sales in the Memorialization and Industrial Technologies segments, partially offset by lower sales in the SGK Brand Solutions segment. On a consolidated basis, changes in foreign currency exchange rates were estimated to have an unfavorable impact of $56.3 million on fiscal 2022 sales compared to the prior year.

Memorialization segment sales for fiscal 2022 were $840.1 million, compared to $769.0 million for fiscal 2021. The increase in sales resulted from improved price realization, increased unit sales of bronze and granite memorial products, higher sales of mausoleums and U.S. cremation equipment, and benefits from the fiscal 2021 acquisition of a small cemetery products business. These increases were partially offset by lower unit sales of caskets compared to the prior year. Changes in foreign currency exchange rates had an unfavorable impact of $4.6 million on the segment's sales compared to the prior year. Industrial Technologies segment sales for fiscal 2022 were $335.5 million, compared to $284.5 million for fiscal 2021. The sales increase primarily reflected higher sales of purpose-built engineered products (primarily energy storage solutions for the electric vehicle market), increased sales of warehouse automation solutions, higher product identification sales, and benefits from the recently completed acquisition of OLBRICH GmbH (“OLBRICH”) and R+S Automotive GmbH (“R+S Automotive”) (see Acquisitions and Divestitures below). These increases were partially offset by reduced sales of surfaces products. Changes in foreign currency exchange rates had an unfavorable impact of $16.9 million on the segment's sales compared to the prior year. In the SGK Brand Solutions segment, sales for fiscal 2022 were $586.8 million, compared to $617.5 million in fiscal 2021, representing a decrease of $30.7 million. The decrease primarily resulted from unfavorable changes in foreign currency exchange rates, which had an unfavorable impact of $34.8 million on the segment's sales compared to the prior year. The change in sales also reflected higher retail-based sales (principally merchandising solutions), higher brand sales in the Asia-Pacific market, and increased sales volume for cylinder (primarily packaging) products, partially offset by lower brand sales in the U.S. and Europe. The sales decline in Europe primarily resulted from weakened economic conditions.

Gross profit for the year ended September 30, 2022 was $522.3 million, compared to $541.8 million for fiscal 2021. Consolidated gross profit as a percent of sales was 29.6% and 32.4% in fiscal 2022 and fiscal 2021, respectively. The decrease in gross profit primarily reflected the impact of higher material (steel, lumber and bronze ingot), labor and transportation costs, particularly in the Memorialization segment, unfavorable changes in sales mix and lower margins on cylinder products within the SGK Brand Solutions segment, and lower margins on U.K. based cremation and incineration projects. Fiscal 2022 gross profit also included $9.7 million of asset write-downs related to the current war between Russia and Ukraine (see Note 23, "Asset Write-downs" in Item 8 - "Financial Statements and Supplementary Data" for further details). These decreases in gross profit were partially offset by the impact of higher sales, benefits from the realization of productivity improvements and other cost-reduction initiatives, and improved margins for engineered products within the Industrial Technologies segment. Gross profit also included acquisition integration costs and other charges primarily in connection with cost-reduction initiatives totaling $12.6 million and $17.3 million in fiscal 2022 and 2021, respectively.

Selling and administrative expenses for the year ended September 30, 2022 were $426.7 million, compared to $415.6 million for fiscal 2021. Consolidated selling and administrative expenses, as a percent of sales, were 24.2% for fiscal 2022, compared to 24.9% in fiscal 2021. Fiscal 2022 selling and administrative expenses reflected the impacts of higher salaries and wage rates, higher travel and entertainment ("T&E") costs, and additional expenses from the recently completed OLBRICH and R+S Automotive acquisition. These increases were partially offset by lower performance-based compensation compared to fiscal 2021 and benefits from ongoing cost-reduction initiatives. Fiscal 2022 selling and administrative expenses included $364,000 of asset write-downs (net of recoveries) related to the current war between Russia and Ukraine (see Note 23, "Asset Write-downs" in Item 8 - "Financial Statements and Supplementary Data" for further details). Selling and administrative expenses also included acquisition integration and related systems-integration costs, and other charges primarily in connection with cost-reduction initiatives totaling $27.1 million in fiscal 2022, compared to $17.5 million in fiscal 2021. Intangible amortization for the year ended September 30, 2022 was $57.1 million, compared to $84.2 million for fiscal 2021. Fiscal 2022 intangible amortization included $4.0 million of incremental amortization resulting from the fiscal 2021 reduction in useful lives for certain customer relationships. Intangible amortization also included accelerated amortization related to certain trade names that have been discontinued. Amortization for these trade names totaled $9.5 million and $35.5 million in fiscal 2022 and fiscal 2021, respectively. In the fiscal 2022 fourth quarter, the Company recorded a goodwill write-down of $82.5 million related to the SGK Brand Solutions reporting unit (formerly the Graphics Imaging reporting unit). Refer to Note 22, "Goodwill and Other Intangible Assets" in Item 8 - "Financial Statements and Supplementary Data" for further details.

Adjusted EBITDA for fiscal 2022 was $210.4 million, compared to $227.8 million for fiscal 2021. Memorialization segment adjusted EBITDA for fiscal 2022 was $151.8 million, compared to $165.7 million for fiscal 2021. Fiscal 2022 segment adjusted EBITDA reflected the benefits of higher sales and productivity initiatives, which were offset by the impact of higher material, labor, transportation and T&E costs and lower margins on certain cremation and incineration projects. Adjusted EBITDA for the Industrial Technologies segment for fiscal 2022 was $56.8 million, compared to $34.9 million in fiscal 2021. Industrial Technologies segment adjusted EBITDA primarily reflected the impact of higher sales, improved margins for engineered products, and benefits from cost-reduction initiatives, which were partially offset by the impact of higher T&E costs and increased performance-based compensation compared to fiscal 2021. Changes in foreign currency exchange rates had an unfavorable impact of $4.1 million on the segment's adjusted EBITDA compared to the prior year. Adjusted EBITDA for the SGK Brand Solutions segment for fiscal 2022 was $60.1 million, compared to $91.4 million for fiscal 2021. The decrease in segment adjusted EBITDA primarily reflected the impact of lower sales, unfavorable changes in sales mix, lower margins on cylinder products, and higher material, labor and T&E costs. These decreases were partially offset by the impact of lower performance-based compensation compared to fiscal 2021 and benefits from cost-reduction initiatives. Changes in foreign currency exchange rates had an unfavorable impact of $5.1 million on the segment's adjusted EBITDA compared to the prior year.

Investment income for the fiscal year ended September 30, 2022 was $1.0 million, compared to $2.6 million for the year ended September 30, 2021. Investment income for both fiscal years primarily reflected changes in the value of investments (primarily marketable securities) held in trust for certain of the Company's benefit plans. Interest expense for fiscal 2022 was $27.7 million, compared to $28.7 million in fiscal 2021. The decrease in interest expense reflected lower average borrowing levels and income recognized from cross currency swaps (see "Liquidity and Capital Resources" below). Other income (deductions), net for the year ended September 30, 2022 represented a decrease in pre-tax income of $33.6 million, compared to a decrease in pre-tax income of $6.8 million in fiscal 2021. Other income (deductions), net includes the non-service components of pension and postretirement expense, which totaled $31.8 million and $5.8 million in fiscal years 2022 and 2021, respectively. Fiscal 2022 non-service pension expense included a $30.9 million non-cash charge resulting from the full settlement of the Company's principal defined benefit retirement plan ("DB Plan") obligations. Refer to Note 15, "Pension and Other Postretirement Plans" in Item 8 - "Financial Statements and Supplementary Data" for further details. Other income (deductions), net also includes banking-related fees and the impact of currency gains and losses on certain intercompany debt and foreign denominated cash balances. Fiscal 2022 other income (deductions), net included $1.5 million of currency losses associated with highly inflationary accounting for the Company's subsidiaries in Turkey (see Note 2, "Summary of Significant Accounting Policies" in Item 8 - "Financial Statements and Supplementary Data" for further details).

The Company's consolidated income taxes for the year ended September 30, 2022 were a benefit of $4.4 million, compared to an expense of $6.4 million for fiscal 2021. The difference between the Company's consolidated income taxes for fiscal 2022 compared to fiscal 2021 partially resulted from fiscal 2022 having a consolidated loss before income taxes compared to fiscal 2021 having consolidated income before incomes taxes. The fiscal 2022 consolidated loss reflected a goodwill write-down recorded in the fourth quarter of fiscal 2022 that was primarily non-deductible. The fiscal 2022 effective tax rate benefited from research and development and foreign tax credits. The fiscal 2022 effective tax rate was negatively impacted by foreign net operating losses that had a full valuation allowance. The fiscal 2021 effective tax rate also benefited from research and development and foreign tax credits as well as the reduction of uncertain tax positions due to the expiration of the statute of limitations in certain jurisdictions, the completion of a state tax audit, and the tax benefit of the NOL carryback. The fiscal 2021 tax rate was negatively impacted by the termination of the Company's Supplemental Retirement Plan ("SERP"), which resulted in certain expenses that are nondeductible for tax purposes. Refer to Note 17, “Income Taxes” in Item 8 - “Financial Statements and Supplementary Data” for further details regarding income taxes.

Net losses attributable to noncontrolling interests were $54,000 in fiscal 2022, compared to $52,000 in fiscal 2021. The net losses attributable to noncontrolling interests primarily reflected losses in less than wholly-owned businesses.

Comparison of Fiscal 2021 and Fiscal 2020:

Sales for the year ended September 30, 2021 were $1.67 billion, compared to $1.50 billion for the year ended September 30, 2020, representing an increase of $172.7 million. The increase in fiscal 2021 sales reflected higher sales in all of the Company's segments. Changes in foreign currency exchange rates were estimated to have a favorable impact of $30.2 million on fiscal 2021 consolidated sales compared to fiscal 2020. Fiscal 2021 sales were impacted by the global outbreak of coronavirus disease 2019 ("COVID-19"), which caused some commercial impacts in certain of the Company's segments and geographic locations. These impacts included higher sales volumes for memorialization products and services, but also included temporary business disruptions and customer project delays for certain of the Company's businesses. Additionally, increases in the cost of certain raw materials and other inflation-related pressures had an unfavorable impact on the Company's results of operations.

Memorialization segment sales for fiscal 2021 were $769.0 million, compared to $656.0 million for fiscal 2020. The increase in sales resulted from a significant increase in unit sales of caskets due to COVID-19. The segment also reported higher sales of bronze and granite memorial products, mausoleums, and cremation equipment. The increase in sales also reflected improved price realization and benefits from an acquisition of a small cemetery products business. Changes in foreign currency exchange rates had a favorable impact of $4.4 million on the segment's sales compared to fiscal 2020. Industrial Technologies segment sales for fiscal 2021 were $284.5 million, compared to $228.5 million for fiscal 2020. The sales increase primarily reflected higher sales of purpose-built engineered products (primarily energy storage solutions for the electric vehicle market), higher sales of warehouse automation systems, and increased product identification sales, partially offset by reduced sales of surfaces products in Europe. Changes in foreign currency exchange rates had a favorable impact of $9.5 million on the segment's sales compared to fiscal 2020. In the SGK Brand Solutions segment, sales for fiscal 2021 were $617.5 million, compared to $613.8 million in fiscal 2020. The increase primarily resulted from increased cylinder (packaging) sales and higher brand sales in the Europe and Asia-Pacific markets. These increases were partially offset by lower retail-based sales (principally merchandising solutions and private label brand market sales) and decreased brand sales in the U.S., both of which were unfavorably impacted by COVID-19. Changes in foreign currency exchange rates had a favorable impact of $16.4 million on the segment's sales compared to fiscal 2020.

Gross profit for the year ended September 30, 2021 was $541.8 million, compared to $497.8 million for fiscal 2020. Consolidated gross profit as a percent of sales was 32.4% and 33.2% in fiscal 2021 and fiscal 2020, respectively. The increase in gross profit primarily reflected higher sales, benefits from the realization of productivity improvements and other cost-reduction initiatives, and improved margins for cylinder (packaging) products within the SGK Brand Solutions segment. These improvements were partially offset by the impact of higher material and transportation costs, particularly in the Memorialization segment, ongoing price competition in the brand market, and lower margins on certain cremation and incineration projects. Higher material costs in the Memorialization segment reflected a significant increase in commodity costs, particularly steel, lumber and bronze ingot. Gross profit also included acquisition integration costs and other charges primarily in connection with cost-reduction initiatives totaling $17.3 million and $12.4 million in fiscal 2021 and 2020, respectively.

Selling and administrative expenses for the year ended September 30, 2021 were $415.6 million, compared to $400.0 million for fiscal 2020. Consolidated selling and administrative expenses, as a percent of sales, were 24.9% for fiscal 2021, compared to 26.7% in fiscal 2020. The increase in selling and administrative expenses reflected higher performance-based compensation compared to fiscal 2020, partially offset by benefits from ongoing cost-reduction initiatives, and reduced T&E costs reflecting travel limitations resulting from the pandemic. Selling and administrative expenses also included acquisition integration and related systems-integration costs, and other charges primarily in connection with cost-reduction initiatives totaling $17.5 million in fiscal 2021, compared to $31.5 million in fiscal 2020. Fiscal 2020 selling and administrative expenses also included an $11.2 million gain on the sale of an ownership interest in a Memorialization business and a $10.6 million charge for a legal matter involving a letter of credit for a customer in Saudi Arabia. Intangible amortization for the year ended September 30, 2021 was $84.2 million, compared to $71.5 million for fiscal 2020. The increase in intangible amortization reflected $15.2

million of incremental amortization resulting from a reduction in useful lives for certain customer relationships. Intangible amortization also included accelerated amortization resulting from the fiscal 2019 reduction in useful lives for certain trade names that have been discontinued. Amortization for these trade names totaled $35.5 million and $37.5 million in fiscal 2021 and fiscal 2020, respectively. During the second quarter of fiscal 2020, the Company recorded a goodwill write-down totaling $90.4 million related to its two reporting units within the SGK Brand Solutions segment. Refer to Note 22, "Goodwill and Other Intangible Assets" in Item 8 - "Financial Statements and Supplementary Data" for further details.

Adjusted EBITDA for fiscal 2021 was $227.8 million, compared to $203.1 million for fiscal 2020. Memorialization segment adjusted EBITDA for fiscal 2021 was $165.7 million, compared to $146.3 million for fiscal 2020. The increase in segment adjusted EBITDA primarily reflected the impact of higher sales, benefits from productivity initiatives, lower T&E costs, and benefits from an acquisition of a small cemetery products business. These increases were partially offset by the impact of higher material and transportation costs, increased performance-based compensation compared to fiscal 2020, and lower margins on certain cremation and incineration projects. Adjusted EBITDA for the Industrial Technologies segment for fiscal 2021 was $34.9 million, compared to $23.1 million in fiscal 2020. Industrial Technologies segment adjusted EBITDA primarily reflected the impact of higher sales, improved margins for engineered products, and reduced T&E costs, partially offset by increased performance-based compensation expense and higher product development costs. Changes in foreign currency exchange rates had a favorable impact of $1.2 million on the segment's adjusted EBITDA compared to fiscal 2020. Adjusted EBITDA for the SGK Brand Solutions segment for fiscal 2021 was $91.4 million, compared to $90.3 million for fiscal 2020. The increase in segment adjusted EBITDA primarily reflected the impact of higher sales, benefits from cost-reduction initiatives, reduced T&E costs, and improved margins for cylinder products. Changes in foreign currency exchange rates had a favorable impact of $1.4 million on the segment's adjusted EBITDA compared to fiscal 2020. These increases were partially offset by increased performance-based compensation compared to fiscal 2020, and the impact of ongoing price competition in the brand market.

Investment income for the fiscal year ended September 30, 2021 was $2.6 million, compared to $2.0 million for the year ended September 30, 2020. Investment income for both fiscal years primarily reflected changes in the value of investments (primarily marketable securities) held in trust for certain of the Company's benefit plans. Interest expense for fiscal 2021 was $28.7 million, compared to $34.9 million in fiscal 2020. The decrease in interest expense reflected a decrease in average borrowing levels and lower average interest rates in fiscal 2021. Other income (deductions), net for the year ended September 30, 2021 represented a decrease in pre-tax income of $6.8 million, compared to a decrease in pre-tax income of $9.2 million in fiscal 2020. Other income (deductions), net includes the non-service components of pension and postretirement expense, which totaled $5.8 million and $7.8 million in fiscal years 2021 and 2020, respectively. Other income (deductions), net also includes banking-related fees and the impact of currency gains and losses on certain intercompany debt and foreign denominated cash balances.

The Company's consolidated income taxes for the year ended September 30, 2021 were an expense of $6.4 million, compared to a benefit of $18.7 million for fiscal 2020. The difference between the Company's consolidated income taxes for fiscal 2021 compared to fiscal 2020 primarily resulted from fiscal 2021 having consolidated income before income taxes, compared to fiscal 2020 having a consolidated loss, which reflected the goodwill write-down recorded in the second quarter of fiscal 2020, that was partially non-deductible. Additionally, the fiscal 2021 tax rate was negatively impacted by the termination of the Company's SERP, which resulted in certain expenses that are nondeductible for tax purposes. The fiscal 2021 effective tax rate benefited from research and development and foreign tax credits, the reduction of uncertain tax positions due to the expiration of the statute of limitations in certain jurisdictions, and the completion of a state tax audit, and the tax benefit of the NOL carryback. The Company’s fiscal 2020 effective tax rate was negatively affected by the non-deductible portion of the goodwill write-down along with certain other non-deductible expenses. The fiscal 2020 effective tax rate benefited from research and development and foreign tax credits, the reduction of uncertain tax positions due to the completion of a foreign tax audit, and the tax benefit of the NOL carryback. Refer to Note 17, “Income Taxes” in Item 8 - “Financial Statements and Supplementary Data” for further details regarding income taxes.

