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

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 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 number: 0-04041

ALLIED MOTION TECHNOLOGIES INC.
(Exact name of registrant as specified in its charter)

Colorado	**84-0518115**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
495 Commerce Drive, Amherst, New York	**14228**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(716) 242-8634**

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock	AMOT	NASDAQ

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See 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. Yes ☒ No ☐

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 voting stock held by non-affiliates of the Registrant, computed by reference to the average bid and asked prices of such stock as of the last business day of the Registrant's most recently completed second fiscal quarter was approximately $300,786,044.

Number of shares of the only class of Common Stock outstanding: 16,067,289 as of March 7, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for the 2023 Annual Meeting of Shareholders are incorporated into Part III.

Table of Contents

Disclosure Regarding Forward-Looking Statements

All statements contained herein that are not statements of historical fact constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance, or achievements, and may contain the word “believe,” “anticipate,” “expect,” “project,” “intend,” “will continue,” “will likely result,” “should” or words or phrases of similar meaning. Forward-looking statements involve known and unknown risks and uncertainties that may cause actual results to differ materially from the expected results described in the forward-looking statements. The risks and uncertainties include those associated with: the domestic and foreign general business and economic conditions in the markets we serve, including political and currency risks and adverse changes in local legal and regulatory environments; the severity, magnitude and duration of the COVID-19 pandemic, including impacts of the pandemic and of businesses’ and governments’ responses to the pandemic on our operations and personnel, and on commercial activity and demand across our and our customers’ businesses, and on global supply chains; our inability to predict the extent to which the COVID-19 pandemic and related impacts will continue to adversely impact our business operations, financial performance, results of operations, financial position, the prices of our securities and the achievement of our strategic objectives; the introduction of new technologies and the impact of competitive products; the ability to protect the Company’s intellectual property; our ability to sustain, manage or forecast our growth and product acceptance to accurately align capacity with demand; the continued success of our customers and the ability to realize the full amounts reflected in our order backlog as revenue; the loss of significant customers or the enforceability of the Company’s contracts in connection with a merger, acquisition, disposition, bankruptcy, or otherwise; our ability to meet the technical specifications of our customers; the performance of subcontractors or suppliers and the continued availability of parts and components; failure of a key information technology system, process or site or a breach of information security, including a cybersecurity breach, ransomware, or failure of one or more key information technology systems, networks, processes, associated sites or service providers; changes in government regulations; the availability of financing and our access to capital markets, borrowings, or financial transactions to hedge certain risks; the ability to attract and retain qualified personnel, and in particular those who can design new applications and products for the motion industry; the ability to implement our corporate strategies designed for growth and improvement in profits including to identify and consummate favorable acquisitions to support external growth and the development of new technologies; the ability to successfully integrate an acquired business into our business model without substantial costs, delays, or problems; our ability to control costs, including the establishment and operation of low cost region manufacturing and component sourcing capabilities; and the additional risk factors discussed under “Item 1A. Risk Factors” in Part I of this report. Actual results, events and performance may differ materially from the Company’s forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements as a prediction of actual results. Any forward-looking statement speaks only as of the date on which it is made. New risks and uncertainties arise over time, and it is not possible for us to predict the occurrence of those matters or the manner in which they may affect us. The Company has no obligation or intent to release publicly any revisions to any forward-looking statements, whether as a result of new information, future events, or otherwise.

New risk factors emerge from time to time and it is not possible for management to predict all such risk factors, nor can it assess the impact of all such risk factors on its business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. The Company’s expectations, beliefs and projections are believed to have a reasonable basis; however, the Company makes no assurance that expectations, beliefs or projections will be achieved.

PART I

All dollar amounts are in thousands except share and per share amounts.

Item 1. Business.

OVERVIEW

Allied Motion Technologies Inc. (“Allied Motion” or the “Company” or “we” or “our”) is a global company that designs, manufactures and sells precision and specialty controlled motion components and systems used in a broad range of industries. Our target markets include Industrial, Vehicle, Medical, and Aerospace & Defense (A&D). We are headquartered in Amherst, NY, and have global operations and sell to markets across the United States, Canada, South America, Europe and Asia-Pacific. We are known worldwide for our expertise in electro-magnetic, mechanical and electronic motion technology. We sell component and integrated controlled motion solutions to end customers and OEMs through our own direct sales force and authorized manufacturers’ representatives and distributors. Our products and solutions include nano precision positioning systems, servo control systems, motion controllers, digital servo amplifiers and drives, brushless servo, torque, and coreless motors, brush motors, integrated motor-drives, gear motors, gearing, incremental and absolute optical encoders, active (electronic) and passive (magnetic) filters for power quality and harmonic issues, Industrial safety rated input/output Modules, Universal Industrial Communications Gateways, light-weighting technologies, and other controlled motion-related products.

Allied Motion was established in 1962 under the laws of Colorado and operates in the United States, Canada, Mexico, Europe and Asia-Pacific. We are headquartered in Amherst, New York and the mailing address of our corporate headquarters is 495 Commerce Drive, Suite 3, Amherst, New York 14228. The telephone number at this location is (716) 242-8634. Our website is www.alliedmotion.com. We trade under the ticker symbol “AMOT” on the NASDAQ exchange.

The Company maintains a website at www.alliedmotion.com. We make available, free of charge on or through our website our annual reports on Form 10 K, quarterly reports on Form 10 Q, current reports on Form 8 K, and amendments to those reports as soon as reasonably practicable after we electronically file or furnish such materials to the SEC.

We have a Code of Ethics for our chief executive officer and president and senior financial officers regarding their obligations in the conduct of Company affairs. We also have a Code of Ethics and Business Conduct that is applicable to all directors, officers and employees. The Codes are available on our website. We intend to disclose on our website any amendment to, or waiver of, the Codes that would otherwise be required to be disclosed under the rules of the SEC and the Nasdaq Global Market. A copy of both Codes is also available in print to any stockholder upon written request addressed to Allied Motion Technologies Inc., 495 Commerce Drive, Suite 3, Amherst, NY 14228-2313, Attention: Secretary.

Recent Events

The continued presence of COVID-19 has and will likely continue to create uncertainties and disruptions to the Company as well as the global economy. This has resulted in operational and financial challenges and risks. In response, we implemented extensive additional health and safety protocols from time to time in keeping with governmental requirements and best practices. As a result of the continued evolving presence of variants of the virus, and related global impacts, there are likely to be ongoing disruptions to certain supply chains as well as impacts on customer demand that may present additional challenges and volatility to our business.

During 2022, inflation negatively impacted our input costs and pricing, primarily for labor and materials. We, our customers, and our suppliers also began to experience the effect of a higher interest rate environment. Gross domestic product growth slowed throughout 2022 largely due to the widespread impacts of inflation, increasing interest rates, and more restrictive financial conditions. Supply chain disruptions, labor shortages, and global inflation remain persistent, along with elevated geopolitical instability.

Specifically, the current conflict in Ukraine has created geopolitical unrest resulting in economic uncertainty and volatility with regard to energy prices, interest rates and our supply chain. We are monitoring the developments as they unfold in order to react accordingly. The impact of the conflict on our operational and financial performance will depend on future developments that cannot be predicted. The Company does not believe the impact on our results to be material at this time.

The Inflation Reduction Act of 2022 (the "IRA") was signed into law in August 2022. The IRA is federal legislation designed to raise revenue from lowering of prescription drug prices and imposition of certain corporate tax measures, while authorizing spending on energy and climate change initiatives, subsidizing the Affordable Care Act, and enacting certain tax reforms. Management continues to monitor any potential impact of the IRA on our results. No immediate or direct effect from the legislation is anticipated to have a material impact on our results at this time.