Net losses attributable to noncontrolling interests were $52,000 in fiscal 2021, compared to $497,000 in fiscal 2020. The net losses attributable to noncontrolling interests primarily reflected losses in less than wholly-owned 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,		
	2022	2021	2020
	(Dollar amounts in thousands)		
Net (loss) income	$ (99,828)	$ 2,858	$ (87,652)
Income tax (benefit) provision	(4,391)	6,375	(18,685)
(Loss) income before income taxes	(104,219)	9,233	(106,337)
Net loss attributable to noncontrolling interests	54	52	497
Interest expense	27,725	28,684	34,885
Depreciation and amortization *	104,056	133,512	119,058
Receivables Purchase Agreement ("RPA") financing fees (1)	1,046	—	—
Strategic initiatives and other charges (2)**	37,431	29,539	40,686
Legal matter reserve (3)	—	—	10,566
Non-recurring / incremental COVID-19 costs (4)***	2,985	5,312	3,908
Defined benefit plan termination related items (5)	(429)	—	—
Asset write-downs, net (6)	10,050	—	—
Goodwill write-downs (7)	82,454	—	90,408
Gain on sale of ownership interests in subsidiaries (8)	—	—	(11,208)
Joint Venture depreciation, amortization, interest expense and other charges (9)	—	—	4,732
Stock-based compensation	17,432	15,581	8,096
Non-service pension and postretirement expense (10)	31,823	5,837	7,789
Total Adjusted EBITDA	$ 210,408	$ 227,750	$ 203,080

(1) Represents fees for receivables sold under the Company's RPA agreement (see "Liquidity and Capital Resources").

(2) Includes certain non-recurring items associated with recent acquisition activities, costs associated with global ERP system integration efforts, certain non-recurring costs associated with productivity and cost-reduction initiatives intended to result in improved operating performance, profitability and working capital levels, and exchange losses associated with highly inflationary accounting (see Note 2, "Summary of Significant Accounting Policies" in Item 8 - "Financial Statements and Supplementary Data").

(3) Represents a reserve established for a legal matter involving a letter of credit for a customer in Saudi Arabia within the Memorialization segment (see Note 9, "Debt and Financing Arrangements" in Item 8 - "Financial Statements and Supplementary Data").

(4) Includes certain non-recurring direct incremental costs (such as costs for purchases of computer peripherals and devices to facilitate working-from-home, additional personal protective equipment and cleaning supplies and services, etc.) incurred in response to COVID-19. This amount does not include the impact of any lost sales or underutilization due to COVID-19.

(5) Represents items associated with the termination of the Company's DB Plan, supplemental retirement plan and the defined benefit portion of the officers retirement restoration plan.

(6) Represents asset write-downs, net of recoveries within the SGK Brand Solutions segment (see Note 23, "Asset Write-Downs" in Item 8 - "Financial Statements and Supplementary Data").

(7) Represents goodwill write-downs within the SGK Brand Solutions segment (see Note 22, "Goodwill and Other Intangible Assets" in Item 8 - "Financial Statements and Supplementary Data").

(8) Represents the gain on the sale of ownership interests in subsidiaries within the Memorialization segment.

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

(10) Non-service pension and postretirement expense includes interest cost, expected return on plan assets, amortization of actuarial gains and losses, curtailment gains and losses, and settlement 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. Curtailment gains and losses and settlement gains and losses are excluded from adjusted EBITDA since they generally result from certain non-recurring events, such as plan amendments to modify future benefits or settlements of plan obligations. 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 $23.2 million, $23.0 million, and $20.5 million, for the Memorialization segment, $11.4 million, $11.4 million, and $11.9 million for the Industrial Technologies segment, $64.2 million, $93.7 million, and $81.4 million for the SGK Brand Solutions segment, and $5.3 million, $5.4 million, and $5.2 million for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020, respectively.

** Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $3.5 million, $1.9 million, and $2.7 million for the Memorialization segment, $5.6 million, $4.0 million, and $2.5 million for the Industrial Technologies segment, $19.4 million, $12.3 million, and $12.5 million for the SGK Brand Solutions segment, and $8.9 million, $11.3 million, and $23.0 million for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020, respectively.

*** Non-recurring/incremental COVID-19 costs were $1.3 million, $3.6 million. and $1.8 million for the Memorialization segment, $6,000, $38,000, and $32,000 for the Industrial Technologies segment, $1.2 million, $1.5 million, and $1.4 million for the SGK Brand Solutions segment, and $466,000, $89,000, and $615,000 for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020, respectively.

LIQUIDITY AND CAPITAL RESOURCES:

Net cash provided by operating activities was $126.9 million for the year ended September 30, 2022, compared to $162.8 million and $180.4 million for fiscal years 2021 and 2020, respectively. Operating cash flow for fiscal 2022 principally included net (loss) income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, goodwill and other asset write-downs, non-cash pension expense, gain on sale of assets, and other non-cash adjustments, and changes in working capital items. Fiscal 2022 operating cash flow also reflected $35.7 million of contributions to fully fund the settlement of the Company's DB Plan obligations. The favorable movements in working capital in fiscal 2022 primarily reflected proceeds from the sale of receivables under a receivables purchase agreement (see below for further discussion), partially offset by higher inventory levels reflecting increased commodity costs, lower performance-based compensation accruals, and changes in other accounts. Operating cash flow for fiscal 2021 principally included net income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, net gains related to investments, and non-cash pension expense, and changes in working capital items. Fiscal 2021 operating cash flow also reflected a $15.0 million discretionary contribution to fund the DB Plan. The favorable movements in working capital in fiscal 2021 primarily reflected the Company's continued emphasis on working capital management, particularly trade accounts payable. Operating cash flow for fiscal 2020 principally included net (loss) income adjusted for deferred taxes, depreciation and amortization, stock-based compensation expense, net losses related to goodwill and investments, and non-cash pension expense, and changes in working capital items. The favorable movements in working capital in fiscal 2020 primarily reflected enhanced accounts receivable collection efforts and effective management of trade accounts payable.

Cash used in investing activities was $80.9 million for the year ended September 30, 2022, compared to $13.0 million and $2.7 million for fiscal years 2021 and 2020, respectively. Investing activities for fiscal 2022 primarily reflected capital expenditures of $61.3 million, acquisition payments (net of cash acquired or received from sellers) of $44.5 million, purchases of investments of $2.2 million, proceeds from the sale of assets of $5.0 million, proceeds from the sale of investments of $8.8 million, and proceeds from the settlement of net investment hedges of $13.1 million. Investing activities for fiscal 2021 primarily reflected capital expenditures of $34.3 million, acquisition payments (net of cash acquired or received from sellers) of $15.6 million, proceeds from the sale of assets of $2.8 million, and proceeds from the sale of investments of$34.2 million. Investing activities for fiscal 2020 primarily reflected capital expenditures of $34.8 million, acquisition payments (net of cash acquired or received from sellers) of $1.0 million, purchases of investments of $9.7 million, and proceeds of $42.2 million from the sale of an ownership interest in a pet cremation business.

Capital expenditures were $61.3 million for the year ended September 30, 2022, compared to $34.3 million and $34.8 million for fiscal years 2021 and 2020, 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 $43.5 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 2023 is currently estimated to be approximately $75 million. Capital spending in fiscal 2022 and 2023 reflects additional capital projects to support new production capabilities and increased efficiencies within the Memorialization and Industrial Technologies segments. 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, 2022 was $37.2 million, and principally reflected proceeds, net of repayments, on long-term debt of $35.7 million, purchases of treasury stock of $41.7 million, payment of dividends to the Company's shareholders of $27.7 million ($0.88 per share), and $725,000 of holdback and contingent consideration payments related to acquisitions from prior years. Cash used in financing activities for the year ended September 30, 2021 was $122.9 million, and principally reflected repayments, net of proceeds, on long-term debt of $76.8 million, purchases of treasury stock of $11.9 million, payment of dividends to the Company's shareholders of $27.7 million ($0.86 per share), $1.8 million of holdback and contingent consideration payments related to acquisitions from prior years, and $1.8 million of payments for the acquisition of noncontrolling interests. Cash used in financing activities for the year ended September 30, 2020 was $172.3 million, and principally reflected repayments, net of proceeds, on long-term debt of $126.3 million, purchases of treasury stock of $4.4 million, payment of dividends to the Company's shareholders of $26.4 million ($0.84 per share), $10.2 million of holdback and contingent consideration payments related to acquisitions from prior years, and payment of deferred financing fees of $2.0 million.

The Company has a domestic credit facility with a syndicate of financial institutions that includes a $750.0 million senior secured revolving credit facility, which matures in March 2025. A portion of the revolving credit facility (not to exceed $350.0 million) can be drawn in foreign currencies. Borrowings under the revolving credit facility bear interest at LIBOR (Euro LIBOR for balances drawn in Euros) plus a factor ranging from 0.75% to 2.00% (1.25% at September 30, 2022) 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 0.30% (based on the Company's leverage ratio) of the unused portion of the revolving credit facility. The Company incurred debt issuance costs in connection with the domestic credit facility. Unamortized costs were $1.5 million and $2.2 million at September 30, 2022 and September 30, 2021, respectively.

The domestic credit facility requires the Company to maintain certain leverage and interest coverage ratios. A portion of the facility (not to exceed $55.0 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, 2022 and 2021 were $472.1 million and $349.8 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, 2022 and 2021 was 3.13% and 2.03%, respectively.

The Company has $299.6 million of 5.25% senior unsecured notes due December 1, 2025. 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. Unamortized costs were $1.7 million and $2.2 million at September 30, 2022 and 2021, respectively.

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. In March 2022, Matthews RFC entered into a receivables purchase agreement (“RPA”) to sell up to $125.0 million of receivables to certain purchasers (the “Purchasers”) on a recurring basis in exchange for cash (referred to as “capital” within the RPA) equal to the gross receivables transferred. The parties intend that the transfers of receivables to the Purchasers constitute purchases and sales of receivables. Matthews RFC has guaranteed to each Purchaser the prompt payment of sold receivables, and has granted a security interest in its assets for the benefit of the Purchasers. Under the RPA, which matures in March 2024, each Purchaser’s share of capital accrues yield at a floating rate plus an applicable margin. The Company is the master servicer under the RPA, and is responsible for administering and collecting receivables.

The proceeds of the RPA are classified as operating activities in the Company’s Consolidated Statements of Cash Flows. Cash received from collections of sold receivables may be used to fund additional purchases of receivables on a revolving basis, or to reduce all or any portion of the outstanding capital of the Purchasers. Gross receivables sold and cash collections reinvested under the RPA program were $424.8 million and $328.2 million in fiscal 2022, respectively. The fair value of the sold receivables approximated book value due to their credit quality and short-term nature, and as a result, no gain or loss on sale of receivables was recorded. As of September 30, 2022, the amount sold to the Purchasers was $96.6 million, which was derecognized from the Consolidated Balance Sheets. As collateral against sold receivables, Matthews RFC maintains a certain level of unsold receivables, which was $44.3 million as of September 30, 2022.

Previously, the Company had a $115.0 million accounts receivable securitization facility (the "Securitization Facility") with certain financial institutions which matured in March 2022. The Securitization Facility did not qualify for sale treatment. Accordingly, the trade receivables and related debt obligations remained on the Company's Consolidated Balance Sheet. Borrowings under the Securitization Facility were based on LIBOR plus 0.75% and the Company was 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, 2021 totaled $96.0 million. At September 30, 2021, the interest rate on borrowings under this facility was 0.83%.

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 €25.0 million ($24.5 million), which includes €8.0 million ($7.8 million) for bank guarantees. The credit facility matures in December 2022 and the Company intends to continue to extend this facility. Outstanding borrowings under the credit facility totaled €8.2 million ($8.1 million) and €704,000 ($817,000) at September 30, 2022 and 2021, respectively. The weighted-average interest rate on outstanding borrowings under this facility was 2.25% at September 30, 2022 and 2021.

Other borrowings totaled $13.4 million and $10.2 million at September 30, 2022 and 2021, respectively. The weighted-average interest rate on these borrowings was 1.85% and 2.19% at September 30, 2022 and 2021, respectively.

The Company operates internationally and utilizes certain derivative financial instruments to manage its foreign currency, debt and interest rate exposures. The following table presents information related to interest rate swaps entered into by the Company and designated as cash flow hedges:

	September 30, 2022	September 30, 2021
	(Dollar amounts in thousands)	
Notional amount	$ 125,000	$ 250,000
Weighted-average maturity period (years)	3.1	2.2
Weighted-average received rate	3.14 %	0.08 %
Weighted-average pay rate	1.04 %	1.34 %

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 a net unrealized gain of $10.7 million ($7.9 million after tax) and a net unrealized loss of $2.1 million ($1.6 million after tax) at September 30, 2022 and 2021, 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, 2022, a gain (net of tax) of approximately $2.5 million included in AOCI is expected to be recognized in earnings over the next twelve months.

During fiscal 2021, the Company entered into a U.S. Dollar/Euro cross currency swap with a notional amount of $94.5 million, which was designated as a net investment hedge of foreign operations. The swap was settled during fiscal 2022, resulting in cash proceeds of $13.1 million. Concurrently, the Company entered into a new U.S. Dollar/Euro cross currency swap with a notional amount of $81.4 million, which was also designated as a net investment hedge of foreign operations. The new swap contract matures in September 2027. The Company assesses hedge effectiveness for the swap contracts based on changes in fair value attributable to changes in spot prices. A gain of $2.8 million (net of income taxes of $0.9 million) and a gain of $29,000 (net of income taxes of $10,000), which represented effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment at September 30, 2022 and September 30, 2021, respectively. Income of $1.6 million and $63,000, which represented the recognized portion of the fair value excluded from the assessment of hedge effectiveness, was included in current period earnings as a component of interest expense for fiscal 2022 and fiscal 2021, respectively. At September 30, 2022 and September 30, 2021, the swaps totaled $3.7 million and $39,000, respectively, and were included in other assets in the Consolidated Balance Sheets.

The Company previously used certain foreign currency debt instruments as net investment hedges of foreign operations. Currency losses of $5.4 million (net of income taxes of $1.7 million), which represent effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment at September 30, 2021.

The Company enters into certain derivative contracts in accordance with its risk management strategy that do not meet the criteria for hedge accounting but which have the economic impact of largely mitigating foreign currency exposure. Changes in the fair value of these economic hedges are recorded in current period earnings as a component of other income (deductions), net. During fiscal 2022, net gains from economic hedges (which largely offset losses from underlying foreign currency exposures) totaled $4.7 million. No such economic hedge contracts were outstanding as of September 30, 2022 and 2021.

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, 1,294,842 shares remain available for repurchase as of September 30, 2022.

Consolidated working capital was $217.2 million at September 30, 2022, compared to $269.9 million at September 30, 2021. Cash and cash equivalents were $69.0 million at September 30, 2022, compared to $49.2 million at September 30, 2021. The Company's current ratio was 1.5 and 1.8 at September 30, 2022 and 2021, respectively.

Long-Term Contractual Obligations:

The following table summarizes the Company's contractual obligations at September 30, 2022, and the effect such obligations are expected to have on its liquidity and cash flows in future periods.

		Payments due in fiscal year:			
	Total	2023[1]	2024 to 2025	2026 to 2027	After 2027
Contractual Cash Obligations:	*(Dollar amounts in thousands)*				
Revolving credit facilities	$ 480,107	$ 8,050	$ 472,057	$ —	$ —
2025 Senior Notes	353,086	15,750	31,500	305,836	—
Finance lease obligations [2]	7,722	2,499	2,451	1,510	1,262
Non-cancelable operating leases [2]	77,978	24,378	34,728	15,561	3,311
Other	40,559	28,119	2,070	2,155	8,215
Total contractual cash obligations	$ 959,452	$ 78,796	$ 542,806	$ 325,062	$ 12,788

[1]The Company maintains certain debt facilities with current maturity dates of twelve months or less that it intends and has the ability to extend beyond twelve months totaling $8.1 million. These balances have been classified as non-current on the Company's Consolidated Balance Sheet.

[2]Lease obligations have not been discounted to their present value.

Benefit payments under the Company's DB Plan were made from plan assets, while benefit payments under the SERP and postretirement benefit plan are funded from the Company's operating funds.

In the first quarter of fiscal 2022, the Company terminated its DB Plan and made plan contributions totaling $35.7 million to fully fund the planned settlement of the DB Plan obligations. Also during the first quarter of fiscal 2022, lump sum distributions of $186.0 million were made from the DB Plan to plan participants, and non-participating annuity contracts totaling $56.3 million were purchased by the DB Plan for plan participants, resulting in the full settlement of the DB Plan obligations. The settlement of the DB Plan obligations resulted in the recognition of a non-cash charge of $30.9 million, which has been presented as a component of other income (deductions), net for the year ended September 30, 2022. This amount represents the immediate recognition of the remaining portion of the deferred AOCI balances related to the DB Plan. During fiscal 2022 contributions of $760,000, $416,000, and $615,000 were made under the SERP, other retirement plans, and postretirement plan, respectively.

In October 2022, subsequent to the date of the balance sheet, the Company made lump sum payments totaling $24.2 million to fully settle the SERP and defined benefit portion of the Company's Officers Retirement Restoration Plan ("ORRP") obligations. The settlement of these plan obligations is expected to result in the recognition of a non-cash charge of approximately $1.3 million in the first quarter of fiscal 2023. This amount represents the immediate recognition of the deferred AOCI balances related to the SERP and ORRP, and is based on current estimates as of September 30, 2022.

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, 2022, the Company had unrecognized tax benefits, excluding penalties and interest, of approximately $4.1 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.

ACQUISITIONS AND DIVESTITURES:

Refer to Note 21, "Acquisitions and Divestitures" in Item 8 - "Financial Statements and Supplementary Data," for further details on the Company's acquisitions and divestitures.

FORWARD-LOOKING INFORMATION:

The Company's current strategy to attain annual operating income growth 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 - and acquisitions and related integration activities to achieve synergy benefits.

The significant factors (excluding acquisitions) influencing sales growth in the Industrial Technologies segment include economic/industrial market conditions, new product development, and the electric vehicles ("EV") and e-commerce trends. Order rates for the Company's Industrial Technologies businesses remained strong through fiscal 2022 and, as a result, are currently expected to support the segment’s organic growth objectives into next year. For the Memorialization segment, sales growth will be influenced by North America death rates, and the impact of the increasing trend toward cremation on the segment's product offerings, including caskets, cemetery memorial products and cremation-related products. For the SGK Brand Solutions segment, sales growth will be influenced by 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. Additionally, the retail-based businesses in the SGK Brand Solutions segment continue to recover from the unfavorable sales impacts of the pandemic (see below).

On January 30, 2020, the World Health Organization declared an outbreak of COVID-19 to be a Public Health Emergency of International Concern, and subsequently recognized COVID-19 as a global pandemic in March 2020. The Company has experienced some commercial impact and business disruptions in certain segments and geographic locations as a result of COVID-19. Recent impacts have included higher sales volumes for memorialization products and services, which are expected to decrease as the pandemic subsides. Additionally, recent increases in the cost of certain raw materials, labor, supply chain challenges, and other inflation-related impacts are expected to impact the Company's results for the near future. The Company expects to partially mitigate these cost increases through price realization and cost-reduction initiatives.

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, 2022.

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, except as disclosed in Note 23, “Asset Write-Downs" in Item 8 - "Financial Statements and Supplementary Data."

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 2022 (January 1, 2022) and determined that the estimated fair values for all goodwill reporting units exceeded their carrying values, therefore no impairment charges were necessary. The estimated fair value of the Company's SGK Brand Solutions reporting unit (formerly the Graphics Imaging reporting unit) exceeded the carrying value (expressed as a percentage of carrying value) by approximately 10%.

The SGK Brand Solutions reporting unit has experienced recent declines, primarily resulting from weakened economic conditions (particularly in Europe) and unfavorable changes in foreign exchange rates. Additionally, recent increases in the cost of certain materials, labor, and other inflation-related pressures have had an unfavorable impact on the reporting unit's results of operations. During the fourth quarter of fiscal 2022, in its assessment of these potential impacts, and in light of the limited excess fair value over carrying value for its SGK Brand Solutions reporting unit (discussed above), management determined a triggering event occurred, resulting in a re-evaluation of goodwill for the reporting unit, as of September 1, 2022. As a result of this interim assessment, the Company recorded a goodwill write-down totaling $82.5 million during the fiscal 2022 fourth quarter. Subsequent to this write-down, the fair value of the SGK Brand Solutions reporting unit approximated its carrying value at September 1, 2022. The fair value for the reporting unit was determined using level 3 inputs (including estimates of revenue growth, EBITDA contribution and the discount rates) 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 and continued economic and industry challenges) significantly change, additional goodwill write-downs may be necessary in future periods.

In fiscal 2020, in its assessment of the potential impacts of COVID-19 on the estimated future earnings and cash flows for the SGK Brand Solutions segment, and in light of the limited excess fair values over carrying values for the segment's two reporting units, management determined that COVID-19 represented a triggering event, resulting in a re-evaluation of the goodwill for the reporting units within the SGK Brand Solutions segment (Graphics Imaging and Cylinders, Surfaces and Engineered Products), as of March 31, 2020. As a result of this interim assessment, the Company recorded a goodwill write-down totaling $90.4 million during the fiscal 2020 second quarter. Subsequent to this write-down, the fair values of the two reporting units within the SGK Brand Solutions segment (Graphics Imaging and Cylinders, Surfaces and Engineered Products) approximated their carrying values at March 31, 2020. The fair values for these reporting units were determined using level 3 inputs (including estimates of revenue growth, EBITDA contribution and the discount rates) and a combination of the income approach using the estimated discounted cash flows and a market-based valuation methodology.

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 exempt from tax, and such earnings are considered to be reinvested indefinitely in foreign operations.

INFLATION:

Recent increases in the cost of certain materials (such as bronze ingot, steel, wood, granite and fuel), labor, and other inflation-related pressures have had an unfavorable impact on the Company's results of operations (see "Results of Operations"). Although recent economic conditions increase the level of uncertainty in the Company's near-term outlook, inflation is not currently anticipated to have a material impact on a long-term basis.

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, 2022	September 30, 2021
	(Dollar amounts in thousands)	
Pay fixed swaps - notional amount	$ 125,000	$ 250,000
Weighted-average maturity period (years)	3.1	2.2
Weighted-average received rate	3.14 %	0.08 %
Weighted-average pay rate	1.04 %	1.34 %

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 a net unrealized gain of $10.7 million ($7.9 million after-tax) at September 30, 2022 that is included in equity as part of AOCI. A hypothetical decrease of 10% in market interest rates (e.g., a decrease from 5.0% to 4.5%) would result in a decrease of approximately $2.5 millionin the fair value of the interest rate swaps.

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 $56.6 million and a decrease in reported operating income of $3.7 million for the year ended September 30, 2022.

As of September 30, 2022, the Company had a foreign currency derivative contract (U.S. Dollar/Euro cross currency swap) with a notional amount of $81.4 million designated as a net investment hedge of foreign operations. The net unrealized gain for this swap contract at September 30, 2022 was of $2.8 million (net of income taxes of $0.9 million). As of September 30, 2022, the potential gain or loss in the fair value of the swap contract assuming a hypothetical 10% fluctuation in the market rates would be approximately $8.4 million.

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.

Actuarial Assumptions - As of September 30, 2022, all of the Company's defined benefit plans are unfunded. The most significant actuarial assumption affecting pension expense and pension obligations is discount rates. A hypothetical decrease of 1% in discount rates would result in an increase of approximately $2.3 million in the projected benefit obligation. Refer to Note 15, "Pension and Other Postretirement Plans" in Item 8 – "Financial Statements and Supplementary Data" for additional information.

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.

OLBRICH GmbH (“OLBRICH”) and R+S Automotive GmbH (“R+S Automotive”) have been excluded from management's assessment of internal control over financial reporting as of September 30, 2022, because they were acquired by the Company in a purchase business combination in August 2022. Total assets and total sales for these subsidiaries represent approximately 5% and 1%, respectively, of the related consolidated financial statement amounts of the Company as of and for the year ended September 30, 2022.

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, 2022. The effectiveness of the Company's internal control over financial reporting as of September 30, 2022 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, 2022, 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, 2022, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting as of September 30, 2022 did not include the internal controls of OLBRICH GmbH ("OLBRICH") and R+S Automotive GmbH ("R+S Automotive"), which are included in the 2022 consolidated financial statements of the Company and constituted 5% of total assets as of September 30, 2022 and 1% of total sales for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of OLBRICH and R+S Automotive.

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, 2022 and 2021, the related consolidated statements of income (loss), comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended September 30, 2022, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 and our report dated November 18, 2022 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 18, 2022

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, 2022 and 2021, the related consolidated statements of income (loss), comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended September 30, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2022, 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, 2022, 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 18, 2022 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 SGK Brand Solutions Reporting Unit Goodwill
Description of the Matter	As more fully described in Note 22 to the consolidated financial statements, during 2022, the Company recorded an $82.5 million impairment charge attributable to its SGK Brand Solutions reporting unit within the SGK Brand Solutions segment. Weakened economic conditions (particularly in Europe), unfavorable changes in foreign exchange rates, and recent increases in the cost of certain materials, labor, and other inflation-related pressures unfavorably impacted the financial results for this reporting unit. Because of these challenging market conditions, as of September 1, 2022, 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, EBITDA contribution, 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 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 18, 2022

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
September 30, 2022 and 2021
(Dollar amounts in thousands, except per share data)

ASSETS	**2022**	**2021**
Current assets:		
Cash and cash equivalents	$ 69,016	$ 49,176
Accounts receivable, net of allowance for doubtful accounts of $10,138 and $10,654, respectively	221,015	309,818
Inventories	225,440	189,088
Restricted cash, current	2,398	—
Other current assets	110,747	76,083
Total current assets	628,616	624,165
Restricted cash, non-current	—	19,167
Investments	25,976	30,438
Property, plant and equipment, net	256,065	223,707
Operating lease right-of-use-assets	71,974	80,262
Deferred income taxes	3,610	3,489
Goodwill	675,421	773,787
Other intangible assets, net	202,154	261,542
Other assets	18,955	15,521
Total assets	$ 1,882,771	$ 2,032,078

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS, continued
September 30, 2022 and 2021
(Dollar amounts in thousands, except per share data)

LIABILITIES AND SHAREHOLDERS' EQUITY	**2022**	**2021**
Current liabilities:		
Long-term debt, current maturities	$ 3,277	$ 4,624
Current portion of operating lease liabilities	22,869	25,151
Trade accounts payable	121,359	112,722
Accrued compensation	58,272	68,938
Accrued income taxes	9,277	4,235
Other current liabilities	196,321	138,555
Total current liabilities	411,375	354,225
Long-term debt	795,291	759,086
Operating lease liabilities	51,445	57,272
Accrued pension	12,437	84,803
Postretirement benefits	11,983	17,958
Deferred income taxes	92,589	97,416
Other liabilities	20,575	24,915
Total liabilities	1,395,695	1,395,675
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	160,255	149,484
Retained earnings	706,749	834,208
Accumulated other comprehensive loss	(190,191)	(192,739)
Treasury stock, 6,035,940 and 4,863,879 shares, respectively, at cost	(225,795)	(190,739)
Total shareholders' equity-Matthews	487,352	636,548
Noncontrolling interests	(276)	(145)
Total shareholders' equity	487,076	636,403
Total liabilities and shareholders' equity	$ 1,882,771	$ 2,032,078

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

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME (LOSS)
for the years ended September 30, 2022, 2021 and 2020
(Dollar amounts in thousands, except per share data)

	2022	2021	2020
Sales	$ 1,762,403	$ 1,671,030	$ 1,498,306
Cost of sales	(1,240,125)	(1,129,198)	(1,000,537)
Gross profit	522,278	541,832	497,769
Selling expense	(128,362)	(130,199)	(125,117)
Administrative expense	(298,315)	(285,366)	(274,923)
Intangible amortization	(57,084)	(84,233)	(71,514)
Goodwill write-downs	(82,454)	—	(90,408)
Operating (loss) profit	(43,937)	42,034	(64,193)
Investment income	1,036	2,645	1,962
Interest expense	(27,725)	(28,684)	(34,885)
Other income (deductions), net	(33,593)	(6,762)	(9,221)
(Loss) income before income taxes	(104,219)	9,233	(106,337)
Income tax benefit (provision)	4,391	(6,375)	18,685
Net (loss) income	(99,828)	2,858	(87,652)
Net loss attributable to noncontrolling interests	54	52	497
Net (loss) income attributable to Matthews shareholders	$ (99,774)	$ 2,910	$ (87,155)
(Loss) earnings per share attributable to Matthews shareholders:			
Basic	$ (3.18)	$ 0.09	$ (2.79)
Diluted	$ (3.18)	$ 0.09	$ (2.79)

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, 2022, 2021 and 2020
(Dollar amounts in thousands)

	Year Ended September 30, 2022		
	Matthews	**Noncontrolling Interest**	**Total**
Net loss	$ (99,774)	$ (54)	$ (99,828)
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment	(48,059)	14	(48,045)
Pension plans and other postretirement benefits	41,112	—	41,112
Unrecognized gain on cash flow hedges:			
Net change from periodic revaluation	8,148	—	8,148
Net amount reclassified to earnings	1,347	—	1,347
Net change in unrecognized gain on cash flow hedges	9,495	—	9,495
Other comprehensive income, net of tax	2,548	14	2,562
Comprehensive loss	$ (97,226)	$ (40)	$ (97,266)

	Year Ended September 30, 2021		
	Matthews	**Noncontrolling Interest**	**Total**
Net income (loss)	$ 2,910	$ (52)	$ 2,858
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	(3,370)	(127)	(3,497)
Pension plans and other postretirement benefits	47,024	—	47,024
Unrecognized gain on cash flow hedges:			
Net change from periodic revaluation	1,873	—	1,873
Net amount reclassified to earnings	2,453	—	2,453
Net change in unrecognized gain on cash flow hedges	4,326	—	4,326
Other comprehensive income (loss), net of tax	47,980	(127)	47,853
Comprehensive income (loss)	$ 50,890	$ (179)	$ 50,711

	Year Ended September 30, 2020		
	Matthews	**Noncontrolling Interest**	**Total**
Net loss	$ (87,155)	$ (497)	$ (87,652)
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	4,333	(7)	4,326
Pension plans and other postretirement benefits	(11,211)	—	(11,211)
Unrecognized (loss) gain on cash flow hedges:			
Net change from periodic revaluation	(6,130)	—	(6,130)
Net amount reclassified to earnings	650	—	650
Net change in unrecognized loss on cash flow hedges	(5,480)	—	(5,480)
Other comprehensive loss, net of tax	(12,358)	(7)	(12,365)
Comprehensive loss	$ (99,513)	$ (504)	$ (100,017)

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, 2022, 2021 and 2020
(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, 2019	$ 36,334	$ 137,774	$ 972,594	$ (228,361)	$ (200,235)	$ 1,130	$ 719,236
Net loss	—	—	(87,155)	—	—	(497)	(87,652)
Pension plans and other postretirement benefits	—	—	—	(11,211)	—	—	(11,211)
Translation adjustment	—	—	—	4,333	—	(7)	4,326
Fair value of cash flow hedges	—	—	—	(5,480)	—	—	(5,480)
Total comprehensive loss							(100,017)
Stock-based compensation	—	8,096	—	—	—	—	8,096
Purchase of 173,576 shares of treasury stock	—	—	—	—	(4,428)	—	(4,428)
Issuance of 12,125 shares of treasury stock	—	(486)	—	—	486	—	—
Cancellation of 23,461 shares of treasury stock	—	1,527	—	—	(1,527)	—	—
Dividends	—	—	(26,437)	—	—	—	(26,437)
Pension contribution of 668,000 shares of treasury stock	—	(11,724)	—	—	26,707	—	14,983
Balance, September 30, 2020	$ 36,334	$ 135,187	$ 859,002	$ (240,719)	$ (178,997)	$ 626	$ 611,433
Net income (loss)	—	—	2,910	—	—	(52)	2,858
Pension plans and other postretirement benefits	—	—	—	47,024	—	—	47,024
Translation adjustment	—	—	—	(3,370)	—	(127)	(3,497)
Fair value of cash flow hedges	—	—	—	4,326	—	—	4,326
Total comprehensive income							50,711
Stock-based compensation	—	15,581	—	—	—	—	15,581
Purchase of 380,109 shares of treasury stock	—	—	—	—	(11,858)	—	(11,858)
Issuance of 53,377 shares of treasury stock	—	(2,097)	—	—	2,097	—	—
Cancellation of 34,727 shares of treasury stock	—	1,981	—	—	(1,981)	—	—
Dividends	—	—	(27,704)	—	—	—	(27,704)
Transactions with noncontrolling interests	—	(1,168)	—	—	—	(592)	(1,760)
Balance, September 30, 2021	$ 36,334	$ 149,484	$ 834,208	$ (192,739)	$ (190,739)	$ (145)	$ 636,403
Net loss	—	—	(99,774)	—	—	(54)	(99,828)
Pension plans and other postretirement benefits	—	—	—	41,112	—	—	41,112
Translation adjustment	—	—	—	(48,059)	—	14	(48,045)
Fair value of cash flow hedges	—	—	—	9,495	—	—	9,495
Total comprehensive loss							(97,266)
Stock-based compensation	—	17,432	—	—	—	—	17,432
Purchase of 1,363,785 shares of treasury stock	—	—	—	—	(41,717)	—	(41,717)
Issuance of 223,033 shares of treasury stock	—	(8,767)	—	—	8,767	—	—
Cancellation of 31,309 shares of treasury stock	—	2,106	—	—	(2,106)	—	—
Dividends	—	—	(27,685)	—	—	—	(27,685)
Divestiture	—	—	—	—	—	(91)	(91)
Balance, September 30, 2022	$ 36,334	$ 160,255	$ 706,749	$ (190,191)	$ (225,795)	$ (276)	$ 487,076

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, 2022, 2021 and 2020
(Dollar amounts in thousands)

	2022	2021	2020
Cash flows from operating activities:			
Net (loss) income	$ (99,828)	$ 2,858	$ (87,652)
Adjustments to reconcile net (loss) income to net cash flows from operating activities:			
Depreciation and amortization	104,056	133,512	119,058
Stock-based compensation expense	17,432	15,581	8,096
Deferred tax (benefit) provision	(32,962)	4,158	(16,607)
Gain on sale of assets, net	(3,194)	(412)	(348)
Gain on sale of ownership interests in subsidiaries	(196)	—	(11,208)
Losses from equity-method investments	—	—	3,498
Other investment losses (gains)	14	(1,364)	(2,066)
Pension settlement loss	30,856	—	—
Asset write-downs	10,050	—	—
Goodwill write-downs	82,454	—	90,408
Changes in working capital items	29,590	12,982	46,367
Decrease in other assets	20,093	15,115	16,392
(Decrease) increase in other liabilities	(45,405)	(16,346)	4,886
Other operating activities, net	13,900	(3,273)	9,623
Net cash provided by operating activities	126,860	162,811	180,447
Cash flows from investing activities:			
Capital expenditures	(61,321)	(34,313)	(34,849)
Acquisitions, net of cash acquired	(44,469)	(15,623)	(1,000)
Purchases of investments	(2,198)	—	(9,703)
Proceeds from sale of assets	4,955	2,776	624
Proceeds from sale of ownership interests in subsidiaries	344	—	42,210
Proceeds from sale of investments	8,771	34,167	—
Proceeds from the settlement of net investment hedges	13,066	—	—
Net cash used in investing activities	(80,852)	(12,993)	(2,718)
Cash flows from financing activities:			
Proceeds from long-term debt	777,809	625,628	1,154,809
Payments on long-term debt	(742,121)	(702,395)	(1,281,092)
Purchases of treasury stock	(41,717)	(11,858)	(4,428)
Dividends	(27,685)	(27,704)	(26,437)
Acquisition holdback and contingent consideration payments	(725)	(1,781)	(10,215)
Transactions with noncontrolling interests	—	(1,760)	—
Other financing activities	(2,774)	(2,982)	(4,889)
Net cash used in financing activities	(37,213)	(122,852)	(172,252)
Effect of exchange rate changes on cash	(5,724)	43	555
Net change in cash, cash equivalents and restricted cash	3,071	27,009	6,032
Cash, cash equivalents and restricted cash at beginning of year	68,343	41,334	35,302
Cash, cash equivalents and restricted cash at end of year	$ 71,414	$ 68,343	$ 41,334
Cash paid during the year for:			
Interest	$ 27,411	$ 28,824	$ 35,269
Income taxes	13,647	9,166	20,734
Non-cash investing and financing activities:			
Contribution of treasury stock to the Company's principal defined benefit retirement plan ("DB Plan")	$ —	$ —	$ 14,983

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 memorialization products, industrial technologies and brand solutions. The Company manages its businesses under three segments: Memorialization, Industrial Technologies and SGK Brand Solutions. Effective in the first quarter of fiscal 2022, the Company transferred its surfaces and engineered products businesses from the SGK Brand Solutions segment to the Industrial Technologies segment. This business segment change is consistent with internal management structure and reporting changes effective for fiscal 2022. Prior periods were revised to reflect retrospective application of this segment realignment. Memorialization products consist primarily of bronze and granite memorials and other memorialization products, caskets, cremation-related products, and cremation and incineration equipment primarily for the cemetery and funeral home industries. Industrial technologies includes the design, manufacturing, service and distribution of high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products. Brand solutions consists of brand management, pre-media services, printing plates and cylinders, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries.