The CHIPS and Science Act ("CHIPS") was signed into law in August 2022. CHIPS is a federal statue providing funding for research and domestic production of semiconductors. Additional funding can be provided through CHIPS to various federal agencies as well as towards climate science research. No immediate or direct material effect from the legislation is anticipated to have a material impact on our results at this time.

Beginning in the last half of 2021, certain regions of China experienced energy shortages which have, for brief periods of time, impacted our facilities. The impact was not material to our results during 2021 and 2022, however, there continue to be uncertainties related to the energy shortages that may impact us in 2023 and beyond. We have been able to proactively mitigate the impact of the restrictions on energy usage to date by managing our scheduling at the impacted facilities.

ACQUISITIONS

Airex, LLC: On June 17, 2022, the Company acquired 100% of the membership interests of Airex, LLC ("Airex"), a privately-owned New Hampshire headquartered developer of high precision electromagnetic products and solutions for the aerospace and defense, life sciences, semiconductor, and commercial industrial applications. Airex combines its patented winding technology with robotic manufacturing to produce linear motors – ironless and iron core, rotary motors, voice coils, wound electromagnetic components and sub-components. Airex expands the Company's motor offerings as well as enhances its quality systems to support broad mission critical defense programs, as well as other high demanding industries such as life sciences and semiconductor.

FPH Group: On May 30, 2022, the Company acquired 100% of the direct and indirect legal and beneficial ownership of the shares of FPH Group Inc., a corporation incorporated pursuant to the laws of the Province of Ontario and the membership interests of Transtar International, LLC, a Michigan limited liability company, collectively "FPH". FPH is an Ontario, Canada headquartered industry leader in the development of technically advanced, reliable and cost-effective electrical drive systems which provide high torque and precision motion for the defense industry, as well as light weighting technologies for existing and future ground-based vehicles in the defense industry. FPH provides concept engineering, prototyping, validation, and production. FPH also develops composites, advanced materials and hybrid products and solutions that achieve significant weight reduction and higher strength. This acquisition provides the Company with a deeper penetration within defense applications including the necessary manufacturing licenses and certifications.

ThinGap, Inc.: On May 24, 2022, the Company acquired 100% of the outstanding stock of ThinGap, Inc. ("ThinGap"), a privately-owned California headquartered developer and manufacturer of high performance, zero clogging slotless motors for use in aerospace, defense, and medical applications that require precise performance in a compact, yet high-torque-to-volume solutions. ThinGap designs, engineers, and manufactures low profile, brushless DC motor kits and assemblies that utilize a proprietary wave-wound stator architecture and highly optimized rotors. ThinGap expands the Company's precision motion capabilities and advances its strategy to provide integrated motion solutions in the robotics, semiconductor, and instrumentation markets.

Spectrum Controls: On December 30, 2021, we acquired Spectrum Controls, Inc. ("Spectrum Controls"), a Washington headquartered innovator and manufacturer of I/O and Universal Communications Gateway products. Spectrum Controls designs and manufactures a wide range of highly sophisticated I/O modules, marquee displays, and industrial gateways for broad industrial controls applications through partnerships with Programmable Logic Controller ("PLC") manufacturers and distributors. This acquisition provides us with the opportunity to enhance our position as a value-added solutions supplier to the industrial automation and industrial controls market.

ALIO Industries: On November 4, 2021, we acquired ALIO Industries ("ALIO"), a Colorado headquartered innovator and manufacturer of advanced linear and rotary motion systems for nano-precision applications. ALIO designs, engineers, and manufactures nano technology motion systems for state-of-the-art applications in silicon photonics, micro assembly, digital pathology, genome sequencing, laser processing and microelectronics. ALIO is well recognized for their technology and expertise in nanometer level positioning. This expertise in high precision positioning and robotic technology solutions will enhance our portfolio of motion solution offerings.

ORMEC Systems Corp.: On November 2, 2021, the Company acquired ORMEC Systems Corp. ("ORMEC"), a New York headquartered developer and manufacturer of mission critical electro-mechanical automation solutions and motion control products including multi-axis controls, electronic drives and actuators for the automation and aerospace industries. In addition to its products, ORMEC designs and manufactures complete electro-mechanical and software solutions for custom automation applications. ORMEC strengthens the Company's technical expertise and adds a higher level of precision motion control systems and solutions to its offerings.

MARKETS AND APPLICATIONS

The Company's growth strategy is focused on becoming the recognized leader in designing products and innovating controlled motion solutions in its selected target markets by further developing its products and service platform to utilize multiple Allied Motion technologies to provide enhanced solutions, products, and value for its customers. Our strategy further defines Allied Motion as being a "technology/know-how" driven company and to remain successful, the company continuously invests in its area of excellence.

This platform development emphasizes a combination of technologies to create enhanced products, solutions, and value to meet the emerging needs of the Company's selected target markets. The emphasis on new opportunities has driven the Company from being an individual component provider to becoming a solutions provider emphasizing the utilization of multiple Company technologies in a system solution approach. In addition to enhanced products, solutions, and value for our customers, this approach is allowing the Company to improve margins. We expect our recent acquisitions will further drive our success. Our strong financial condition, along with Allied Systematic Tools ("AST") continuous improvement initiatives in quality, delivery, and cost provide a positive outlook for the continued long-term growth and profitability of the Company.

The Company sells its products and solutions into a subset of the following broad markets:

Industrial: products and solutions are used in factory automation, specialty equipment, material handling equipment, commercial grade floor polishers and cleaners, commercial building equipment such as welders, cable pullers and assembly tools, the handling, inspection, and testing of components and final products such as PCs, high definition printers, tunable lasers and spectrum analyzers for the fiber optic industry, test and processing equipment for the semiconductor manufacturing industry, power quality products to filter distortion caused by variable frequency drives and other power electronic equipment, nano technology motion systems in silicon photonics, micro assembly, digital pathology, genome sequencing, laser processing and microelectronics, PLC manufacturers and distributors.

Vehicle: electronic power steering and drive-by-wire applications to electrically replace, or provide power-assist to, a variety of mechanical linkages, traction / drive systems and pumps, automated and remotely guided power steering systems, various high performance vehicle applications, actuation systems (e.g., lifts, slide-outs, covers, etc.), HVAC systems, solutions to improve energy efficiency of vehicles while idling and alternative fuel systems such as liquified petroleum gas ("LPG"), fuel cell and hybrid vehicles. Vehicle types include off- and on-road construction and agricultural equipment; trucks, buses, boats, utility, recreational (e.g., RVs, ATVs (all-terrain vehicles), specialty automotive, automated and remotely guided vehicles).

Medical: surgical robots, prosthetics, electric powered surgical hand pieces, programmable pumps to meter and administer infusions associated with chemotherapy, pain control and antibiotics, nuclear imaging systems, radiology equipment, automated pharmacy dispensing equipment, kidney dialysis equipment, respiratory ventilators, heart pumps, and patient handling equipment (e.g., wheel chairs, scooters, stair lifts, patient lifts, transport tables and hospital beds).

Aerospace & Defense: inertial guided missiles, mid-range smart munitions systems, weapons systems on armed personnel carriers, unmanned vehicles, security and access control, camera systems, door access control, airport screening scanning devices, and light-weighting vehicle technologies.

OTHER FACTORS IMPACTING OUR OPERATIONS

Sales and Marketing

We design and develop our products within our Technology Centers and can manufacture these products and solutions in various facilities located in the United States, Canada, Mexico, Europe and Asia-Pacific. We also operate Allied Motion Solution Centers that evaluate and focus all Allied Motion products to create integrated controlled motion solutions for our customers. We sell our products and solutions globally to a broad spectrum of customers through our own direct sales force and authorized manufacturers' representatives and distributors. Our customers include end users and original equipment manufacturers ("OEMs").

Allied Motion Sales Organization:

The Company's sales organization is focused on becoming the best sales and service force in its industry. Through the One Team approach for providing products and controlled motion solutions that best address customers' needs, the Company has broadened the knowledge and skills of its direct sales force, while creating sales and service support in its Solution Centers. This enables the entire sales organization to be capable of selling all products designed, developed and produced by Allied Motion globally. The Company's primary channels to market include the direct sales force and external authorized Sales Representatives, Agents and Distributors that provide field coverage in Asia-Pacific, Europe, Canada, Israel and the Americas. While most of the Company's sales are directly to OEMs, it has expanded its market reach through Distribution channels.

Allied Motion Solution Centers:

Allied Motion has Solution Centers in China, Europe and North America that enable the design and sale of individual component products as well as integrated controlled motion systems that utilize multiple Allied Motion products and technologies. In addition to providing sales and applications support, the solution center function may include final assembly, integration and tests as required to support customers within their geographic region.

Sales Backlog:

Backlog as of December 31, 2022 was $330,078 compared with $249,927 as of December 31, 2021. Included in backlog as of December 31, 2022 is $21,222 from the acquisitions completed in 2022. The time to convert the majority of backlog to sales is approximately three to nine months. Given the short product lead times, we do not believe that the amount of our backlog of orders is a reliable indication of our future sales. We may on occasion receive multi-year orders from customers for product to be delivered on demand over that time frame. There is no assurance that the Company's backlog from these customers will be converted into revenue.

Major Customer

Sales to one customer were 11% of total sales in 2022 and 15% of total sales in 2021. We believe the diversification of the target markets and customers we serve reduces our exposure to negative developments with any single customer.

Competitive Environment

Our products and solutions are sold into the global market with a large and diverse group of competitors that vary by product, geography, industry and application. The controlled motion market is highly fragmented with many competitors, some of which are substantially larger and have greater resources than Allied Motion. We believe our competitive advantages include our electro-magnetic, mechanical and electronic controlled motion expertise, the breadth of our motor technologies and our ability to integrate these technologies with our encoders, gearing, power electronics, digital control technologies and network/feedback communications capabilities, as well as our global presence. Unlike many of our competitors, we are unique in our ability to provide custom-engineered controlled motion solutions that integrate the products we manufacture such as embedded or external electrical control solutions with our motors. We compete on technological capabilities, quality, reliability, service responsiveness, delivery speed and price. Our competitors include Altra Industrial Motion, Ametek, Inc., Parker Hannifin Corporation and other smaller competitors.

Availability and Prices of Parts and Raw Materials

We purchase critical raw materials from a limited number of suppliers due to the technically challenging requirements of the supplied product and/or the lengthy process required to qualify these materials both internally and with our customers. We cannot quickly establish additional or replacement suppliers for these materials in some cases because of these rigid requirements. For these critical raw materials, we maintain minimum safety stock levels and partner with suppliers through contract to help ensure the continuity of supply. As a result of the COVID-19 pandemic and resulting economic and supply chain disruptions, we have experienced upward pricing pressure and challenges with availability of parts and raw materials. In addition, workplace disruptions and restrictions on the movement of raw materials and goods, both at our own facilities and at our customers and suppliers has led to increases in prices and freight costs. As we seek to secure supply during volatile times, we have proactively increased the levels of certain inventories to put us in the position to meet the needs of our customers on a timely basis.

Patents, Trademarks, Licenses, Franchises and Concessions

We hold several patents and trademarks for components manufactured by our various subsidiaries, and we have several patents pending on new products recently developed, which we believe are significant.

Working Capital Items

We currently maintain inventory levels adequate for our short-term needs based upon present levels of production while taking into account the potential for supply chain disruptions. We consider the component parts of our different product lines to be generally available and current suppliers to be reliable and capable of satisfying anticipated needs under normal conditions. As discussed herein, as a result of the COVID-19 pandemic and supply chain disruptions, we have experienced increased costs and have purposely increased certain inventories to manage global supply chain issues.

Engineering and Development Activities

Our engineering and development (E&D) activities are for the development of new products, enhancement of the functionality, effectiveness and reliability of current products, to redesign products to reduce the cost of manufacturing of products or to expand the types of applications for which our products and solutions can be used. Our engineering and development expenditures for the years ended December 31, 2022 and 2021 were $38,561 and $27,818, respectively, or 8% and 7% of sales in 2022 and 2021, respectively. We believe E&D is critical to our ongoing success and expect to continue to invest at similar levels in the future. Of these expenditures, no material amounts were charged directly to customers, although we record non-recurring engineering charges to certain customers for custom engineering required to develop products that meet the customer's specifications.

Environmental Issues

The Company takes its responsibility to be a good steward of the environment seriously and we adopt policies and procedures under the guidance of the Board of Directors that advance our performance. No significant pollution or other types of hazardous emission result from the Company's operations and it is not anticipated that our operations will be materially affected by Federal, State or local provisions concerning environmental controls.

We monitor existing and pending climate legislation, regulation, and international treaties and accords to evaluate any potential impact on our future results of operations, capital expenditures or financial position. The Board of Directors provides oversight as part of their environmental, social and governance ("ESG") initiatives and we will continue to monitor emerging developments and assess our performance in this area. We may face additional economic and operational impacts from ESG regulations as well as impacts from our suppliers and customers as they adhere to the laws and regulations.

International Operations

Our operations outside the United States are conducted through wholly-owned foreign subsidiaries and are located in North America, Europe, and Asia-Pacific. Our international operations are subject to the usual risks inherent in international trade, including currency fluctuations, local government contracting regulations, local governmental restrictions on foreign investment and repatriation of profits, exchange controls, regulation of the import and distribution of foreign goods, as well as changing economic and social conditions in countries in which our operations are conducted. The information required by this item is set forth in Note 13, *Segment Information*, of the notes to consolidated financial statements contained in Item 8 of this report.

Human Capital

Employment

At December 31, 2022, we employed 2,254 full-time employees worldwide. Of those, approximately 57% are located in North America, 33% are located in Europe and the remainder are located in Asia-Pacific. As of December 31, 2022, 18% of our total workforce were employed in engineering functions, demonstrating our commitment to invest significantly in engineering resources.

Human Capital Management

The Company believes that its workforce is one of the Company's greatest assets, and it has a proactive human capital management and talent development program. The Board of Directors and Human Capital and Compensation Committee recognizes human capital as a key driver of long-term value and is responsible for oversight of the Company's human capital management and talent development programs.

- Attraction: The Company competes within each world-wide market for a finite number of skilled and talented workers. The Company leverages its broad resources, compensation strategy, and reputation to deliver an outstanding career opportunity and workplace experience to its candidates and employees.
- Engagement: The Company strives to provide engaging, progressive, and meaningful career opportunities for its employees, so they can thrive and be satisfied in its technology and innovation-based culture.
- Development: The Company strengthens its employees' skills and experiences through diverse career development and learning opportunities, both internal and external. This emphasizes the Company's key attribute as a compelling place to work and grow at all levels.
- Retention: The Company supports a workplace that provides an environment of trust, personal and professional development and work-life balance which is vital to its successful retention of engaged, top-notch talent.

Employee Health and Safety

The Company complies in all respects with the national and local laws of the jurisdictions in which we operate regarding workers safety and health. The Company strives to continuously improve employee safety and health through consistent measurement and reporting on progress and leading indicators. It has programs that emphasize that each employee in the organization is responsible for safety in the workplace. The Company provides a comprehensive safety program that focuses on a zero-incident mindset by providing ongoing training opportunities and review of safety activities and initiative. This highly visible effort encourages employee engagement and active management and leadership involvement.