The Company has facilities in 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 and any variable interest entities for which the Company is the primary beneficiary. 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, Cash Equivalents and Restricted Cash:

The Company considers all investments purchased with a remaining maturity of three months or less to be cash equivalents. Restricted cash represents amounts held for specific purposes, which are not available for general business use. The carrying amount of cash, cash equivalents and restricted cash 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 historical collection experience, the aging of

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

accounts receivable, and economic trends and forecasts, and also reflects adjustments for 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.

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, except as disclosed in Note 23, “Asset Write-Downs."

Leases:

A lease exists at contract inception if the contract conveys the right to control an identified asset for a period of time in exchange for consideration. Control is considered to exist when the lessee has the right to obtain substantially all of the economic benefits from the use of an identified asset, as well as the right to direct the use of that asset. If a contract is considered to be a lease, the Company recognizes a lease liability based on the present value of the future lease payments, and a corresponding right-of-use ("ROU") asset. As a majority of the Company’s leases do not provide an implicit interest rate within the lease, an incremental borrowing rate is used to determine the ROU asset and lease liability which is based on information available at the commencement date. Options to purchase, extend or terminate a lease are included in the ROU asset and lease liability when it is reasonably certain an option will be exercised. Renewal options are most prevalent in the Company’s real estate leases. In general, the Company has not included renewal options for leases in the ROU asset and lease liability because the likelihood of renewal is not considered to be reasonably certain. In addition, leases may include variable lease payments, for items such as maintenance and utilities, which are expensed as incurred as variable lease expense.

The Company applies the practical expedient to not separate lease components from non-lease components for all asset classes. In addition, the Company applies the practical expedient to utilize a portfolio approach for certain equipment asset classes, primarily information technology, as the application of the lease model to the portfolio would not differ materially from the application of the lease model to the individual leases within the portfolio.

There are two types of leases, operating leases and finance leases. Lease classification is determined at lease commencement. Leases not meeting the finance lease criteria are classified as operating leases. ROU assets and corresponding lease liabilities are recorded on the Consolidated Balance Sheet. ROU assets for operating leases are classified in other assets, and ROU assets for finance leases are classified in property, plant and equipment, net on the Consolidated Balance Sheet. For operating leases, short-term lease liabilities are classified in other current liabilities, and long-term lease liabilities are classified in other liabilities on the Consolidated Balance Sheet. For finance leases, short-term lease liabilities are classified in long-term debt, current maturities, and long-term lease liabilities are classified in long-term debt on the Consolidated Balance Sheet. Leases with an initial lease term of twelve months or less have not been recognized on the Consolidated Balance Sheet.

Lease expense for operating leases is recognized on a straight-line basis over the lease term as an operating expense, while the expense for finance leases is recognized as depreciation expense and interest expense using the interest method of recognition. On the cash flow statement, payments for operating leases are classified as operating activities. Payments for finance leases are classified as a financing activity, with the exception of the interest component of the payment which is classified as an operating activity.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

Goodwill and Other Intangible Assets:

Intangible assets with finite useful lives are amortized over their estimated useful lives, ranging from2 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 generally 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 hedging activities are recognized in the statement of cash flows in a manner consistent with the underlying hedged item.

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."

The Company applies highly inflationary accounting for subsidiaries when the cumulative inflation rate for a three-year period meets or exceeds 100 percent. Under highly inflationary accounting, the financial statements of these subsidiaries are remeasured into the Company's reporting currency (U.S. dollar) and exchange gains and losses from the remeasurement of monetary assets and liabilities are reflected in current earnings, rather than accumulated other comprehensive loss on the Consolidated Balance Sheets, until such time as the applicable economy is no longer considered highly inflationary.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

Effective April 1, 2022, the Company applies highly inflationary accounting to its Turkish subsidiaries. As of September 30, 2022, the Company had net monetary assets related to its Turkish subsidiaries of $5,022. Exchange losses related to highly inflationary accounting totaled $1,473 in fiscal 2022 and were included in the Consolidated Statements of Income within other income (deductions), net.

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 cash flow hedges, 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. Transaction price, for revenue recognition, is allocated to each performance obligation consisting of the stand alone selling price for goods and services, as well as warranties. Transaction price also reflects estimates of rebates, other sales or contract renewal incentives, 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 purpose-built engineered products (primarily in support of the electric vehicle and energy storage solutions industries), cremation and incineration projects, and product identification and warehouse automation projects, are recognized over time using the input method measuring progress toward completion of such projects. 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 $15,536, $13,206 and $13,363 for the years ended September 30, 2022, 2021 and 2020, 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.

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 exempt from tax, and such earnings are considered to be reinvested indefinitely in foreign operations.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (continued)

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 October 2021, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2021-08, *Business Combinations (Topic 805)* which improves the accounting for acquired revenue contracts with customers in a business combination by addressing diversity in practice and inconsistency related to recognition of an acquired contract asset/liability, and payment terms and their effect on subsequent revenue recognized by the acquirer. This ASU is effective for the Company beginning in interim periods starting in fiscal 2024. While the impact of this ASU is dependent on the nature of any future transactions, the Company currently does not expect this ASU to have a significant impact on its consolidated financial statements.

Adopted

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740)* which simplifies the accounting for income taxes. The amendments in this update remove certain exceptions to the general principles in Topic 740 and also simplify GAAP for other areas of Topic 740 by clarifying and amending existing guidance. The amendments in this ASU will be applied using different approaches depending on what the specific amendment relates to and, for public entities, are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company early adopted this ASU in the quarter ended March 31, 2020. The adoption of this ASU had no significant impact on the Company's consolidated financial statements, but modifies the methodology to assess certain tax principles in Topic 740 prospectively.

In August 2018, the FASB issued 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. The adoption of this ASU in the first quarter ended December 31, 2020 had no 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. The adoption of this ASU in the first quarter ended December 31, 2019 had no 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. The adoption of this ASU in the first quarter ended December 31, 2019 had no 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. Subsequently, the FASB issued ASU No. 2019-11, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses* and ASU No. 2020-02, *Financial Instruments—Credit Losses (Topic 326)* and *Leases (Topic 842)*, that provide certain amendments to the new guidance. The adoption of these ASUs in the first quarter ended December 31, 2020 had no material impact on the Company's consolidated financial statements.

(Dollar amounts in thousands, except per share data)

3. ACCOUNTING PRONOUNCEMENTS, (continued)

The following table summarizes the activity for the accounts receivable allowance for doubtful accounts for the years ended September 30, 2022 and 2021.

Description	Balance at Beginning of Period	Charged to Expense	Deductions [1]	Balance at End of Period
Allowance for Doubtful Accounts:				
Fiscal Year Ended:				
September 30, 2022	$ 10,654	$ 1,368	$ (1,884)	$ 10,138
September 30, 2021	9,618	2,182	(1,146)	10,654

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

4. REVENUE RECOGNITION:

The Company delivers a variety of products and services through its business segments. The Memorialization segment produces and delivers bronze and granite memorials and other memorialization products, caskets, cremation-related products, and cremation and incineration equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment designs, manufactures, services and distributes high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products. The SGK Brand Solutions segment delivers brand management, pre-media services, printing plates and cylinders, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries.

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, 2022, 2021 and 2020 were as follows:

	North America	Central and South America	Europe	Australia	Asia	Consolidated
Memorialization:						
2022	$ 788,791	$ —	$ 41,184	$ 10,149	$ —	$ 840,124
2021	710,926	—	47,858	10,232	—	769,016
2020	611,496	—	35,557	8,982	—	656,035
Industrial Technologies:						
2022	$ 155,977	$ —	$ 172,985	$ —	$ 6,561	$ 335,523
2021	142,516	—	135,612	—	6,367	284,495
2020	120,682	—	104,773	—	2,998	228,453
SGK Brand Solutions:						
2022	$ 285,499	$ 4,729	$ 230,437	$ 11,057	$ 55,034	$ 586,756
2021	287,954	5,036	262,804	13,336	48,389	617,519
2020	305,527	6,304	247,501	12,097	42,389	613,818
Consolidated:						
2022	$ 1,230,267	$ 4,729	$ 444,606	$ 21,206	$ 61,595	$ 1,762,403
2021	1,141,396	5,036	446,274	23,568	54,756	1,671,030
2020	1,037,705	6,304	387,831	21,079	45,387	1,498,306

(Dollar amounts in thousands, except per share data)

4. REVENUE RECOGNITION, (continued):

Revenue from products or services provided to customers over time accounted for approximately12%, 11%, and less than5% of revenue for the years ended September 30, 2022, 2021, and 2020, respectively. As of September 30, 2022 and 2021, the Company had contract assets of $48,210 and $23,998, respectively, that were recorded in other current assets within the Consolidated Balance Sheets. As of September 30, 2022 and 2021, the Company had contract liabilities of $31,871 and $19,752, respectively, that were recorded in other current liabilities within the Consolidated Balance Sheets. The increase in contract assets and contract liabilities in fiscal 2022 reflects the acquisition of OLBRICH and R+S Automotive.

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.

As of September 30, 2022 and 2021, the fair values of the Company's assets and liabilities measured on a recurring basis were categorized as follows:

	September 30, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 14,421	$ —	$ 14,421
Equity and fixed income mutual funds	—	—	—	—
Life insurance policies	—	4,439	—	4,439
Total assets at fair value	$ —	$ 18,860	$ —	$ 18,860

	September 30, 2021			
	Level 1	Level 2	Level 3	Total
Assets:				
Derivatives [1]	$ —	$ 209	$ —	$ 209
Equity and fixed income mutual funds	—	6,936	—	6,936
Life insurance policies	—	4,626	—	4,626
Total assets at fair value	$ —	$ 11,771	$ —	$ 11,771
Liabilities:				
Derivatives [1]	$ —	$ 2,232	$ —	$ 2,232
Total liabilities at fair value	$ —	$ 2,232	$ —	$ 2,232

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

The carrying values for other financial assets and liabilities approximated fair value for the years ended September 30, 2022 and 2021.

(Dollar amounts in thousands, except per share data)

6. INVENTORIES:

Inventories at September 30, 2022 and 2021 consisted of the following:

	2022	2021
Raw materials	$ 52,586	$ 37,673
Work in process	94,804	75,997
Finished goods	78,050	75,418
	$ 225,440	$ 189,088

7. INVESTMENTS:

At September 30, 2022 and 2021, non-current investments were as follows:

	2022	2021
Equity and fixed income mutual funds	$ —	$ 6,936
Life insurance policies	4,439	4,626
Equity-method investments	2,729	458
Other (primarily cost-method) investments	18,808	18,418
	$ 25,976	$ 30,438

Equity and fixed income mutual funds at September 30, 2021 represented investments held in trust for the Company's non-qualified Supplemental Retirement Plan ("SERP") and were classified as trading securities and recorded at fair value. During fiscal 2022, the Company sold these investments in anticipation of the planned settlement of the SERP obligations in fiscal 2023. Realized and unrealized gains and losses are recorded in investment income.

8. PROPERTY, PLANT AND EQUIPMENT:

Property, plant and equipment and the related accumulated depreciation at September 30, 2022 and 2021 were as follows:

	2022	2021
Buildings	$ 137,827	$ 109,912
Machinery, equipment and other	477,004	485,691
	614,831	595,603
Less accumulated depreciation	(404,548)	(400,281)
	210,283	195,322
Land	20,209	16,619
Construction in progress	25,573	11,766
	$ 256,065	$ 223,707

Depreciation expense, including amortization of assets under finance lease, was $46,972, $49,279 and $47,544 for each of the three years ended September 30, 2022, 2021 and 2020, respectively.

(Dollar amounts in thousands, except per share data)

9. DEBT AND FINANCING ARRANGEMENTS:

Long-term debt at September 30, 2022 and 2021 consisted of the following:

	2022	2021
Revolving credit facilities	$ 480,107	$ 350,597
Securitization facility	—	95,990
2025 Senior Notes [1]	297,961	297,796
Other borrowings	13,434	10,150
Finance lease obligations	7,066	9,177
Total debt	798,568	763,710
Less current maturities	(3,277)	(4,624)
Long-term debt	$ 795,291	$ 759,086

[1] During fiscal 2022, the Company extinguished a small portion of the 2025 Senior Notes.

The Company has a domestic credit facility with a syndicate of financial institutions that includes a $750,000 senior secured revolving credit facility, which matures in March 2025. A portion of the revolving credit facility (not to exceed $350,000) can be drawn in foreign currencies. Borrowings under the revolving credit facility bear interest at LIBOR (Euro LIBOR for balances drawn in Euros) plus a factor ranging from 0.75% to 2.00% (1.25% at September 30, 2022) 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 0.30% (based on the Company's leverage ratio) of the unused portion of the revolving credit facility. The Company incurred debt issuance costs in connection with the domestic credit facility. Unamortized costs were $1,522 and $2,182 at September 30, 2022 and September 30, 2021, respectively.

The domestic credit facility requires the Company to maintain certain leverage and interest coverage ratios. A portion of the facility (not to exceed $55,000) 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, 2022 and 2021 were $472,057 and $349,780, 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, 2022 and 2021 was 3.13% and 2.03%, respectively.

The Company has $299,625 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. Unamortized costs were $1,664 and $2,204 at September 30, 2022 and 2021, respectively.

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. In March 2022, Matthews RFC entered into a receivables purchase agreement (“RPA”) to sell up to $125,000 of receivables to certain purchasers (the “Purchasers”) on a recurring basis in exchange for cash (referred to as “capital” within the RPA) equal to the gross receivables transferred. The parties intend that the transfers of receivables to the Purchasers constitute purchases and sales of receivables. Matthews RFC has guaranteed to each Purchaser the prompt payment of sold receivables, and has granted a security interest in its assets for the benefit of the Purchasers. Under the RPA, which matures in March 2024, each Purchaser’s share of capital accrues yield at a floating rate plus an applicable margin. The Company is the master servicer under the RPA, and is responsible for administering and collecting receivables.

The proceeds of the RPA are classified as operating activities in the Company’s Consolidated Statements of Cash Flows. Cash received from collections of sold receivables may be used to fund additional purchases of receivables on a revolving basis, or to reduce all or any portion of the outstanding capital of the Purchasers. Gross receivables sold and cash collections reinvested under the RPA program were $424,789 and $328,199 for the year ended September 30, 2022, respectively. The fair value of the sold receivables approximated book value due to their credit quality and short-term nature, and as a result, no gain or loss on sale of receivables was recorded. As of September 30, 2022, the amount sold to the Purchasers was $96,590, which was derecognized from the Consolidated Balance Sheets. As collateral against sold receivables, Matthews RFC maintains a certain level of unsold receivables, which was $44,262 as of September 30, 2022.

9. DEBT AND FINANCING ARRANGEMENTS, (continued)

Previously, the Company had a $115,000 accounts receivable securitization facility (the "Securitization Facility") with certain financial institutions which matured in March 2022. The Securitization Facility did not qualify for sale treatment. Accordingly, the trade receivables and related debt obligations remained on the Company's Consolidated Balance Sheet. Borrowings under the Securitization Facility were based on LIBOR plus 0.75% and the Company was 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, 2021 totaled 95,990. At September 30, 2021, the interest rate on borrowings under this facility was 0.83%.

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 €25.0 million ($24,499), which includes €8.0 million ($7,840) for bank guarantees. The credit facility matures in December 2022 and the Company intends to continue to extend this facility. Outstanding borrowings under the credit facility totaled €8.2 million ($8,050) and €0.7 million ($817) at September 30, 2022 and 2021, respectively. The weighted-average interest rate on outstanding borrowings under this facility was 2.25% at September 30, 2022 and 2021.

Other borrowings totaled $13,434 and $10,150 at September 30, 2022 and 2021, respectively. The weighted-average interest rate on these borrowings was 1.85% and 2.19% at September 30, 2022 and 2021, respectively.

In September 2014, a claim was filed by a customer seeking to draw upon a letter of credit issued by the Company of £8,570,000 ($9,544 at September 30, 2022) with respect to a performance guarantee on an incineration equipment 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 dispute involved litigation in multiple foreign jurisdictions because the contract between the parties included a venue clause requiring the venue for any litigation to be in the United Kingdom, while the enforcement of any final judgment was required to be executed in Saudi Arabia. Thus, the Company pursued a trial on the merits in Saudi Arabia. On November 9, 2020, the judge in the Commercial Court of Saudi Arabia issued a final judgment against the customer in the amount of £10,450,000 (representing the full claim amount plus interest) in favor of Matthews and the customer did not appeal the ruling by the Commercial Court. As result, the judgment is now final and enforceable in Saudi Arabia. The Company is assessing options to enforce and collect upon the judgment and its level of success in recovering funds from the customer will depend upon several factors, including the availability of recoverable funds, and the level of support of the Saudi Arabian government to enforce the judgment against the customer.

During fiscal 2020 and fiscal 2021, the Saudi Arabian government enforced restrictions on travel to Mecca due to the coronavirus disease 2019 ("COVID-19") pandemic. As a result, the Company was not able to support the operation of the incineration equipment for the local agency responsible for its operation during the prior two (2) Hajj Pilgrimages. Consequently, the Company continues to have concerns regarding the level of anticipated support from the government in its collection efforts. As a result of these concerns and other collectability risks, the Company established a reserve for the full value of the funded letter of credit as of June 30, 2020, and has made no adjustments to the reserve since that time. The Company will continue to assess the accounting and collectability related to this matter as facts and circumstances evolve.