Diversity and Inclusion

The Company is committed to apply fair labor practices while respecting the national and local laws of the countries and communities where we have operations. The Company is also committed to providing equal opportunity in all aspects of employment. The Company does not engage in or tolerate unlawful conduct, including discrimination, intimidation, or harassment. The Company strives to establish relationships with key organizations and associations that foster diversity and inclusion initiatives in the communities where it is located. The Company is committed to identifying a talented and innovative workforce through a culture that promotes human equity and emphasizes the benefits of a diverse and inclusive workforce and pipeline of talent. The Human Capital and Compensation Committee is responsible for setting the tone at the top and the oversight of the Company's diversity and inclusion initiatives.

Ethical Business Practices

The Company is dedicated to conducting its business with integrity and responsibility. The Company promotes honest and ethical conduct, and the Board has adopted a Code of Ethics and Business Conduct which applies to all employees, directors, and officers. The Company does not tolerate human rights abuses, human trafficking and or slavery, the use of child labor and will not engage or be complicit in any activity that solicits or encourages human rights abuse.

Item 1A. Risk Factors

In the ordinary course of our business, we face various strategic, operating, compliance and financial risks. These risks could have a material impact on our business, reputation, financial condition or results of operations. Our most significant risks are set forth below and elsewhere in this Report. These risk factors should be considered in addition to our cautionary comments concerning forward-looking statements in this Report, including statements related to markets for our products and trends in our business that involve a number of risks and uncertainties.

RISKS RELATED TO THE COVID-19 PANDEMIC

Our financial condition and results of operations have been and may continue to be adversely affected by public health issues, including epidemics or pandemics such as COVID-19.

The COVID-19 pandemic subjected our business, operations, financial performance, cash flows and financial condition to a number of risks. We have faced increased operational challenges and costs from the need to protect employee health and safety, workplace disruptions and restrictions on the movement of people, raw materials and goods, both at our own facilities and at our customers and suppliers. The COVID-19 pandemic continues to create challenges for the global economy, and the ultimate impacts and significance of these challenges to our business, financial condition, results of operations, and cash flows will depend greatly on the future course of the COVID-19 pandemic.

The COVID-19 pandemic drove changes in our customers' priorities and practices, as our customers in both the United States and globally confront competing budget priorities and more limited resources. To the extent that COVID-19 continues to impact demand for our products and solutions or impairs the viability of some of our customers, our financial condition, results of operations, and cash flows could be adversely affected, and those impacts could be material.

The magnitude and duration of the impact of the COVID-19 pandemic on the global economy and the world's response continue to be uncertain. To the extent the pandemic continues to adversely affect portions of our business and our overall operating and financial results, it may also adversely affect our operating and financial results in a manner that is not presently known to us or that we currently do not expect to present significant risks to our operations or financial results. The extent of the pandemic's effect on our business will depend on future developments, including the duration, spread and intensity of the pandemic and the successful distribution, acceptance, and efficacy of vaccines for COVID-19, all of which are uncertain and difficult to predict.

OPERATIONAL RISKS

Our global sales and operations are subject to a variety of economic, market and financial risks and costs that could affect our profitability and operating results.

We do business around the world and are continuing our strategy of enhancing our global optimization. Our international sales are primarily to customers in Europe, Canada and Asia-Pacific. In addition, our manufacturing operations, suppliers and employees are located in many places around the world. The future success of our business includes growth in our sales in non-U.S. markets. Our global operations are subject to numerous financial, legal and operating risks, such as political and economic instability; imposition of trade or foreign exchange restrictions, including in the U.S.; trade protection measures such as the imposition of or increase in tariffs and other trade barriers, including in the U.S.; unexpected changes in regulatory requirements, including in the U.S., prevalence of corruption in certain countries; enforcement of contract and intellectual property rights and compliance with existing and future laws, regulations and policies, including those related to tariffs, investments, taxation, trade controls, product content and performance, employment and repatriation of earnings. In addition, we are affected by changes in foreign currency exchange rates, inflation rates and interest rates.

Our growth could suffer if the markets into which we sell our products and solutions decline.

Our growth depends in part on the growth of the markets which we serve. Any decline or lower than expected growth in our served markets could diminish demand for our products and solutions, which would adversely affect our financial results. We operate in industries that may experience periodic, cyclical downturns. Demand for our products and solutions is also sensitive to changes in customer order patterns, which may be affected by announced price changes, changes in incentive programs, new product introductions and customer inventory levels. Any of these factors could adversely affect our growth and results of operations in any given period.

We could experience a failure of a key information technology system, process or site or a breach of information security, including a cybersecurity breach or failure of one or more key information technology systems, networks, processes, associated sites or service providers.

We rely extensively on information technology (“IT”) systems for the storage, processing, and transmission of our electronic, business-related information assets used in or necessary to conduct business. We leverage our internal information technology infrastructures, and those of our business partners, to enable, sustain, and support our global business activities. In addition, we rely on networks and services, including internet sites, data hosting and processing facilities and tools and other hardware, software and technical applications and platforms, some of which are managed, hosted, provided and/or used by third-parties or their vendors, to assist in conducting our business. The data we store, and process may include customer payment information, personal information concerning our employees, confidential financial information, and other types of sensitive business-related information. Numerous and evolving cybersecurity threats pose potential risks to the security of our IT systems, networks and services, as well as the confidentiality, availability and integrity of our technology systems and data. In addition, the laws and regulations governing security of data on IT systems is evolving and adding another layer of complexity in the form of new requirements. In the past, we have had cybersecurity incidents and we have made, and continue to make investments, seeking to address these threats, including monitoring of networks and systems, hiring of experts to evaluate and test our systems, employee training and security policies for employees and third-party providers.

The frequency and the techniques used in these attacks has increased significantly and may be difficult to detect for periods of time and we may face difficulties in anticipating and implementing adequate preventative measures. While the breaches of our IT systems to date have not been material to our business or results of operations, the costs of attempting to protect our IT systems and data will increase, and there can be no assurance that these added security efforts will prevent all breaches of our IT systems or thefts of our data. If our IT systems are damaged or cease to function properly, the networks or service providers we rely upon fail to function properly, or we or one of our third-party providers suffer a loss or disclosure of our business or stakeholder information due to any number of causes ranging from catastrophic events or power outages to improper data handling or security breaches (including ransomware, denial-of-service attacks, a malicious website, the use of social engineering and other means to affect the confidentiality, integrity and availability of our technology systems and data) and our business continuity plans do not effectively address these failures on a timely basis, we may be exposed to potential disruption in operations, loss of customers, reputational, competitive and business harm as well as significant costs from remediation, ransom payments, litigation and regulatory actions.

We are also subject to an increasing number of evolving data privacy and security laws and regulations. Failure to comply with such laws and regulations could result in the imposition of fines, penalties and other costs. The European Union ("EU") and United Kingdom's General Data Protection Regulations and the EU's pending ePrivacy Regulation could disrupt our ability to sell products and solutions or use and transfer data because such activities may not be in compliance with applicable laws. Additionally, cybersecurity incidents related to export control technology information of our Aerospace & Defense customers could subject us to additional reporting requirements, could disrupt our ability to sell products to those customers and could subject us to additional costs, penalties, and fines all of which may be material to our operating results.

The Board of Directors and Audit Committee are responsible for information security oversight and the Audit Committee is comprised entirely of independent directors. Additionally, two members of the Company's Board of Directors have relevant information security and cybersecurity experience. As part of their oversight, senior leadership meets with the Audit Committee at least annually to discuss information security and cybersecurity matters.