As of September 30, 2022 and 2021, 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, 2022

(Dollar amounts in thousands, except per share data)

9. DEBT AND FINANCING ARRANGEMENTS, (continued)

Aggregate maturities by fiscal year of long-term debt, including other borrowings, is as follows:

2023	$	9,043	(a)
2024		1,037	
2025		473,091	
2026		299,015	
2027		1,101	
Thereafter		8,215	
		791,502	
Finance lease obligations		7,066	(b)
	$	798,568	

(a) The Company maintains certain debt facilities with current maturity dates of twelve months or less that it intends and has the ability to extend beyond twelve months totaling $ 8,050. These balances have been classified as non-current on the Company's Consolidated Balance Sheet.

(b) Aggregate maturities of finance lease obligations can be found in Note 10, "Leases."

10. LEASES:

The Company's lease portfolio includes various contracts for real estate, vehicles, information technology and other equipment. The following table presents the balance sheet and lease classification for the Company's lease portfolio as of September 30, 2022 and 2021, respectively:

Balance Sheet Classification	Lease Classification		2022		2021
Non-current assets:					
Property, plant and equipment, net	Finance	$	10,727	$	12,337
Other assets	Operating		71,974		80,262
Total lease assets		$	82,701	$	92,599
Current liabilities:					
Long-term debt, current maturities	Finance	$	2,284	$	3,674
Other current liabilities	Operating		22,869		25,151
Non-current liabilities:					
Long-term debt	Finance		4,782		5,503
Other liabilities	Operating		51,445		57,272
Total lease liabilities		$	81,380	$	91,600

The following table presents the components of lease cost for the years ended September 30, 2022, 2021 and 2020, respectively:

		2022		2021		2020
Finance lease cost:						
Amortization of ROU assets	$	3,816	$	4,016	$	2,112
Interest on lease liabilities		205		248		206
Operating lease cost		21,675		21,716		23,735
Variable lease cost		10,486		6,752		5,298
Sublease income		(279)		(83)		(732)
Total lease cost	$	35,903	$	32,649	$	30,619

(Dollar amounts in thousands, except per share data)

10. LEASES, (continued)

Supplemental information regarding the Company's leases follows:

	For the Year Ended September 30,		
	2022	2021	2020
Cash paid for finance and operating lease liabilities:			
Operating cash flows from finance leases	$ 211	$ 255	$ 207
Operating cash flows from operating leases	27,648	28,246	29,309
Financing cash flows from finance leases	3,691	4,134	2,064
ROU assets obtained in exchange for new finance lease liabilities	1,516	3,687	2,613
ROU assets obtained in exchange for new operating lease liabilities	10,365	16,341	12,442

	September 30,		
	2022	2021	2020
Weighted-average remaining lease term - finance leases (years)	4.28	3.85	4.39
Weighted-average remaining lease term - operating leases (years)	3.62	3.82	3.52
Weighted-discount rate - finance leases	3.08 %	2.70 %	2.89 %
Weighted-discount rate - operating leases	2.45 %	2.28 %	2.82 %

Maturities of lease obligations by fiscal year were as follows as of September 30, 2022:

	Operating Leases	Finance Leases
2023	$ 24,378	$ 2,499
2024	19,973	1,552
2025	14,755	899
2026	11,023	799
2027	4,538	711
Thereafter	3,311	1,262
Total future minimum lease payments	77,978	7,722
Less: Interest	3,664	656
Present value of lease liabilities:	$ 74,314	$ 7,066

11. DERIVATIVES AND HEDGING ACTIVITIES:

The Company operates internationally and utilizes certain derivative financial instruments to manage its foreign currency, debt and interest rate exposures. At September 30, 2022 and 2021, derivative instruments were reflected on a gross-basis in the consolidated balance sheets as follows:

Derivatives:	September 30, 2022		September 30, 2021	
	Interest Rate Swaps	Cross-Currency Swaps	Interest Rate Swaps	Cross-Currency Swaps
Current assets:				
Other current assets	$ 3,358	$ —	$ 31	$ —
Long-term assets:				
Other assets	7,341	3,722	139	39
Current liabilities:				
Other current liabilities	—	—	(1,922)	—
Long-term liabilities:				
Other liabilities	—	—	(310)	—
Total derivatives	$ 10,699	$ 3,722	$ (2,062)	$ 39

(Dollar amounts in thousands, except per share data)

11. DERIVATIVES AND HEDGING ACTIVITIES, (continued)

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

	September 30, 2022	September 30, 2021
Notional amount	$ 125,000	$ 250,000
Weighted-average maturity period (years)	3.1	2.2
Weighted-average received rate	3.14 %	0.08 %
Weighted-average pay rate	1.04 %	1.34 %

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 a net unrealized gain of $10,699 ($7,937 after tax) and a net unrealized loss of $2,062 ($1,558 after tax) at September 30, 2022 and 2021, 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, 2022, a gain (net of tax) of approximately $2,510 included in AOCI is expected to be recognized in earnings over the next twelve months.

During fiscal 2021, the Company entered into a U.S. Dollar/Euro cross currency swap with a notional amount of $94,464, which was designated as a net investment hedge of foreign operations. The swap was settled during fiscal 2022, resulting in cash proceeds of $13,066. Concurrently, the Company entered into a new U.S. Dollar/Euro cross currency swap with a notional amount of $81,392, which was also designated as a net investment hedge of foreign operations. The new swap contract matures in September 2027. The Company assesses hedge effectiveness for the swap contracts based on changes in fair value attributable to changes in spot prices. A gain of $2,782 (net of income taxes of $940) and a gain of $29 (net of income taxes of $10), which represented effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment at September 30, 2022 and September 30, 2021, respectively. Income of $1,645 and $63, which represented the recognized portion of the fair value excluded from the assessment of hedge effectiveness, was included in current period earnings as a component of interest expense for fiscal 2022 and fiscal 2021, respectively. At September 30, 2022 and September 30, 2021, the swaps totaled $3,722 and $39, respectively, and were included in other assets in the Consolidated Balance Sheets.

The Company previously used certain foreign currency debt instruments as net investment hedges of foreign operations. Currency losses of $5,370 (net of income taxes of $1,743), which represent effective hedges of net investments, were reported as a component of AOCI within currency translation adjustment at September 30, 2021.

The Company enters into certain derivative contracts in accordance with its risk management strategy that do not meet the criteria for hedge accounting but which have the economic impact of largely mitigating foreign currency exposure. Changes in the fair value of these economic hedges are recorded in current period earnings as a component of other income (deductions), net. During fiscal 2022, net gains from economic hedges (which largely offset losses from underlying foreign currency exposures) totaled $4,677. No such economic hedge contracts were outstanding as of September 30, 2022 or 2021.

Refer to Note 16, "Accumulated Other Comprehensive Income" for further details regarding amounts recorded in AOCI and the Consolidated Statements of Income (Loss) related to derivatives.

(Dollar amounts in thousands, except per share data)

12. 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, 1,294,842 shares remain available for repurchase as of September 30, 2022.

13. SHARE-BASED PAYMENTS:

The Company maintains an equity incentive plan (as amended and restated, 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 from the date the Company's Board of Directors approved of the 2017 Equity Incentive Plan, the maximum number of shares available for grants or awards is an aggregate of 3,450,000 (subject to adjustment upon certain events such as stock dividends or stock splits), following the amendment and restatement of the 2017 Equity Incentive Plan at the Company's 2022 Annual Shareholder Meeting. At September 30, 2022, 215,618 shares have been issued under the 2017 Equity Incentive Plan. 790,515 time-based restricted share units, 946,212 performance-based restricted share units, and 75,000 stock options have been granted under the 2017 Equity Incentive Plan. 1,498,212 of these share-based awards are outstanding as of September 30, 2022. The 2017 Equity Incentive Plan is administered by the Compensation Committee of the Board of Directors (the "Committee"). The number of shares issued under performance-based restricted share units may be up to 200% of the number of performance-based restricted share units, based on the satisfaction of specific criteria established by the plan administrator.

For the years ended September 30, 2022, 2021 and 2020, stock-based compensation cost totaled $17,432, $15,581 and $8,096, respectively. The associated future income tax benefit recognized was $3,821, $3,247 and $1,665 for the years ended September 30, 2022, 2021 and 2020, respectively.

With respect to the 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. Such performance thresholds include adjusted earnings per share, return on invested capital, appreciation in the market value of the Company's Class A Common Stock, or other targets established by the Committee. Approximately 42% of the outstanding share units 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 transactions for restricted shares and restricted share units for the year ended September 30, 2022 were as follows:

	Shares	Weighted-average Grant-date Fair Value
Non-vested at September 30, 2021	1,083,365	$ 34.07
Granted	671,817	37.86
Vested	(167,031)	41.76
Expired or forfeited	(128,918)	47.11
Non-vested at September 30, 2022	1,459,233	$ 33.78

(Dollar amounts in thousands, except per share data)

13. SHARE-BASED PAYMENTS, (continued)

During fiscal 2021, 75,000 stock options were granted under the 2017 Equity Incentive Plan. The option price for each stock option granted was $41.70, which was equal to the fair market value of the Company's Class A Common Stock on the date of grant. These options vest in one-third increments annually over three years from the grant date. Unvested stock options expire on the earlier of five years from the date of grant, or upon employment termination, retirement or death. The Company generally settles employee stock option exercises with treasury shares.

As of September 30, 2022, the total unrecognized compensation cost related to all unvested stock-based awards was $21,753 which is expected to be recognized over a weighted-average period of 2.2 years.

The fair value of certain restricted share units that are subject to performance conditions and the fair value of stock options are estimated on the date of grant using a binomial lattice valuation model. The following table indicates the assumptions used in estimating the fair value of certain stock-based awards granted during the year ended September 30, 2021.

	Restricted Share Units	Stock Options
Expected volatility	42.9 %	41.9 %
Dividend yield	3.2 %	3.1 %
Average risk-free interest rate	0.2 %	0.5 %
Average expected term (years)	3.0	5.0

The risk-free interest rate is based on United States Treasury yields at the date of grant. The dividend yield is based on the most recent dividend payment and average stock price over the 12 months prior to the grant date. Expected volatilities are based on the historical volatility of the Company's stock price. The expected term for grants in the year ended September 30, 2021 represents an estimate of the average period of time for restricted share units and stock options to vest.

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"). 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. In November 2022, the Board of Directors approved the Amended and Restated 2019 Director Fee Plan, which increases the maximum number of shares available for grants or awards to an aggregate of 300,000. The Amended and Restated 2019 Director Fee Plan is subject to shareholder approval at the February 2023 Annual Shareholder Meeting. 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 2022, either cash or shares of the Company's Class A Common Stock with a value equal to $90. The annual retainer fee for fiscal 2022 paid to a non-employee Chairman of the Board is $210. 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 45,475 shares and share units had been deferred under the Director Fee Plans at September 30, 2022. 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 $140 for fiscal 2022. As of September 30, 2022, 305,911 restricted shares and restricted share units have been granted under the Director Fee Plans, 132,682 of which were issued under the 2019 Director Fee Plan. 58,008 restricted shares and restricted share units are unvested at September 30, 2022.

14. EARNINGS PER SHARE:

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

	2022	2021	2020
Net (loss) income attributable to Matthews shareholders	$ (99,774)	$ 2,910	$ (87,155)
Weighted-average shares outstanding (in thousands):			
Basic shares	31,367	31,696	31,190
Effect of dilutive securities	—	291	—
Diluted shares	31,367	31,987	31,190

Anti-dilutive securities excluded from the dilutive calculation were insignificant for the fiscal year ended September 30, 2021. During periods in which the Company incurs a net loss, diluted weighted-average shares outstanding are equal to basic weighted-average shares outstanding because the effect of all equity awards is anti-dilutive.

15. 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 DB Plan was closed to new participants. As of September 30, 2022, all of the Company's defined benefit plans are unfunded.

In April 2021, the Committee approved resolutions to freeze all future benefit accruals for all participants in the Company's SERP and the defined benefit portion of the Officers Retirement Restoration Plan ("ORRP"), effective April 30, 2021. In August 2021, the Committee approved the termination of the SERP and the defined benefit portion of the ORRP. In September 2021, the Company notified SERP and ORRP participants of its intention to fully settle the obligations of the SERP and ORRP in early fiscal 2023.

In August 2021, the Company's Board of Directors approved the freeze of all future benefit accruals for the Company's DB Plan, effective September 30, 2021, and the planned termination of the DB Plan in early fiscal 2022. At such time, the Company notified all plan participants of the Company's intentions to terminate and fully settle the obligations of the DB Plan early in fiscal 2022.
The freezing of the DB Plan, SERP, and ORRP triggered curtailments, which resulted in the remeasurement of the projected benefit obligations and the immediate recognition of prior service costs in earnings in fiscal 2021, which were previously included within AOCI.

In the first quarter of fiscal 2022, the Company terminated its DB Plan and made plan contributions totaling $35,706 to fully fund the planned settlement of the DB Plan obligations. Also during the first quarter of fiscal 2022, lump sum distributions of $185,958 were made from the DB Plan to plan participants, and non-participating annuity contracts totaling $56,274 were purchased by the DB Plan for plan participants, resulting in the full settlement of the DB Plan obligations. The settlement of the DB Plan obligations resulted in the recognition of a non-cash charge of $30,856, which has been presented as a component of other income (deductions), net for the year ended September 30, 2022. This amount represents the immediate recognition of the remaining portion of the deferred AOCI balances related to the DB Plan.

(Dollar amounts in thousands, except per share data)

15. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

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, 2022 and 2021:

	Pension		Other Postretirement	
	2022	2021	2022	2021
Change in benefit obligation:				
Benefit obligation, beginning of year	$ 293,926	$ 318,887	$ 18,841	$ 19,431
Acquisitions [1]	9,829	—	—	—
Service cost	392	7,919	165	201
Interest cost	1,127	6,145	411	376
Actuarial gain	(19,978)	(8,045)	(5,989)	(660)
Curtailment gain	—	(17,324)	—	—
Special termination benefits	—	315	—	—
Settlement	(242,232)	—	—	—
Exchange gain	(3,093)	(133)	—	—
Benefit payments	(3,362)	(13,838)	(615)	(507)
Benefit obligation, end of year [2]	36,609	293,926	12,813	18,841
Change in plan assets:				
Fair value, beginning of year	208,344	168,134	—	—
Actual return	368	37,789	—	—
Benefit payments	(3,362)	(13,838)	(615)	(507)
Employer contributions	36,882	16,259	615	507
Settlement	(242,232)	—	—	—
Fair value, end of year	—	208,344	—	—
Funded status	(36,609)	(85,582)	(12,813)	(18,841)
Unrecognized actuarial loss (gain)	5,140	49,545	(5,973)	16
Unrecognized prior service (credit) cost	(4,815)	(309)	(1,320)	(1,684)
Net amount recognized	$ (36,284)	$ (36,346)	$ (20,106)	$ (20,509)
Amounts recognized in the consolidated balance sheet:				
Current liability	$ (24,172)	$ (779)	$ (830)	$ (883)
Noncurrent benefit liability	(12,437)	(84,803)	(11,983)	(17,958)
Accumulated other comprehensive loss (income)	325	49,236	(7,293)	(1,668)
Net amount recognized	$ (36,284)	$ (36,346)	$ (20,106)	$ (20,509)
Amounts recognized in accumulated other comprehensive loss (income):				
Net actuarial loss (gain)	$ 5,140	$ 49,545	$ (5,973)	$ 16
Prior service (credit) cost	(4,815)	(309)	(1,320)	(1,684)
Net amount recognized	$ 325	$ 49,236	$ (7,293)	$ (1,668)

[1] Benefit obligations assumed in connection with the acquisition of OLBRICH and R+S Automotive. For additional information, see Note 21.

[2] Gains and losses related to changes in assumptions (e.g., discount rate, mortality, etc.), asset, salary and other experience, and curtailments impacted benefit obligations.

(Dollar amounts in thousands, except per share data)

15. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

Based upon actuarial valuations performed as of September 30, 2022 and 2021, the accumulated benefit obligation for the Company's defined benefit pension plans was $36,609 and $293,926 at September 30, 2022 and 2021, respectively, and the projected benefit obligation for the Company's defined benefit pension plans was $36,609 and $293,926 at September 30, 2022 and 2021, respectively.

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

	Pension			Other Postretirement		
	2022	2021	2020	2022	2021	2020
Service cost	$ 392	$ 7,919	$ 8,679	$ 165	$ 201	$ 227
Interest cost *	1,127	6,145	7,735	411	376	501
Expected return on plan assets *	(1,040)	(10,809)	(10,214)	—	—	—
Amortization:						
Prior service cost	(152)	(127)	(186)	(364)	(364)	(464)
Net actuarial loss *	469	9,769	9,767	—	—	—
Curtailment gain *	—	(220)	—	—	—	—
Special termination benefits *	—	315	—	—	—	—
Prior-service cost write-offs *	—	261	—	—	—	—
Settlement*	30,856	—	—	—	—	—
Net benefit cost	$ 31,652	$ 13,253	$ 15,781	$ 212	$ 213	$ 264

* 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 DB Plan were made from plan assets, while benefit payments under the SERP and postretirement benefit plan are made from the Company's operating funds.

Contributions made in fiscal 2022 are as follows:

Contributions	Pension	Other Postretirement
Principal defined benefit retirement plan	$ 35,706	$ —
Supplemental retirement plan	760	—
Other retirement plans	416	—
Other postretirement plan	—	615

In October 2022, subsequent to the date of the balance sheet, the Company made lump sum payments totaling $24,242 to fully settle the SERP and defined benefit portion of the ORRP obligations. The settlement of these plan obligations is expected to result in the recognition of a non-cash charge of approximately $1,271 in the first quarter of fiscal 2023. This amount represents the immediate recognition of the deferred AOCI balances related to the SERP and ORRP, and is based on current estimates as of September 30, 2022.