Over the last three years, the Company has experienced one known information security breach, in connection with a ransomware incident that occurred in June 2021. Costs incurred related to the information security breach did not have a material adverse effect on our results of operations in the years ended December 31, 2022, 2021, and 2020. However, as cybersecurity incidents continue to increase in scope, complexity, and frequency, we may be unable to prevent a significant incident in the future which may materially impact our results of operations. The Company regularly undertakes audits and evaluations (including to the National Institute of Standards and Technology (NIST) SP 800-171 standards) and enhances its security framework based upon the results of those audits and evaluations. For new associates, and on an annual basis therefore the Company requires associates to take security awareness training and has an on-going phishing recognition training and testing programs.

We rely on suppliers to provide equipment, components and services, which creates certain risks and uncertainties that may adversely affect our business.

Our business requires that we buy equipment, components and services from third parties. Our reliance on suppliers involves certain risks, including poor quality or an insecure supply chain, which could adversely affect the reliability and reputation of our products and solutions; changes in the cost of these purchases due to inflation, exchange rates, tariffs, or other factors; shortages of components, commodities or other materials, which could adversely affect our manufacturing efficiencies and ability to make timely delivery.

Any of these uncertainties could adversely affect our profitability and ability to compete. The effect of unavailability or delivery delays would be more severe if associated with our higher volume and more profitable products and solutions. Even where substitute sources of supply are available, qualifying the alternate suppliers and establishing reliable supplies could cost more or could result in delays and a loss of sales.

Certain materials and components used in our products and solutions are required and qualified to be sourced from a single or a limited number of suppliers. As such, some materials and components could become in short supply resulting in limited availability and/or increased costs. Additionally, we may elect to develop relationships with a single or limited number of suppliers for materials and components that are otherwise generally available, because some customers require extensive certification of suppliers which is a considerable and time consuming undertaking. Although we believe that alternative suppliers are available to supply materials and components to replace those currently used, doing so may require redesign work and would require having those new sources qualified by our customers prior to making use of those new alternatives. Any interruption in the supply from any supplier that serves as a sole source could delay product shipments and have a material adverse effect on our business, financial condition and results of operations.

Our profits may decline if the price of raw materials rise and we cannot recover the increases from our customers.

We use various raw materials, such as copper, steel, zinc and rare earth magnets, in our manufacturing operations. The prices of these raw materials have been subject to volatility. As a result of price increases, we have generally implemented price surcharges to our customers; however, we may be unable to collect surcharges without suffering reductions in unit volume, revenue and operating income. There can be no assurance that we will be able to fully recover the price increases through surcharges in a timely manner. We are also subject to risks associated with U.S. and foreign legislation and regulations relating to imports, including quotas, duties, tariffs or taxes, and other charges or restrictions on imports, which could adversely affect our operations and our ability to import products at current or increased levels. We cannot predict whether additional U.S. and foreign customs quotas, duties, tariffs, taxes or other charges or restrictions, requirements as to where raw materials must be purchased, or other restrictions on our imports will be imposed upon the importation of our products and solutions in the future or adversely modified, or what effect such actions would have on our costs of operations.

We face competition that could harm our business and we may be unable to compete successfully against new entrants and established companies with greater resources.

Competition in connection with the manufacturing of our products and solutions may intensify in the future. The market for our technologies is competitive and subject to rapid technological change. We compete globally on the basis of product performance, customer service, availability, reliability, productivity and price. Our competitors may be larger and may have greater financial, operational, economies of scale, personnel, sales, technical and marketing resources than us. Certain of our competitors also may pursue aggressive pricing or product strategies that may cause us to reduce the prices we charge for our original equipment and aftermarket products and services or lose sales. These actions may lead to reduced revenues, lower margins and/or a decline in market share, any of which may adversely affect our business, financial condition and results of operations.

Quality problems with our products and solutions could harm our reputation, erode our competitive advantage and could result in warranty claims and additional costs.

Quality is important to us and our customers, and our products and solutions are held to high quality and performance standards. In the event our products and solutions fail to meet these standards, our reputation could be harmed, which could damage our competitive advantage, causing us to lose customers and resulting in lower revenues. We generally allow customers to return defective or damaged products for credit, replacement, repair or exchange. We generally warrant that our products and solutions will meet customer specifications and will be free from defects in materials and workmanship. We reserve for our exposure to warranty claims based upon recent historical experience and other specific information as it becomes available. However, these reserves may not be adequate to cover future warranty claims and additional warranty costs or inventory write-offs may be incurred which could harm our operating results.

If we are unable to attract and retain qualified personnel, our ability to operate and grow our company will be in jeopardy.

We are required to hire and retain skilled employees at all levels of our operations in a market where such qualified employees are in high demand and are subject to receiving competing offers. We believe that there is, and will continue to be, competition for qualified personnel in our industry, and there is no assurance that we will be able to attract or retain the personnel necessary for the management and development of our business. The inability to attract or retain employees currently or in the future may have a material adverse effect on our business.

Our future success depends in part on the continued service of our engineering and technical personnel and our ability to identify, hire and retain personnel.

Our success will depend in large part upon our ability to attract, train, retain and motivate highly skilled engineering and technical employees. There is currently aggressive competition for employees who have experience in technology and engineering. We may not be able to continue to attract and retain engineers or other qualified technical personnel necessary for the development and growth of our business or to replace personnel who may leave our employ in the future. The failure to retain and recruit key engineering and technical personnel could cause additional expense, potentially reduce the efficiency of our operations and could harm our business.

We depend heavily upon a limited number of customers, and if we lose any of them or they reduce their business with us, we would lose a substantial portion of our revenues.

A significant portion of our revenues and trade receivables are concentrated with a small group of customers. These customers have a variety of suppliers to choose from and therefore can make substantial demands on us, including demands on product pricing and on contractual terms, often resulting in the allocation of risk to us as the supplier. Our ability to maintain strong relationships with our principal customers is essential to our future performance. If we lose a key customer, if any of our key customers reduce their orders of our products and solutions or require us to reduce our prices before we are able to reduce costs, if a customer is acquired by one of our competitors or if a key customer suffers financial hardship, our operating results would likely be harmed as well as the collectability of accounts receivable.

If we do not respond to changes in technology, our products and solutions may become obsolete and we may experience a loss of customers and lower revenues.

We sell our products and solutions to customers in several industries that experience rapid technological changes, new product introductions and evolving industry standards. Without the timely introduction of new products and solutions, our offerings will likely become technologically obsolete over time and we may lose a significant number of our customers. Our product and solutions development efforts may be affected by a number of factors, including our ability to anticipate customer needs, allocate and process our research and development funding, innovate and develop new products, differentiate our offerings and commercialize new technologies, secure intellectual property protection for our products and manufacture products in a cost-effective manner. We would be harmed if we did not meet customer requirements and expectations. Our inability, for technological or other reasons, to successfully develop and introduce new and innovative products and solutions could result in a loss of customers and lower revenues.

We face the challenge of accurately aligning our capacity with our demand.

We have experienced capacity constraints and longer lead times for certain products and solutions in times of growing demand and have also experienced idle capacity as economies slow or demand for certain products decline. Accurately forecasting our expected volumes and appropriately adjusting our capacity have been, and will continue to be, important factors in determining our results of operations. We cannot guarantee that we will be able to increase manufacturing capacity to a level that meets demand for our products and solutions, which could prevent us from meeting increased customer demand and could harm our business. However, if we overestimate our demand and overbuild our capacity, we may have significantly underutilized assets and we may experience reduced margins. If we do not accurately align our manufacturing capabilities with demand it could have a material adverse effect on our results of operations.

The manufacture of many of our products and solutions is a highly exacting and complex process, and if we directly or indirectly encounter problems manufacturing products, our reputation, business and financial results could suffer.