(Dollar amounts in thousands, except per share data)

15. 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 pension and other postretirement benefit plans was September 30, for fiscal 2022, 2021 and 2020. The weighted-average assumptions for those plans were:

	Pension			Other Postretirement		
	2022	2021	2020	2022	2021	2020
Discount rate	4.01 %	2.79 %	2.62 %	5.37 %	2.83 %	2.63 %
Return on plan assets	— %	3.10 %	6.75 %	—	—	—
Compensation increase	— %	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 2022, 2021 and 2020, the Company elected to value its pension 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 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 at September 30, 2021 was as follows:

Asset Category	Plan Assets at 2021
Equity securities	$ 4,075
Fixed income, cash and cash equivalents	189,958
Other investments	14,311
	$ 208,344

The Company categorizes plan assets within a three level fair value hierarchy (see Note 5, "Fair Value Measurements" 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.

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.

(Dollar amounts in thousands, except per share data)

15. PENSION AND OTHER POSTRETIREMENT PLANS, (continued)

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 at September 30, 2021 were as follows:

	September 30, 2021			
Asset Category	**Level 1**	**Level 2**	**Level 3**	**Total**
Equity securities - stocks (1)	$ 4,075	$ —	$ —	$ 4,075
Fixed income securities	10,403	101,133	—	111,536
Cash and cash equivalents	78,422	—	—	78,422
Other investments	—	—	14,311	14,311
Total	$ 92,900	$ 101,133	$ 14,311	$ 208,344

(1) Includes $4,075 of of Matthews Class A Common Stock in Level 1.

Changes in the fair value of Level 3 assets at September 30, 2022 and 2021 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, 2022	$ 14,311	$ —	$ (14,700)	$ 139	$ 250	$ —
September 30, 2021	15,273	236	(2,144)	272	674	14,311

Benefit payments expected to be paid are as follows:

Years ending September 30:	**Pension Benefits ***	**Other Postretirement Benefits**
2023	$ 24,790	$ 830
2024	551	855
2025	560	870
2026	564	875
2027	573	859
2028-2032	3,067	4,206
	$ 30,105	$ 8,495

* Pension benefit amounts include the settlement of the SERP and ORRP in fiscal 2023 (see above for further details).

For measurement purposes, a rate of increase of7.5% in the per capita cost of health care benefits was assumed for 2023; 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.

The Company sponsors defined contribution plans for hourly and salary employees. The expense associated with the contributions made to these plans was $12,442, $9,186, and $8,692 for the fiscal years ended September 30, 2022, 2021 and 2020, respectively.

(Dollar amounts in thousands, except per share data)

16. ACCUMULATED OTHER COMPREHENSIVE INCOME:

The changes in AOCI by component, net of tax, for the years ended September 30, 2022, 2021, and 2020 were as follows:

	Postretirement Benefit Plans	Currency Translation Adjustment	Cash Flow Hedges	Total
Attributable to Matthews:				
Balance, September 30, 2019	$ (71,743)	$ (156,214)	$ (404)	$ (228,361)
OCI before reclassification	(18,094)	4,333	(6,130)	(19,891)
Amounts reclassified from AOCI	6,883 (a)	—	650 (b)	7,533
Net current-period OCI	(11,211)	4,333	(5,480)	(12,358)
Balance, September 30, 2020	$ (82,954)	$ (151,881)	$ (5,884)	$ (240,719)
OCI before reclassification	39,822	(3,322)	1,873	38,373
Amounts reclassified from AOCI	7,202 (a)	(48) (b)	2,453 (b)	9,607
Net current-period OCI	47,024	(3,370)	4,326	47,980
Balance, September 30, 2021	$ (35,930)	$ (155,251)	$ (1,558)	$ (192,739)
OCI before reclassification	17,851	(46,817)	8,148	(20,818)
Amounts reclassified from AOCI	23,261 (a)	(1,242) (b)	1,347 (b)	23,366
Net current-period OCI	41,112	(48,059)	9,495	2,548
Balance, September 30, 2022	$ 5,182	$ (203,310)	$ 7,937	$ (190,191)
Attributable to noncontrolling interest:				
Balance, September 30, 2019	$ —	$ 375	$ —	$ 375
OCI before reclassification	—	(7)	—	(7)
Net current-period OCI	—	(7)	—	(7)
Balance, September 30, 2020	$ —	$ 368	$ —	$ 368
OCI before reclassification	—	(127)	—	(127)
Net current-period OCI	—	(127)	—	(127)
Balance, September 30, 2021	$ —	$ 241	$ —	$ 241
OCI before reclassification	—	14	—	14
Net current-period OCI	—	14	—	14
Balance, September 30, 2022	$ —	$ 255	$ —	$ 255

(a) Amounts were included in net periodic benefit cost for pension and other postretirement benefit plans (see Note 15).
(b) Amounts were included in interest expense in the periods the hedged item affected earnings (see Note 11).

Accumulated other comprehensive loss at September 30, 2022 and 2021 consisted of the following:

	2022	2021
Cumulative foreign currency translation	$ (203,310)	$ (155,251)
Fair value of cash flow hedges, net of tax of $2,762 and $504, respectively	7,937	(1,558)
Minimum pension liabilities, net of tax of $1,786 and $11,638, respectively	5,182	(35,930)
	$ (190,191)	$ (192,739)

(Dollar amounts in thousands, except per share data)

16. ACCUMULATED OTHER COMPREHENSIVE INCOME, (continued)

Reclassifications out of AOCI for the years ended September 30, 2022, 2021 and 2020 were as follows:

Details about AOCI Components	September 30, 2022	September 30, 2021	September 30, 2020	Affected line item in the Statement of Income
Postretirement benefit plans				
Prior service (cost) credit [(a)]	$ 516	$ 491	$ 650	
Actuarial losses	(469)	(9,769)	(9,767)	Other income (deductions), net
Prior service cost write-off	—	(261)	—	Other income (deductions), net
Settlement loss	(30,856)	—	—	Other income (deductions), net
	(30,809)	(9,539)	(9,117)	Income before income tax [(b)]
	7,548	2,337	2,234	Income taxes
	$ (23,261)	$ (7,202)	$ (6,883)	Net income
Derivatives				
Cash flow hedges	$ (1,786)	$ (3,249)	$ (861)	Interest expense
Net investment hedges	1,645	63	—	Interest expense
	(141)	(3,186)	(861)	Income before income tax [(b)]
	36	781	211	Income taxes
	$ (105)	$ (2,405)	$ (650)	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. For additional information, see Note 15.

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

17. INCOME TAXES:

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

	2022	2021	2020
Current:			
Federal	$ 13,481	$ (3,741)	$ (12,354)
State	4,676	3,579	(1,030)
Foreign	10,414	2,379	11,306
	28,571	2,217	(2,078)
Deferred:			
Federal	(24,239)	5,829	4,710
State	(3,895)	169	2,880
Foreign	(4,828)	(1,840)	(24,197)
	(32,962)	4,158	(16,607)
Total	$ (4,391)	$ 6,375	$ (18,685)

(Dollar amounts in thousands, except per share data)

17. INCOME TAXES, (continued)

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

	2022	2021	2020
Federal statutory tax rate	21.0 %	21.0 %	21.0 %
Effect of state income taxes, net of federal deduction	0.2 %	37.5 %	(1.9)%
Foreign statutory taxes compared to federal statutory rate	1.6 %	(18.6)%	3.4 %
Share-based compensation	(1.1)%	24.5 %	(1.4)%
Termination of SERP	— %	28.6 %	— %
Tax credits	1.2 %	(26.6)%	1.8 %
Sale of SERP-related investments	— %	23.8 %	— %
Goodwill write-down	(11.2)%	— %	(9.4)%
Tax rate differential on net operating loss carryback	— %	(21.4)%	4.2 %
Other *	(7.5)%	0.2 %	(0.1)%
Effective tax rate	4.2 %	69.0 %	17.6 %

* In Fiscal 2022, "Other" primarily consists of foreign net operating losses that had a full valuation allowance.

The Company's consolidated income taxes for the year ended September 30, 2022 were a benefit of $4,391, compared to an expense of $6,375 for fiscal 2021, and a benefit of $18,685 for fiscal 2020. The difference between the Company's consolidated income taxes for fiscal 2022 compared to fiscal 2021 partially resulted from fiscal 2022 having a consolidated loss before income taxes compared to fiscal 2021 having consolidated income before incomes taxes. The fiscal 2022 consolidated loss reflected a goodwill write-down recorded in the fourth quarter of fiscal 2022 that was primarily non-deductible. The fiscal 2022 effective tax rate benefited from research and development and foreign tax credits. The fiscal 2022 effective tax rate was negatively impacted by foreign net operating losses that had a full valuation allowance. The fiscal 2021 effective tax rate also benefited from research and development and foreign tax credits as well as the reduction of uncertain tax positions due to the expiration of the statute of limitations in certain jurisdictions, the completion of a state tax audit, and the tax benefit of the NOL carryback. The fiscal 2021 tax rate was negatively impacted by the termination of the Company's SERP, which resulted in certain expenses that are nondeductible for tax purposes.

The difference between the Company's consolidated income tax provision for fiscal 2021 compared to fiscal 2020 primarily resulted from fiscal 2021 having consolidated income before income taxes, compared to fiscal 2020 having a consolidated loss, which reflected a goodwill write-down that was partially non-deductible. The Company’s fiscal 2020 effective tax rate was negatively affected by the non-deductible portion of a goodwill write-down along with certain other non-deductible expenses. The fiscal 2020 effective tax rate benefited from research and development and foreign tax credits, the reduction of uncertain tax positions due to the completion of a foreign tax audit, and the tax benefit of the NOL carryback.

The Company's foreign subsidiaries had loss before income taxes for the year ended September 30, 2022 of approximately $47,653, income before income taxes for the year ended September 30, 2021 of approximately $6,685 and loss before income taxes for the year ended September 30, 2020 of approximately $68,343. 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, 2022, undistributed earnings of foreign subsidiaries for which deferred income taxes have not been provided approximated $346,298.

(Dollar amounts in thousands, except per share data)

17. INCOME TAXES, (continued)

The components of deferred tax assets and liabilities at September 30, 2022 and 2021 are as follows:

	2022	2021
Deferred tax assets:		
Pension and postretirement benefits	$ 9,051	$ 11,832
Accruals and reserves not currently deductible	10,909	8,753
Income tax credit carryforward	5,796	5,206
Operating and capital loss carryforwards	54,875	51,438
Stock options	7,103	4,944
Other	50	1,320
Total deferred tax assets	87,784	83,493
Valuation allowances	(27,552)	(28,619)
Net deferred tax assets	60,232	54,874
Deferred tax liabilities:		
Depreciation	(27,317)	(23,224)
Unrealized gains and losses	(2,793)	(886)
Goodwill and intangible assets	(98,715)	(113,476)
Other	(20,386)	(11,215)
Total deferred tax liabilities	(149,211)	(148,801)
Net deferred tax liability	$ (88,979)	$ (93,927)

At September 30, 2022, the Company had foreign net operating loss carryforwards of $249,216. The Company has recorded deferred tax assets of $3,312 for state net operating loss carryforwards, which will be available to offset future income tax liabilities. 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 $27,552 at September 30, 2022.

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

	2022	2021	2020
Balance, beginning of year	$ 2,807	$ 10,483	$ 15,526
Increases for tax positions of prior years	1,393	—	500
Decreases for tax positions of prior years	(200)	(288)	(2,727)
Increases based on tax positions related to the current year	551	628	939
Decreases due to lapse of statute of limitation	(428)	(8,016)	(3,755)
Balance, end of year	$ 4,123	$ 2,807	$ 10,483

The Company had unrecognized tax benefits of $4,123 at September 30, 2022, which would impact the annual effective tax rate. It is reasonably possible that the amount of unrecognized tax benefits could decrease by approximately $1,425 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 $876 and $691 at September 30, 2022 and 2021, 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)

17. 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, 2022, the tax years that remain subject to examination by major jurisdiction generally are:

United States - Federal	2019 and forward
United States - State	2018 and forward
Canada	2018 and forward
Germany	2019 and forward
United Kingdom	2021 and forward
Australia	2017 and forward
Singapore	2018 and forward

18. COMMITMENTS AND CONTINGENT LIABILITIES:

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 2023 and 2025. 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, 2022 was $4,768.

19. SUPPLEMENTAL CASH FLOW INFORMATION:

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

	2022	2021	2020
Current assets:			
Accounts receivable	$ 74,013	$ (13,423)	$ 24,055
Inventories	(23,459)	(12,839)	5,976
Other current assets	(15,770)	(15,618)	(14,803)
	34,784	(41,880)	15,228
Current liabilities:			
Trade accounts payable	7,437	29,621	8,363
Accrued compensation	(10,760)	10,791	15,512
Accrued income taxes	5,745	601	(2,384)
Other current liabilities	(7,616)	13,849	9,648
	(5,194)	54,862	31,139
Net change	$ 29,590	$ 12,982	$ 46,367

20. SEGMENT INFORMATION:

The Company manages its businesses under three segments: Memorialization, Industrial Technologies and SGK Brand Solutions. Effective in the first quarter of fiscal 2022, the Company transferred its surfaces and engineered products businesses from the SGK Brand Solutions segment to the Industrial Technologies segment. This business segment change is consistent with internal management structure and reporting changes effective for fiscal 2022. Prior periods were revised to reflect retrospective application of this segment realignment. The Memorialization segment consists primarily of bronze and granite memorials and other memorialization products, caskets, cremation-related products, and cremation and incineration equipment primarily for the cemetery and funeral home industries. The Industrial Technologies segment includes the design, manufacturing, service and distribution of high-tech custom energy storage solutions, product identification and warehouse automation technologies and solutions, including order fulfillment systems for identifying, tracking, picking and conveying consumer and industrial products. The SGK Brand Solutions segment consists of brand management, pre-media services, printing plates and cylinders, imaging services, digital asset management, merchandising display systems, and marketing and design services primarily for the consumer goods and retail industries.

The Company's primary measure of segment profitability is 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 does not allocate corporate costs to its reportable segments. 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 Note 2 "Summary of Significant Accounting Policies". 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).

(Dollar amounts in thousands, except per share data)

20. SEGMENT INFORMATION, (continued)

Information about the Company's segments follows:

	Memorialization	Industrial Technologies	SGK Brand Solutions	Corporate and Non-Operating	Consolidated
Sales to external customers:					
2022	$ 840,124	$ 335,523	$ 586,756	$ —	$ 1,762,403
2021	769,016	284,495	617,519	—	1,671,030
2020	656,035	228,453	613,818	—	1,498,306
Intersegment sales:					
2022	—	1,057	1,295	—	2,352
2021	—	2,146	2,376	—	4,522
2020	4	3,629	2,621	—	6,254
Depreciation and amortization:					
2022	23,228	11,387	64,173	5,268	104,056
2021	23,043	11,427	93,665	5,377	133,512
2020	20,527	11,923	81,445	5,163	119,058
Adjusted EBITDA:					
2022	151,849	56,762	60,120	(58,323)	210,408
2021	165,653	34,889	91,435	(64,227)	227,750
2020	146,285	23,055	90,342	(56,602)	203,080
Total assets:					
2022	800,666	414,019	631,291	36,795	1,882,771
2021	807,215	285,710	874,001	65,152	2,032,078
2020	779,886	255,512	951,533	85,702	2,072,633
Capital expenditures:					
2022	28,899	13,646	14,287	4,489	61,321
2021	11,969	8,620	11,775	1,949	34,313
2020	11,282	14,058	7,790	1,719	34,849

(Dollar amounts in thousands, except per share data)

20. SEGMENT INFORMATION, (continued)

A reconciliation of adjusted EBITDA to net income follows:

	2022	2021	2020
Total Adjusted EBITDA	$ 210,408	$ 227,750	$ 203,080
RPA financing fees [(1)]	(1,046)	—	—
Strategic initiatives and other charges [(2)]**	(37,431)	(29,539)	(40,686)
Legal matter reserve [(3)]	—	—	(10,566)
Non-recurring / incremental COVID-19 costs [(4)]***	(2,985)	(5,312)	(3,908)
Defined benefit plan termination related items [(5)]	429	—	—
Asset write-downs, net [(6)]	(10,050)	—	—
Goodwill write-downs [(7)]	(82,454)	—	(90,408)
Gain on sale of ownership interests in subsidiaries [(8)]	—	—	11,208
Joint Venture depreciation, amortization, interest expense and other charges [(9)]	—	—	(4,732)
Stock-based compensation	(17,432)	(15,581)	(8,096)
Non-service pension and postretirement expense [(10)]	(31,823)	(5,837)	(7,789)
Depreciation and amortization *	(104,056)	(133,512)	(119,058)
Interest expense	(27,725)	(28,684)	(34,885)
Net loss attributable to noncontrolling interests	(54)	(52)	(497)
(Loss) income before income taxes	(104,219)	9,233	(106,337)
Income tax benefit (provision)	4,391	(6,375)	18,685
Net (loss) income	$ (99,828)	$ 2,858	$ (87,652)

(1) Represents fees for receivables sold under the Company's RPA agreement (see Note 9, "Debt and Financing Arrangements").

(2) Includes certain non-recurring items associated with recent acquisition activities, costs associated with global ERP system integration efforts, certain non-recurring costs associated with productivity and cost-reduction initiatives intended to result in improved operating performance, profitability and working capital levels, and exchange losses associated with highly inflationary accounting (see Note 2, "Summary of Significant Accounting Policies").

(3) Represents a reserve established for a legal matter involving a letter of credit for a customer in Saudi Arabia within the Memorialization segment (see Note 9, "Debt and Financing Arrangements").

(4) Includes certain non-recurring direct incremental costs (such as costs for purchases of computer peripherals and devices to facilitate working-from-home, additional personal protective equipment and cleaning supplies and services, etc.) incurred in response to COVID-19. This amount does not include the impact of any lost sales or underutilization due to COVID-19.

(5) Represents items associated with the termination of the Company's DB Plan, supplemental retirement plan and the defined benefit portion of the officers retirement restoration plan.

(6) Represents asset write-downs, net of recoveries within the SGK Brand Solutions segment (see Note 23, "Asset Write-Downs").

(7) Represents goodwill write-downs within the SGK Brand Solutions segment (see Note 22, "Goodwill and Other Intangible Assets").

(8) Represents the gain on the sale of ownership interests in subsidiaries within the Memorialization segment.

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

(10) Non-service pension and postretirement expense includes interest cost, expected return on plan assets, amortization of actuarial gains and losses, curtailment gains and losses, and settlement 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. Curtailment gains and losses and settlement gains and losses are excluded from adjusted EBITDA since they generally result from certain non-recurring events, such as plan amendments to modify future benefits or settlements of plan obligations. 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 $ 23,228, $23,043, and $20,527 for the Memorialization segment, $11,387, $11,427, and $11,923 for the Industrial Technologies segment, $64,173, $93,665, and $81,445 for the SGK Brand Solutions segment, and $5,268, $5,377, and $5,163 for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020, respectively.

** Acquisition costs, ERP integration costs, and strategic initiatives and other charges were $ 3,517, $1,923, and $2,696 for the Memorialization segment, $5,631, $4,026, and $2,517 for the Industrial Technologies segment, $19,359, $12,323, and $12,488 for the SGK Brand Solutions segment, and $ 8,924, $11,267, and $22,985 for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020, respectively.

*** Non-recurring/incremental COVID-19 costs were $1,314, $3,646, and $1,819 for the Memorialization segment, $6, $38, and $32 for the Industrial Technologies segment, $1,199, $1,539, and $1,442 for the SGK Brand Solutions segment, and $466, $89, and $615 for Corporate and Non-Operating, for the fiscal years ended September 30, 2022, 2021, and 2020 respectively.

(Dollar amounts in thousands, except per share data)

20. 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:						
2022	$ 1,230,267	$ 4,729	$ 444,606	$ 21,206	$ 61,595	$ 1,762,403
2021	1,141,396	5,036	446,274	23,568	54,756	1,671,030
2020	1,037,705	6,304	387,831	21,079	45,387	1,498,306
Long-lived assets:						
2022	822,566	10,787	242,614	14,895	42,778	1,133,640
2021	890,545	14,226	277,655	21,012	55,598	1,259,036
2020	957,393	14,063	286,990	21,746	55,482	1,335,674

21. ACQUISITIONS AND DIVESTITURES:

Fiscal 2022:

In August 2022, the Company acquired German-based engineering firms OLBRICH and R+S Automotive for a purchase price of approximately €43,700 ($44,469) (net of cash acquired) within the Industrial Technologies segment. OLBRICH is a production and intelligent equipment manufacturer, specializing in purpose-built rotary processing equipment, including equipment used in the manufacturing of dry and wet electrodes for lithium-ion batteries used in electric vehicles and components for hydrogen fuel cells and electrolyzers, with additional strong positions in Specialty & Pharma, Packaging and Home & Décor. R+S Automotive is a specialty engineering services provider of automation, plant and tooling concepts for automotive manufacturing companies around the world. Annual sales for these businesses were approximately $140,000 prior to the acquisition. The preliminary purchase price allocation is not finalized as of September 30, 2022 and is subject to changes as the Company obtains additional information related to fixed assets, intangible assets, and other assets and liabilities.

Fiscal 2021:

In April 2021, the Company completed a small acquisition in the hydrogen fuel cell industry within the Industrial Technologies segment for a purchase price of $2,523 (net of cash acquired and holdback amounts). The Company finalized the allocation of the purchase price in the first quarter of fiscal 2022, resulting in an immaterial adjustment to certain working capital accounts.

In January 2021, the Company acquired a memorialization business that produces and distributes cemetery products for a purchase price of $13,100. The Company finalized the allocation of the purchase price in the fourth quarter of fiscal 2021, resulting in an immaterial adjustment to certain working capital accounts.

Fiscal 2020:

During fiscal 2020, the Company completed a small acquisition in the Memorialization segment for a purchase price of $1,000 (net of cash acquired and holdback amounts). The Company finalized the allocation of the purchase price in the fourth quarter of fiscal 2021, resulting in an immaterial adjustment to certain working capital accounts.

During fiscal 2020, the Company sold its ownership interest in a non-consolidated Memorialization subsidiary for $42,210 of cash and $15,000 of senior preferred shares. In connection with this sale transaction, the Company recognized a pre-tax gain of $11,208, which was recorded as a component of administrative expenses for the year ended September 30, 2020. Subsequently, the Company received $15,000 for the full redemption of the senior preferred shares during fiscal 2021.

(Dollar amounts in thousands, except per share data)

22. GOODWILL AND OTHER INTANGIBLE ASSETS:

Changes to goodwill during the years ended September 30, 2022 and 2021, follow.

	Memorialization	Industrial Technologies	SGK Brand Solutions	Consolidated
Net goodwill at September 30, 2020	$ 361,682	$ 91,969	$ 311,737	$ 765,388
Additions during period	4,775	—	—	4,775
Translation and other adjustments	(97)	608	3,113	3,624
Net goodwill at September 30, 2021	366,360	92,577	314,850	773,787
Additions during period	—	17,013	—	17,013
Translation and other adjustments	(4,578)	(2,568)	(25,779)	(32,925)
Goodwill write-down	—	—	(82,454)	(82,454)
Net goodwill at September 30, 2022	$ 361,782	$ 107,022	$ 206,617	$ 675,421

The net goodwill balances at September 30, 2022 and 2021 included $261,186 and $178,732 of accumulated impairment losses, respectively. Accumulated impairment losses at September 30, 2022 were $5,000, $23,946, and $232,240 for the Memorialization, Industrial Technologies and SGK Brand Solutions segments, respectively. Accumulated impairment losses at September 30, 2021 were $5,000, $23,946, and $149,786 for the Memorialization, Industrial Technologies and SGK Brand Solutions segments, respectively.

Fiscal 2022:

In fiscal 2022, the additions to Industrial Technologies goodwill reflects the acquisition of OLBRICH and R+S Automotive.

The Company performed its annual impairment review of goodwill and indefinite-lived intangible assets in the second quarter of fiscal 2022 (January 1, 2022) and determined that the estimated fair values for all goodwill reporting units exceeded their carrying values, therefore no impairment charges were necessary. The estimated fair value of the Company's SGK Brand Solutions reporting unit (formerly the Graphics Imaging reporting unit) exceeded the carrying value (expressed as a percentage of carrying value) by approximately 10%.

The SGK Brand Solutions reporting unit has experienced recent declines, primarily resulting from weakened economic conditions (particularly in Europe) and unfavorable changes in foreign exchange rates. Additionally, recent increases in the cost of certain materials, labor, and other inflation-related pressures have had an unfavorable impact on the reporting unit's results of operations. During the fourth quarter of fiscal 2022, in its assessment of these potential impacts, and in light of the limited excess fair value over carrying value for its SGK Brand Solutions reporting unit (discussed above), management determined a triggering event occurred, resulting in a re-evaluation of goodwill for the reporting unit, as of September 1, 2022. As a result of this interim assessment, the Company recorded a goodwill write-down totaling $82,454 during the fiscal 2022 fourth quarter. Subsequent to this write-down, the fair value of the SGK Brand Solutions reporting unit approximated its carrying value at September 1, 2022. The fair value for the reporting unit was determined using level 3 inputs (including estimates of revenue growth, EBITDA contribution and the discount rates) 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 and continued economic and industry challenges) significantly change, additional goodwill write-downs may be necessary in future periods.

Fiscal 2021:

In fiscal 2021, the additions to Memorialization goodwill and SGK Brand Solutions goodwill reflect acquisitions of small businesses within each segment.

Fiscal 2020:

In fiscal 2020, in its assessment of the potential impacts of COVID-19 on the estimated future earnings and cash flows for the SGK Brand Solutions segment, and in light of the limited excess fair values over carrying values for the segment's two reporting units, management determined that COVID-19 represented a triggering event, resulting in a re-evaluation of the goodwill for the reporting units within the SGK Brand Solutions segment (Graphics Imaging and Cylinders, Surfaces and Engineered Products), as of March 31, 2020. As a result of this interim assessment, the Company recorded a goodwill write-

(Dollar amounts in thousands, except per share data)

22. GOODWILL AND OTHER INTANGIBLE ASSETS, (continued)

down totaling $90,408 during the fiscal 2020 second quarter. Subsequent to this write-down, the fair values of thetwo reporting units within the SGK Brand Solutions segment (Graphics Imaging and Cylinders, Surfaces and Engineered Products) approximated their carrying values at March 31, 2020. The fair values for these reporting units were determined using level 3 inputs (including estimates of revenue growth, EBITDA contribution and the discount rates) and a combination of the income approach using the estimated discounted cash flows and a market-based valuation methodology.

The following tables summarize the carrying amounts and related accumulated amortization for intangible assets as of September 30, 2022 and 2021, respectively.

	Carrying Amount	Accumulated Amortization	Net
September 30, 2022			
Indefinite-lived trade names	$ 30,540	$ —	$ 30,540
Definite-lived trade names	150,528	(117,572)	32,956
Customer relationships	380,593	(248,464)	132,129
Copyrights/patents/other	20,878	(14,349)	6,529
	$ 582,539	$ (380,385)	$ 202,154
September 30, 2021			
Indefinite-lived trade names	$ 30,540	$ —	$ 30,540
Definite-lived trade names	148,867	(104,211)	44,656
Customer relationships	388,699	(210,361)	178,338
Copyrights/patents/other	23,584	(15,576)	8,008
	$ 591,690	$ (330,148)	$ 261,542

The net change in intangible assets during fiscal 2022 included the impact of foreign currency fluctuations during the period, additional amortization, and additions related to the acquisition of OLBRICH and R+S Automotive.

During the second quarter of fiscal 2021, the Company reassessed the useful lives for certain of its customer relationships. As a result of this reassessment, the Company reduced the remaining useful lives for these customer relationships to reflect their estimated remaining duration, utilizing actual historical customer attrition rates.

Amortization expense on intangible assets was $57,084, $84,233, and $71,514 in fiscal 2022, 2021 and 2020, respectively. Fiscal year amortization expense is estimated to be approximately $41,427 in 2023, $35,889 in 2024, $18,601 in 2025, $14,357 in 2026 and $13,364 in 2027.

23. ASSET WRITE-DOWNS:

The Company has certain operations in Russia within its SGK Brand Solutions segment. In light of the current war between Russia and Ukraine, and the resulting regional instability and evolving political and economic conditions within the region, the Company evaluated certain of its assets for recoverability and impairment. As a result of this assessment, and due to the uncertainty in projecting future cash flows for the Company's operations in Russia, the Company recorded asset write-downs totaling $10,050 (net of recoveries) during fiscal 2022 to reduce the carrying value of these assets to zero. Asset write-downs (primarily related to property, plant and equipment) totaling $9,686 and $364 were reported within cost of sales and administrative expense, respectively, for the year ended September 30, 2022.

24. SUBSEQUENT EVENT:

In October 2022, subsequent to the date of the balance sheet, the Company made lump sum payments totaling $24,242 to fully settle the SERP and defined benefit portion of the ORRP obligations. The settlement of these plan obligations is expected to result in the recognition of a non-cash charge of approximately $1,271 in the first quarter of fiscal 2023. This amount represents the immediate recognition of the deferred AOCI balances related to the SERP and ORRP, and is based on current estimates as of September 30, 2022. See Note 15, "Pension and Other Postretirement Plans" for further discussion.

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, 2022	$ 10,654	$ 1,368	$ —	$ (1,884)	$ 10,138
September 30, 2021	9,618	2,182	—	(1,146)	10,654
September 30, 2020	10,846	1,736	15	(2,979)	9,618

(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, 3)]	Allowance Changes	Other Additions (Deductions) [(2)]	Balance at End of Period
			(Dollar amounts in thousands)		
Deferred Tax Asset Valuation Allowance:					
Fiscal Year Ended:					
September 30, 2022	$ 28,619	$ (1,300)	$ —	$ 233	$ 27,552
September 30, 2021	22,527	5,709	—	383	28,619
September 30, 2020	15,352	6,982	—	193	22,527

(1) Amounts relate primarily to adjustments in net operating loss carryforwards which are precluded from use.
(2) Consists principally of adjustments related to foreign exchange.
(3) Fiscal 2022 amount is comprised of a $ 5,004 benefit related to non-survivability of deferred tax assets with full valuation allowance due to entity dissolution and a $ 3,704 expense primarily related to adjustments in net operating loss carryforwards which are precluded from use.

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, 2022. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2022, 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, 2022 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, 2022 that have materially affected, or are reasonably likely to materially affect, the Company's internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

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 "Delinquent Section 16(a) Reports" (if applicable) 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, 2022.

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, 2022. 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, 2022.

Equity Compensation Plans:

The Company maintains an equity incentive plan (as amended and restated, 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 from the date the Company's Board of Directors approved of the 2017 Equity Incentive Plan, the maximum number of shares available for grants or awards is an aggregate of 3,450,000 (subject to adjustment upon certain events such as stock dividends or stock splits), following the amendment and restatement of the 2017 Equity Incentive Plan at the Company's 2022 Annual Shareholder Meeting. 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, 2022, 215,618 shares have been issued under the 2017 Equity Incentive Plan. 790,515 time-based restricted share units, 946,212 performance-based restricted share units, and 75,000 stock options have been granted under the 2017 Equity Incentive Plan. 1,498,212 of these share-based awards are outstanding as of September 30, 2022. All plans are administered by the Compensation Committee of the Board of Directors. The number of shares issued under performance-based restricted share units may be up to 200% of the number of performance-based restricted share units, based on the satisfaction of specific criteria established by the plan administrator.

With respect to the 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. Such performance thresholds include adjusted earnings per share, return on invested capital, appreciation in the market value of the Company's Class A Common Stock, or other targets established by the Compensation Committee of the Board of Directors. Approximately 42% of the outstanding share units vest based on time, while the remaining vest based on pre-defined performance thresholds. The Company issues common stock from treasury shares once vested.

With respect to outstanding stock option grants, options vest in one-third increments annually over three years from the grant date. Unvested stock options expire on the earlier of five years from the date of grant, or upon employment termination, retirement or death. The Company generally settles employee stock option exercises with treasury shares.

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"). 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. In November 2022, the Board of Directors approved the Amended and Restated 2019 Director Fee Plan, which increases the maximum number of shares available for grants or awards to an aggregate of 300,000. The Amended and Restated 2019 Director Fee Plan is subject to shareholder approval at the February 2023 Annual Shareholder Meeting. 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 2022, either cash or shares of the Company's Class A Common Stock with a value equal to $90,000. The annual retainer fee for fiscal 2022 paid to a non-employee Chairman of the Board is $210,000. 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 45,475 shares and share units had been deferred under the Director Fee Plans at September 30, 2022. 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 $140,000 for fiscal 2022. As of September 30, 2022, 305,911 restricted shares and restricted share units have been granted under the Director Fee Plans, 132,682 of which were issued under the 2019 Director Fee Plan. 58,008 restricted shares and restricted share units are unvested at September 30, 2022.

The following table provides information about grants under the Company's equity compensation plans as of September 30, 2022:

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	120,475 (1)	$ 41.70 (2)	4,681,346 (3)
Equity compensation plans not approved by security holders	None	None	None
Total	120,475	$ 41.70	4,681,346

(1) Includes (1) deferred awards under Director Fee Plans; and (2) outstanding stock options.

(2) Weighted-average exercise price of outstanding stock options included in column (a).

(3) Includes (1) shares reserved under the 2017 Equity Incentive Plan, which provides for the grant or award of stock options, restricted shares, stock-based performance units and certain other types of stock based awards; (2) shares reserved under the 2019 Director Fee Plan, which provides for the grant, award or deferral of stock options, restricted shares, stock-based performance units and certain other types of stock based awards and compensation; and (3) the shares purchased under the Employee Stock Purchase Plan which 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, 2022.

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, 2022.

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:

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
EXHIBITS INDEX

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, as amended January 8, 2021*	Exhibit Number 3.1 to the Current Report on Form 8-K filed on January 14, 2021
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
4.5	Registration Rights Agreement*	Exhibit Number 10.1 to the Current Report on Form 8-K filed on September 25, 2020
4.6	Description of Securities*	Exhibit 4.6 to the Annual Report on Form 10-K for the year ended September 30, 2020
10.1	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
10.2 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
10.3 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
10.4 a	Amendment to the Supplemental Retirement Plan	Exhibit Number 10.4 to the Annual Report on Form 10-K for the year ended September 30, 2021
10.5 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
10.6 a	Amendment to the Officers Retirement Restoration Plan	Exhibit Number 10.6 to the Annual Report on Form 10-K for the year ended September 30, 2021
10.7 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

Exhibit No.	Description	Prior Filing or Sequential Page Numbers Herein
10.8 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
10.9 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
10.10 a	2012 Equity Incentive Plan*	Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on January 22, 2013
10.11 a	2015 Incentive Compensation Plan*	Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on January 19, 2016
10.12 a	Amended and Restated 2017 Equity Incentive Plan*	Exhibit Number 99.1 to the Registration Statement on Form S-8 filed on April 29, 2022
10.13 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
10.14 a	2019 Director Fee Plan*	Exhibit Number 99.3 to the Registration Statement on Form S-8 filed on May 3, 2019
10.15 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
10.16 a	Form of Change in Control Agreement*	Exhibit Number 10.1 to Current Report on Form 8-K filed on October 3, 2019
10.17	Third Amended and Restated Loan Agreement*	Exhibit Number 10.1 to the Current Report on Form 8-K filed on March 30, 2020
10.18	First Amendment to Third Amended and Restated Loan Agreement*	Exhibit Number 10.1 to the Quarterly Report on Form 10-Q filed on April 30, 2021
10.19	Second Amendment to Third Amended and Restated Loan Agreement*	Exhibit Number 10.1 to the Quarterly Report on Form 10-Q filed on July 29, 2022
10.20	Third Amendment to Third Amended and Restated Loan Agreement*	Filed Herewith
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
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

Exhibit No.	Description	Prior Filing or Sequential Page Numbers Herein
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
104.	Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit 101)	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 18, 2022.

MATTHEWS INTERNATIONAL CORPORATION
(Registrant)

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

Each person whose individual signature appears below hereby authorizes and appoints Joseph C. Bartolacci, Steven F. Nicola and Brian D. Walters, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this annual report on Form 10-K and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue thereof.