The manufacture of many of our products and solutions is an exacting and complex process. Problems may arise during manufacturing for a variety of reasons, including equipment malfunction, failure to follow specific protocols and procedures, problems with raw materials, natural disasters and environmental factors, and if not discovered before the product is released to market could result in recalls and product liability exposure. Because of the time required to develop and maintain manufacturing facilities, an alternative manufacturer may not be available on a timely basis to replace such production capacity. We have also undertaken certain manufacturing footprint rationalization activities, which may include new challenges related to management and monitoring of the manufacturing of our products and solutions. Any of these manufacturing problems could result in significant costs and liability, as well as negative publicity and damage to our reputation that could reduce demand for our products.

We face the potential harms of natural disasters, pandemics, acts of war, terrorism, international conflicts or other disruptions to our operations.

Natural disasters, pandemics, acts or threats of war or terrorism, international conflicts, political instability, and the actions taken by governments could cause damage to or disrupt our business operations, our suppliers or our customers, and could create economic instability. Although it is not possible to predict such events or their consequences, these events could decrease demand for our products or make it difficult or impossible for us to deliver products.

We face potential operational impacts associated with volatility in energy markets.

Volatility in the supply and cost for energy exists in the locations where we operate, particularly Europe and China. As Europe continues to face impacts from the conflict in Ukraine and sanctions between the European Union and Russia, there are concerns about the availability and costs related to providing resources to meet the energy needs of Europe. Should these energy needs not be met, there are risks that the European operations of the Company may experience uncertainties related to the availability and cost of such resources. At times, China has experienced energy shortages, and has, in the past, resorted to rolling blackouts. Although these blackouts have not materially impacted our operations, it remains a risk we may face in the future.

STRATEGIC RISKS

Our strong organic growth has been and will continue to be enhanced by strategic acquisitions that complement, enhance or expand our business. We may not be able to find or complete these transactions, and, if completed, we may experience operational and financial risks in connection with our acquisitions that prevent us from realizing the anticipated benefits and may materially adversely affect our business, financial condition and operating results.

Acquisitions are part of our strategic growth plans. We may have difficulty finding these opportunities, or if we do identify these opportunities, we may not be able to complete the transactions for various reasons including a failure to secure financing.

As we complete acquisitions, we face the operational and financial risks commonly encountered with an acquisition strategy. These risks include the challenge of integrating acquired businesses while managing the ongoing operations of each business, the challenge of combining the business cultures of each company, and the need to retain key personnel of our existing business and the acquired business. The process of integrating operations could cause an interruption of, or loss of momentum in, the activities of the acquired business and our existing business. Members of our senior management may be required to devote considerable amounts of time to the integration process, which will decrease the time they will have to manage our businesses, service existing customers, attract new customers and develop new products. If our senior management is not able to effectively manage the integration process, or if any significant business activities are interrupted as a result of the integration process, our business could be adversely affected.

The indemnification provisions of acquisition agreements by which we have acquired companies may not fully protect us and as a result we may face unexpected liabilities.

Certain of the acquisition agreements by which we have acquired companies require the former owners to indemnify us against certain liabilities related to the operation of the company before we acquired it. In most of these agreements, however, the liability of the former owners is limited, and certain former owners may be unable to meet their indemnification responsibilities. We cannot assure that these indemnification provisions will protect us fully or at all, and as a result we may face unexpected liabilities that adversely affect our financial results.

We intend to develop new products and solutions and expand into new markets, which may not be successful and could harm our operating results.

We intend to expand into new markets and develop new and modified products and solutions based on our existing technologies and engineering capabilities, including the continued expansion of our controlled motion systems and integrated electronics. These efforts have required and will continue to require us to make substantial investments, including significant research, development and engineering expenditures and capital expenditures for new, expanded or improved manufacturing facilities. Specific risks in connection with expanding into new products, solutions, and markets include longer product development cycles, the inability to transfer our quality standards and technology into new products, and the failure of our customers to accept the new or modified products and solutions.

We may experience difficulties that could delay or prevent the successful development of new products or product enhancements under new and existing contracts, and new products and solutions or product enhancements may not be accepted by our customers. In addition, the development expenses we incur may exceed our cost estimates, and new products we develop may not generate sales sufficient to offset our costs. If any of these events occur, our sales and profits could be adversely affected.

Our competitiveness depends on successfully executing our growth initiatives and our global optimization strategies.

We continue to invest in initiatives to support future growth, such as the creation of a more effective corporate structure, implementation of our enterprise resource planning system, launch of a new integrated website, implementation of a structured approach to identify target markets, and the expansion of our AST (continuous improvement initiatives in quality, delivery, and cost). The failure to achieve our objectives on these initiatives could have an adverse effect on our operating results and financial condition. Our global optimization strategy includes localization of our products, solutions, and services to be closer to our customers and identified growth opportunities. Localization of our products and services includes expanding our capabilities, including supply chain and sourcing activities, product design, manufacturing, engineering, marketing and sales and support. These activities expose us to risks, including those related to political and economic uncertainties, transportation delays, labor market disruptions and challenges to protect our intellectual property.

FINANCIAL RISKS

Foreign currency exchange rates may adversely affect our financial results.

Sales and purchases in currencies other than the U.S. dollar expose us to fluctuations in foreign currencies relative to the U.S. dollar and may adversely affect our financial results. Increased strength of the U.S. dollar increases the effective price of our products sold in U.S. dollars into other countries, which may require us to lower our prices or adversely affect sales to the extent we do not increase local currency prices. Decreased strength of the U.S. dollar could adversely affect the cost of materials, products and services we purchase from non-U.S. denominated locations. Sales and expenses of our non-U.S. businesses are also translated into U.S. dollars for reporting purposes and the strengthening or weakening of the U.S. dollar could result in unfavorable translation effects. The Company also faces exchange rate risk from its investments in subsidiaries owned and operated in foreign countries.

Economic and credit market uncertainty could interrupt our access to capital markets, borrowings, or financial transactions to hedge certain risks, which could adversely affect our financial condition.

To date, we have been able to access debt and equity financing that has allowed us to make investments in growth opportunities and fund working capital requirements. In addition, we enter into financial transactions to hedge certain risks, including foreign exchange and interest rate risk. Our continued access to capital markets, the stability of our lenders and their willingness to support our needs, and the stability of the parties to our financial transactions that hedge risks are essential for us to meet our current and long-term obligations, fund operations, and fund our strategic initiatives. An interruption in our access to external financing or financial transactions to hedge risk could affect our business prospects and financial condition.

Our indebtedness may limit our operations and our use of our cash flow, and any failure to comply with the covenants that apply to our indebtedness could adversely affect our liquidity and financial results.

Our ability to service our indebtedness depends on our financial performance, which is affected by prevailing economic conditions and financial, business, regulatory and other factors. Some of these factors are beyond our control. Our debt level and related debt service obligations can have negative consequences, including requiring us to dedicate significant cash flow from operations to the payment of principal and interest on our debt, which reduces the funds we have available for other purposes such as acquisitions and capital investment; reducing our flexibility in planning for or reacting to changes in our business and market conditions; and exposing us to interest rate risk since a portion of our debt obligations are at variable rates. In addition, certain of our indebtedness will have significant outstanding principal balances on their maturity dates, commonly known as balloon payments. Therefore, we will likely need to refinance at least a portion of our outstanding debt as it matures. We may incur more debt in the future, particularly to finance acquisitions, and there can be no assurance that our cost of funding will not substantially increase.

Our existing credit agreements contain, and any future debt agreements we may enter into may contain, certain financial tests and other covenants that limit our ability to incur indebtedness, pay dividends, acquire other businesses and impose various other restrictions. If we breach any of the covenants and do not obtain a waiver from the lenders, the outstanding indebtedness could be declared immediately due and payable. If we are unable to obtain sufficient capital in the future, we may have to curtail our capital expenditures and other expenses. Any such actions could have a material adverse effect on our business, financial condition, results of operations and liquidity.