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 18, 2022:

/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/ Alvaro Garcia-Tunon
Alvaro Garcia-Tunon, 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/ Lillian D. Etzkorn
Lillian D. Etzkorn, Director

THIRD AMENDMENT TO
THIRD AMENDED AND RESTATED LOAN AGREEMENT

This Third Amendment to Third Amended and Restated Loan Agreement, dated the 1 st day of July, 2022, by and among Matthews International Corporation, a Pennsylvania corporation (the "US Borrower"), Schawk UK Limited, a limited liability company incorporated under the laws of England and Wales (the "UK Borrower"), Matthews Europe GmbH, a limited liability company organized under the laws of Germany (the "German Borrower"), and SGK Netherlands B.V (f/k/a MATW Netherlands Holding B.V.), a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) duly incorporated and existing under the laws of The Netherlands (the "Dutch Borrower") (the UK Borrower, the German Borrower and the Dutch Borrower are each a "Foreign Borrower" and collectively, the "Foreign Borrowers") (the US Borrower and the Foreign Borrowers are each a "Borrower" and, collectively, the "Borrowers"), the Banks (as defined in the Loan Agreement (as hereinafter defined)), Citizens Bank, N.A., a national banking association, in its capacity as administrative agent for the Banks (in such capacity, the "Agent"), PNC Bank, National Association, a national banking association, Truist Bank, a North Carolina banking corporation, JPMorgan Chase Bank, N.A., a national banking association and Wells Fargo Bank, N.A., a national banking association, each in its capacity as syndication agent for the Banks (in such capacity, individually and collectively, the "Syndication Agent") and Bank of America, N.A., a national banking association, in its capacity as a documentation agent for the Banks (in such capacity, the "Documentation Agent") (this "Amendment").

W I T N E S S E T H:

WHEREAS, pursuant to that certain Third Amended and Restated Loan Agreement, dated March 27, 2020, by and among the US Borrower, the Banks party thereto, the Agent, the Syndication Agent and the Documentation Agent, as amended by that certain: (i) First Amendment to Third Amended and Restated Loan Agreement, dated March 30, 2021, by and among the Borrowers, the Banks party thereto, the Agent, the Syndication Agent and the Documentation Agent; and (ii) Second Amendment to Third Amended and Restated Loan Agreement, dated December 27, 2021, by and among the Borrowers, the Banks party thereto, the Agent, the Syndication Agent and the Documentation Agent (as may be further amended, modified, supplemented or restated from time to time, the "Loan Agreement"), the Banks agreed, among other things, to extend a revolving credit facility to the Borrower in an aggregate principal amount not to exceed Seven Hundred Fifty Million and 00/100 Dollars ($750,000,000.00); and

WHEREAS, the Borrowers desire to amend certain provisions of the Loan Agreement and the Agent shall permit such amendments pursuant to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the parties hereto agree as follows:

1. All capitalized terms used herein which are defined in the Loan Agreement shall have the same meanings herein as in the Loan Agreement unless the context clearly indicates otherwise.

2. Section 1.01 of the Loan Agreement is hereby amended by inserting therein as new defined terms in their proper alphabetical order, the following:

"Specified L/C Sublimit" means, with respect to any Issuing Bank, the amount set forth opposite its name in the table below under the heading "Specified L/C Sublimit":

Issuing Bank	**Specified L/C Sublimit**
Citizens	$35,000,000.00
PNC Bank, National Association	$5,000,000.00
Truist Bank	$5,000,000.00
JPMorgan Chase Bank, N.A.	$5,000,000.00
Wells Fargo Bank, N.A.	$5,000,000.00

"Third Amendment Closing Date" means July 1, 2022.

3. Section 1.01 of the Loan Agreement is hereby amended to delete therefrom the following defined term and insert in its stead the following:

"Issuing Bank" shall mean Citizens, PNC Bank, National Association, a national banking association, Truist Bank, a North Carolina banking corporation, JPMorgan Chase Bank, N.A., a national banking association, Wells Fargo Bank, N.A., in each case, in its individual capacity as issuer of Letters of Credit hereunder, and any other Bank that Borrower, the Agent and such other Bank may agree from time to time may issue Letters of Credit hereunder.

4. The first complete paragraph of Section 2.06 of the Loan Agreement is hereby deleted in its entirety and in its stead is inserted the following:

2.06 Agreement to Issuer Letters of Credit.

From time to time during the period from the Third Amendment Closing Date to the fifteenth (15th) day preceding the Expiry Date, subject to the further terms and conditions hereof, including those required in connection with the making of Revolving Credit Loans, the applicable Issuing Bank(s) shall issue Standby Letters of Credit or Commercial Letters of Credit (collectively the "Letters of Credit") for the account of the Borrower in a Dollar Equivalent amount not to exceed Fifty-Five Million and 00/100 Dollars ($55,000,000.00) in the aggregate as a subfacility of the Revolving Credit Facility Commitment; provided, however, that the outstanding amount of Letters of Credit of any Issuing Bank shall not exceed its Specified L/C Sublimit; provided further, however, that on any date on which the Borrower requests a Letter of Credit, and after giving effect to the Letter of Credit Face Amount of such Letter of Credit, the sum of (i) the Dollar Equivalent amount of all Revolving Credit Loans outstanding, plus (ii) all Swing Line Loans outstanding, plus (iii) the Dollar Equivalent amount of all Letters of Credit Outstanding shall not exceed the Revolving Credit Facility Commitment. As of the date hereof, those Letters of Credit set forth on Schedule 2.06 hereof (collectively, the "Existing Letters of Credit"), which were issued under the Existing Loan Agreement and are outstanding on the date hereof, will be deemed to be Letters of Credit issued and outstanding hereunder.

5. Clause (A)(i) of Section 8.17 of the Loan Agreement is hereby deleted in its entirety and in its stead is inserted:

(i) Prior Consent of Agent. No transfer may be consummated pursuant to this Section 8.17(A) without the prior written consent of the Agent and the Issuing Banks, which consent of the Agent and the Issuing Banks shall not be unreasonably withheld, delayed or conditioned.

6. Section 9.02 of the Loan Agreement is hereby deleted in its entirety and in its stead is inserted:

9.02 Amendments and Waivers.

Except as provided for in Section 2.03(d) hereof, no amendment, modification, termination, or waiver of any provision of this Agreement or any Loan Document, nor consent to any variance therefrom, shall be effective unless the same shall be in writing and signed by the Majority Banks and the Borrower and then such waiver or consent shall be effective only in the specific instance and for the specific purpose given; provided, further, that no such agreement shall amend, modify, extend or otherwise affect the rights or obligations of the Agent or any Issuing Bank without the prior written consent of the Agent or such Issuing Bank, as the case may be. Notwithstanding anything contained herein to the contrary, consent of each Bank affected thereby shall be required with respect to (a) any increase in such Bank's Commitments hereunder (other than pursuant to Section 2.21 hereof), (b) the extension of the Expiry Date, the Term Loan Maturity Date, the payment date of interest or principal hereunder, or the payment of commitment or other fees or amounts payable hereunder, (c) any reduction in the rate of interest on the Notes, or in any amount of principal or interest due on any Note, or the payment of commitment or other fees hereunder or any change in the manner of pro rata application of any payments made by the Borrower to the Banks hereunder, (d) any change in any percentage voting requirement, voting rights or the definition of Majority Banks in this Agreement, (e) any release of any Guarantor representing more than fifteen percent (15%) of the fair market value of all the Loan Parties' assets immediately prior to such sale or disposition; provided, that, no Event of Default shall exist immediately prior to and after giving effect to such release from its obligations under the Guaranty Agreement to which it is a party, (f) any amendment to this Section 9.02, 9.11 or Section 7.04 hereof or (g) any amendment to the definitions of "Impacted Bank" and "Defaulting Bank" herein. Notice of amendments or consents ratified by the Banks hereunder shall be immediately forwarded by the Agent to all Banks. Each Bank or other holder of a Note shall be bound by any amendment, waiver or consent obtained as authorized by this Section, regardless of its failure to agree thereto. In the case of any such waiver or consent relating to any provision of this Agreement, any Event of Default or Potential Default so waived or consented to will be deemed to be cured and not continuing, but no such waiver or consent will extend to any other or subsequent Event of Default or Potential Default or impair any right consequent to any other or subsequent Event of Default or Potential Default or impair any right consequent thereto. Notwithstanding anything to the contrary herein, no Impacted Bank shall have any right to approve or disapprove any amendment, waiver or consent hereunder, except that (i) the Commitment of such Impacted Bank may not be increased or extended without the consent of such Impacted Bank, (ii) any reduction in the rate of interest on the Notes, or in any amount of principal or interest due on any Note, or the payment of commitment or other fees hereunder or any adverse change in the manner of pro rata application of any payments made by the Borrower to the Banks hereunder shall require the consent of such Impacted Bank and (iii) any amendment, modification, termination or waiver requiring the consent of all Banks or each affected Bank that by its terms affects any Impacted Bank more adversely than other Banks shall require the consent of such Impacted Bank.

7. The provisions of Sections 2 through 6 of this Amendment shall not become effective until the Agent has received the following, each in form and substance acceptable to the Agent:

(a) this Amendment, duly executed by the Borrowers and the Majority Banks;

(b) payment of all fees and expenses owed to the Agent and its counsel in connection with this Amendment and the Loan Agreement; and

(c) such other documents, deliverables and/or evidence reasonably required by the Agent in connection with the transactions contemplated hereby.

8. The US Borrower acknowledges and agrees that each and every document, instrument or agreement which secures payment of the US Borrower's Indebtedness under the Loan Agreement including, but not limited to, (i) the Loan Agreement and (ii) the Guaranty Agreements continue to secure prompt payment when due of each Borrower's Indebtedness under the Loan Agreement

9. Each Borrower hereby reconfirms and reaffirms, as of the date hereof, all representations and warranties, agreements and covenants made by it pursuant to the terms and conditions of the Loan Agreement and the other Loan Documents, except as such representations and warranties, agreements and covenants may have heretofore been amended, modified or waived in writing in accordance with the Loan Agreement.

10. Each Borrower hereby represents and warrants to the Agent as of the date hereof that (i) such Borrower has the legal power and authority to execute and deliver this Amendment, (ii) the officers of such Borrower executing this Amendment have been duly authorized to execute and deliver the same and bind such Borrower with respect to the provisions hereof, (iii) the execution and delivery hereof by such Borrower and the performance and observance by such Borrower of the provisions hereof and of the Loan Agreement and all documents executed or to be executed herewith or therewith, do not violate or conflict with the organizational documents of such Borrower or any Law applicable to such Borrower or result in a breach of any provision of or constitute a default which would have a Material Adverse Effect under any other agreement, instrument or document binding upon or enforceable against such Borrower, and (iv) this Amendment, the Loan Agreement and the documents executed or to be executed by such Borrower in connection herewith or therewith constitute valid and binding obligations of such Borrower in every respect, enforceable in accordance with their respective terms.

11. Each Borrower represents and warrants that as of the date hereof, after giving effect to the amendments set forth in this Amendment no Event of Default exists under the Loan Agreement, nor will any occur as a result of the execution and delivery of this Amendment or the performance or observance of any provision hereof.

12. This Amendment shall not constitute a novation of the Loan Agreement or any of the Loan Documents. Except as expressly set forth herein, this Amendment (i) shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Banks or the Agent under the Loan Agreement or any other Loan Document, and (ii) shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Loan Agreement or any other Loan Document. Except as modified by this Amendment and each Annex (if any) attached hereto, each and every term, condition, obligation, covenant and agreement contained in the Loan Agreement or any other Loan Document is hereby ratified and re-affirmed in all respects and shall continue in full force and effect. Each Borrower reaffirms its Obligations, including obligations (whether direct, as a guarantor or otherwise), liabilities and indebtedness, under the Loan Documents to which it is party and its grant and the validity of the Liens granted by it in the Collateral under the applicable Loan Documents, and all financing statements and all other recordings and filings previously made, recorded or filed are intended to and do secure all of its Obligations and perfect all Liens granted by it in the Collateral, in each case to the extent provided in such Loan Documents, with all such Liens continuing in full force and effect after giving effect to this Amendment. This Amendment shall constitute a Loan Document for purposes of the Loan Agreement, and from and after the date hereof, all references to the Loan Agreement in any Loan Document and all references in the Loan Agreement to "this Agreement", "hereunder", "hereof" or words of like import referring to the Loan Agreement shall, unless expressly provided otherwise, refer to the Loan Agreement as amended by this Amendment.

13. This Amendment may be executed in any number of counterparts and by the different parties hereto on separate counterparts each of which, when so executed, shall be deemed to be an original, but all such counterparts shall constitute but one and the same instrument. Delivery of an executed signature page counterpart hereof by telecopy, emailed .pdf or any other electronic means that reproduces an image of the actual executed signature page shall be effective as delivery of a manually executed counterpart hereof. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include electronic signatures, the electronic association of signatures and records on electronic platforms, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, any other similar state laws based on the Uniform Electronic Transactions Act or the Uniform Commercial Code, each as amended, and the parties hereto hereby waive any objection to the contrary, provided that (x) nothing herein shall require Agent to accept electronic signature counterparts in any form or format and (y) Agent reserves the right to require, at any time and at its sole discretion, the delivery of manually executed counterpart signature pages to this Amendment or any document signed in connection with this Amendment and the parties hereto agree to promptly deliver such manually executed counterpart signature pages.

14. This Amendment shall be governed by, and shall be construed and enforced in accordance with, the Laws of the Commonwealth of Pennsylvania without regard to any conflict of law principles thereof. Each Borrower hereby consents to the jurisdiction and venue of the Court of Common Pleas of Allegheny County, Pennsylvania and the United States District Court for the Western District of Pennsylvania with respect to any suit arising out of or mentioning this Amendment.

[INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto, have caused this Amendment to be duly executed, as a document under seal, by their duly authorized officers on the day and year first above written.

BORROWERS:

Matthews International Corporation

By: /s/ Richard Beard __(SEAL)

Name: Richard Beard__

Title: SVP, Tax and Treasurer__

SGK Netherlands B.V.

By: /s/ Joseph C. Bartolacci__(SEAL)

Name: Joseph C. Bartolacci__

Title: Director__

By: /s/ A.R. Brandenburg van den Gronden__(SEAL)
Name: A.R. Brandenburg van den Gronden__

Title: Director__

Matthews Europe GmbH

By: /s/ Richard Beard __(SEAL)
Name: Richard Beard__

Title: Prokurist__

Schawk UK Ltd.

By: /s/ Steven F. Nicola__(SEAL)

Name: Steven F. Nicola__

Title: Director__

[*Bank Signature Pages Follow*]

Citizens Bank, N.A., as Agent and

for itself as a Bank

By:/s/ Carl S. Tabacjar__

Name: Carl S. Tabacjar

Title: Senior Vice President

Bank of the West, as a Bank

By:/s/ Philip R. Medsger__
Name: Philip R. Medsger
Title: Director

JPMorgan Chase Bank, N.A., as a Bank

By: /s/ Bam Fakorede__
Name: Bam Fakorede
Title: Vice President

HSBC Bank USA, National Association, as a Bank

By: /s/ Kyle Patterson__
Name: Kyle Patterson
Title: Senior Vice President

TD Bank, N.A., as a Bank

By: /s/ Matthew Bacigalupo__
Name: Matthew Bacigalupo
Title: Senior Vice President

First National Bank of Pennsylvania, as a Bank

By: /s/ Michael D. Pearce__
Name: Michael D. Pearce
Title: Vice President

Truist Bank, as a Bank

By: /s/ David Miller__
Name: David Miller
Title: Director

Wells Fargo Bank, N.A., as a Bank

By: /s/ Kevin Valenta__
Name: Kevin Valenta
Title: Director

Fifth Third Bank, National Association, as a Bank

By: /s/ Sam Schuessler____________
Sam Schuessler
Associate

PNC Bank, National Association, as a Bank

By: /s/ Scott Colcombe____________
Scott Colcombe
Senior Vice President

Bank of America, N.A., as a Bank

By: /s/ Brandon Bouchard____________
Brandon Bouchard
Vice President

Northwest Bank, as a Bank

By: /s/ Stephen J. Orban____________
Stephen J. Orban
Senior Vice President

EXHIBIT 21

MATTHEWS INTERNATIONAL CORPORATION AND SUBSIDIARIES
SUBSIDIARIES OF THE REGISTRANT
(as of October 31, 2022)

Name	Percentage Ownership
IDL Worldwide, Inc.	100
The SLN Group, Inc.	100
Therm-Tec, Inc.	100
Saueressig North America, Inc.	100
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
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	100
York Casket Development Company, Inc.	100
Matthews Aurora, LLC	100
Aurora Casket Company, LLC	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
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

Name	Percentage Ownership
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
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
Matthews Marking Systems Holding GmbH	100
Desgrippes Gobe Group (Yuan Hosea)	100
Schawk UK Ltd.	100
Matthews Brands Solutions (UK) Limited	100
PM Colour Limited	100
InTouch Reprographic Limited	100
M3dia Projects Limited	51
Schawk UK Corporate Packaging	100
Schawk UK Holdings Ltd.	100
Brandimage Degrippes and LAGA SAS	100
Matthews International Malaysia 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

Name	Percentage Ownership
Desgrippes (Shanghai) Brand Consulting Co Ltd.	100
Schawk Anthem Shenzhen Co Ltd.	100
Schawk Imaging (Shanghai) Co.	100
SGK Netherlands 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
SGK Manila, Inc	99
SGK Germany 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
Schawk Hungary Nyomdaipari 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
Wetzel GmbH	100
Saueressig Polska Sp. z.o.o.	33
Olbrich GmbH	100
R+S Automotive GmbH	100
Unterstützungskasse der Firma R+S Automotive GmbH	100
R+S Automotive CZ s.r.i.	100
Olbrich Holding Corp.	100
R+S Automotive USA LLC	100
R+S Technik GmbH	100
Jiangyin R+S Machinery	50
Polytype Converting AG	100
Olbrich Machinery Trading (jiangyin) Co. Ltd.	100
Unterstützungskasse der Herbert Olbrich GmbH & Co. KG GmbH	100

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, 033-57797, and 333-264584 and Form S-3 No. 333-251794) of our reports dated November 18, 2022, 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, 2022.

/s/ Ernst & Young LLP

Pittsburgh, Pennsylvania
November 18, 2022

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 18, 2022

/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 18, 2022

/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, 2022 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 18, 2022

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, 2022 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 18, 2022

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.