In addition, certain of our variable rate debt uses Term Standard Overnight Financing Rate ("SOFR") as a benchmark for establishing the interest rate, a portion of which is hedged with London Interbank Offering Rate (“LIBOR”) based interest rate derivatives. LIBOR has been the subject of proposals for reform, and is currently scheduled to be discontinued on June 30, 2023. The Company expects to amend LIBOR-based interest rate derivative agreements by negotiating new SOFR-based agreements. The discontinuation of LIBOR is not expected to materially impact our interest rate exposure.

Unforeseen exposure to additional income tax liabilities may negatively affect our operating results.

Our distribution of taxable income is subject to domestic tax and, as a result of our significant manufacturing and sales presence in foreign countries, foreign tax. Our effective tax rate may be affected by shifts in our mix of earnings in countries with varying statutory tax rates, changes in reinvested foreign earnings, alterations to tax rates, regulations or interpretations and outcomes of any audits performed on previous tax returns.

Our operating results could fluctuate significantly.

Our quarterly and annual operating results are affected by a wide variety of factors that could materially adversely affect revenues and profitability, including: the timing of customer orders and the deferral or cancellation of orders previously received, the level of orders received which can be shipped in a quarter, fulfilling backlog on a timely basis, competitive pressures on selling prices, changes in the mix of products sold, the unavailability or delays in the receipt of critical inventories, the timing of investments in engineering and development, development of and response to new technologies, and delays in new product qualifications.

As a result of the foregoing and other factors, we may experience material fluctuations in future operating results on a quarterly or annual basis which could materially and adversely affect our business, financial condition, operating results and stock price.

We may never realize the full value of our substantial intangible assets.

These intangible assets consist primarily of goodwill, customer lists, trade names and technology arising from our acquisitions. Goodwill is not amortized; it is tested at least annually or upon the occurrence of certain events which indicate that the assets may be impaired. Definite lived intangible assets are amortized over their estimated useful lives and are tested for impairment upon the occurrence of certain events which indicate that the assets may be impaired. We may not receive the recorded value for our intangible assets if we sell or liquidate our business or assets. In addition, intangible assets with definite lives will continue to be amortized. Amortization expenses relating to these intangible assets will continue to reduce our future earnings.

Increased healthcare, pension and other costs under the Company's benefit plans could adversely affect the Company's financial condition and results of operations.

We provide health benefits to many of our employees and the costs to provide such benefits continue to increase annually. The amount of any increase or decrease in the cost of Company-sponsored health plans will depend on a number of different factors including new governmental regulations mandating types of coverage and reporting and other requirements.

We also sponsor defined benefit pension, defined contribution pension, and other postretirement benefit plans. Our costs to provide such benefits generally continue to increase annually. We use actuarial valuations to determine the Company's benefit obligations for certain benefit plans, which require the use of significant estimates, including the discount rate, expected long-term rate of return on plan assets, mortality rates and the rates of increase in compensation and health care costs. Changes to these significant estimates could increase the cost of these plans, which could also have a material adverse effect on the Company's financial condition and results of operations.

Failure of our internal controls over financial reporting could limit our ability to report our financial results accurately and timely or prevent fraud.

We believe that effective internal controls are necessary to provide reliable financial reports and to assist in the effective prevention of fraud. If we are unable to detect or correct any issues in the design or operating effectiveness of internal controls over financial reporting or fail to prevent fraud, current and potential customers and shareholders could lose confidence in our financial reporting, which could harm our business and the trading price of our stock.

Our operating results depend in part on our ability to contain or reduce costs. There is substantial price competition in our industry and upward pressure on material and labor costs. Our success and profitability will depend on our ability to maintain a competitive cost and price structure.

Our efforts to maintain and improve profitability depend in part on our ability to maintain or reduce the costs of materials, components, supplies and labor, including establishing production capabilities at our low cost regional subcontractors. While the failure of any single cost containment effort by itself would most likely not significantly impact our results, we cannot give any assurances that we will be successful in controlling material and labor costs to maintain a competitive cost structure.

There is substantial price competition in our industry, and our success and profitability will depend on our ability to maintain a competitive cost and price structure. We may have to reduce prices in the future to remain competitive. Also, our future profitability will depend in part upon our ability to continue to improve our manufacturing efficiencies and maintain a cost structure that will enable us to offer competitive prices in the face of upward pressure on material and labor costs. Our inability to maintain a competitive cost structure could have a material adverse effect on our business, financial condition and results of operations.

LEGAL AND REGULATORY RISKS

Our international operations expose us to legal and regulatory risks, which could have a material effect on our business.

Our profitability and international operations are, and will continue to be, subject to risks relating to changes in foreign legal and regulatory requirements. In addition, our international operations are governed by various U.S. laws and regulations, including Foreign Corrupt Practices Act (FCPA), the U.K. Bribery Act and other foreign anti-bribery laws. The FCPA generally prohibits companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. Other countries in which we operate also have anti-bribery laws, some of which prohibit improper payments to government and non-government persons and entities. Any alleged or actual violations of these regulations may subject us to government scrutiny, severe criminal or civil sanctions and other liabilities and could negatively affect our business, reputation, operating results and financial condition.

We are required to comply with various import laws and export control and economic sanctions laws, which may affect our transactions with certain customers, business partners and other persons and dealings between our employees and subsidiaries. In certain circumstances, export control and economic sanctions regulations or embargos may prohibit the export of certain products, services and technologies. In other circumstances, we may be required to obtain an export license before exporting the controlled item. Compliance with the various import laws that apply to our businesses can restrict our access to, and increase the cost of obtaining, certain products and at times can interrupt our supply of imported inventory. In addition to government regulations regarding sale and export, we are subject to other regulations regarding our products. For example, the U.S. Securities and Exchange Commission has adopted disclosure rules for companies that use conflict minerals in their products, with substantial supply chain verification requirements in the event that the materials come from, or could have come from, the Democratic Republic of the Congo or adjoining countries. These rules and verification requirements impose additional costs on us and on our suppliers, and may limit the sources or increase the cost of materials used in our products. Further, if we are unable to certify that our products are conflict free, we may face challenges with our customers that could place us at a competitive disadvantage, and our reputation may be harmed.

Our inability to adequately enforce and protect our intellectual property or defend against assertions of infringement could prevent or restrict our ability to compete.

We rely on patents, trademarks and proprietary knowledge and technology, both internally developed and acquired, in order to maintain a competitive advantage. Our inability to defend against the unauthorized use of these rights and assets could have an adverse effect on our results of operations and financial condition. Litigation may be necessary to protect our intellectual property rights or defend against claims of infringement. This litigation could result in significant costs and divert our management’s focus away from operations.

We are subject to a variety of litigation and other legal and regulatory proceedings in the course of our business that could adversely affect our financial results.

We are subject to a variety of litigation and other legal and regulatory proceedings incidental to our business, including claims for damages arising out of the use of products or services and claims relating to intellectual property, employment, tax, commercial disputes, competition, sales and trading practices, environmental, personal injury, insurance coverage, acquisition, as well as regulatory investigations or enforcement. We may also become subject to lawsuits as a result of past or future acquisitions including liabilities retained from, or representations, warranties or indemnities provided in connection with these acquisitions. These lawsuits may include claims for compensatory damages, punitive and consequential damages and/or injunctive relief. The defense of these lawsuits may divert our management’s attention, we may incur significant expenses in defending these lawsuits and we may be required to pay damage awards or settlements or become subject to equitable remedies that could adversely affect our operations and financial results. Moreover, any insurance or indemnification rights that we may have may be insufficient or unavailable to protect us against such losses. We estimate loss contingencies and establish reserves based on our assessment where liability is deemed probable and reasonably estimable given the facts and circumstances known to us at a particular point in time. Subsequent developments may affect our assessment and estimates of the loss contingencies recorded as liabilities. We cannot guarantee that our liabilities in connection with litigation and other legal and regulatory proceedings will not exceed our estimates or adversely affect our financial results and reputation.

Our business is subject to environmental regulations that could negatively affect our operating results.

Our worldwide operations are subject to environmental laws and regulations that impose various environmental controls on the manufacturing, transportation, storage, use and disposal of hazardous chemicals and other materials used in, and hazardous waste produced by the manufacturing of our products. Conditions relating to our historical operations may require expenditures for clean-up in the future and changes in environmental laws and regulations may impose costly compliance requirements on us or otherwise subject us to future liabilities. Additional or modified regulations relating to the manufacture, transportation, storage, use and disposal of materials used to manufacture our products or restricting disposal or transportation of our products may be imposed that may result in higher costs or lower operating results. In addition, we cannot predict the affect that additional or modified environmental regulations may have on us or our customers.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

As of December 31, 2022, the Company occupies facilities as follows:

Description / Use	Location	Approximate Square Footage	Owned Or Leased
Corporate headquarters	Amherst, New York	6,000	Leased
Office and manufacturing facility	Amherst, New York	6,000	Leased
Office and manufacturing facility	Arvada, Colorado	15,000	Leased
Office and manufacturing facility	Bellevue, Washington	30,000	Leased
Office and manufacturing facility	Camarillo, California	14,500	Leased
Office and manufacturing facility	Changzhou, China	40,000	Leased
Office	Christchurch, New Zealand	27,000	Leased
Office	Dayton, Ohio	29,000	Owned
Office and manufacturing facility	Dayton, Ohio	25,000	Leased
Office and manufacturing facility	Dordrecht, The Netherlands	32,000	Leased
Office and manufacturing facility	Dothan, Alabama	88,000	Owned
Office	Ferndown, Great Britain	1,000	Leased
Office and manufacturing facility	Germantown, Wisconsin	99,000	Leased
Office and manufacturing facilities	Kelheim, Germany	154,000	Leased
Office	Kidderminster, Great Britain	6,200	Leased
Office and manufacturing facility	London, Ontario, Canada	48,500	Leased
Office and manufacturing facility	Mrakov, Czech Republic	42,000	Leased
Office	Oakville, Ontario, Canada	3,500	Leased
Office and manufacturing facility	Owosso, Michigan	85,000	Owned
Office and manufacturing facility	Porto, Portugal	53,000	Owned
Office and manufacturing facility	Reynosa, Mexico	50,000	Leased
Office and manufacturing facility	Rochester, New York	15,000	Leased
Office	Roseville, Michigan	5,300	Leased
Office and manufacturing facility	Somersworth, New Hampshire	15,000	Leased
Office and manufacturing facility	Stockholm, Sweden	25,000	Leased
Office and manufacturing facility	Suzhou, China	41,000	Leased
Office and manufacturing facility	Tulsa, Oklahoma	172,000	Leased
Office and manufacturing facility	Watertown, New York	107,000	Owned

The Company’s management believes the above-described facilities are adequate to meet the Company’s current and foreseeable needs. Operating leases for the Company’s properties expire at various times through 2033. Upon the expiration of the Company’s current leases, management believes that the Company will be able to secure renewal terms or enter into leases for alterative locations at market terms.

Item 3. Legal Proceedings.

The Company is involved in certain actions that have arisen out of the ordinary course of business. Management believes that resolution of the actions will not have a significant adverse effect on the Company’s consolidated financial statements.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

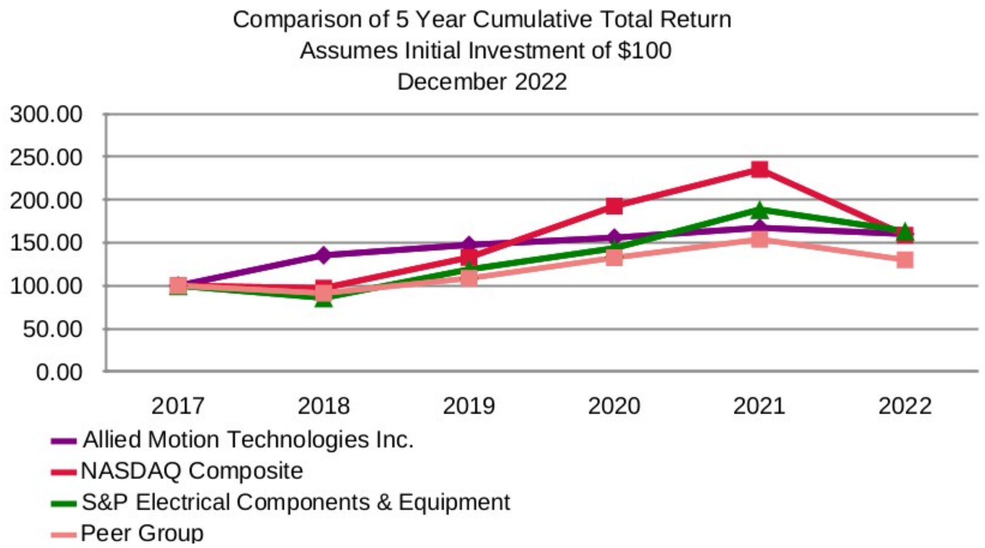
Allied Motion's common stock is listed on the Nasdaq Global Market System and trades under the symbol AMOT. The number of holders of record as reported by the Company's transfer agent of the Company's common stock as of the close of business on March 7, 2023 was 226.

Dividends

During 2022 and 2021, we declared regular quarterly cash dividends on our common stock. We paid $0.025 in each quarter of 2022. We paid $0.02 in the first quarter of 2021 and $0.025 per quarter for the remainder of 2021. While it is our current intention to pay regular quarterly cash dividends, any decision to pay future cash dividends will be made by our Board and will depend on our earnings, financial condition and other factors.

Performance Graph

The following performance graph and tables reflect the five year change in the Company's cumulative total stockholder return on Common Stock as compared with the cumulative total return of the NASDAQ Stock Market Index and the S&P Electrical Components and Equipment Index for a $100 investment made on December 31, 2017, including reinvestment of any dividends.



	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Allied Motion Technologies	$ 100.00	$ 135.39	$ 147.40	$ 155.82	$ 167.34	$ 160.14
NASDAQ (U.S.)	$ 100.00	$ 97.16	$ 132.81	$ 192.47	$ 235.15	$ 158.65
S&P Electrical Components & Equipment	$ 100.00	$ 85.84	$ 118.91	$ 143.57	$ 188.59	$ 163.48
Peer Group	$ 100.00	$ 91.22	$ 108.53	$ 132.50	$ 153.88	$ 130.04

The above performance graph is a transitional graph as the Company transitions from the S&P Electrical Components & Equipment index to a Peer Group which includes the following stocks: LSI Industries, Moog, Inc., Onto Innovation, Preformed Line, Proto Labs, Inc., Helios Tech Inc., Thermon Group, Altra Industrial Motion, Astronics Corporation, Aeroenvironment, Columbus McKinnon, Franklin Electric, and Novanta, Inc. The Company believes this Peer Group is a closer representation of our industries and market capitalization.

Issuer Purchases of Equity Securities

Period	Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
10/01/22 to 10/31/22	—	$ —	—	—
11/01/22 to 11/30/22	—	—	—	—
12/01/22 to 12/31/22	8,500	35.22	—	—
Total	8,500	$ 35.22	—	—

(1) As permitted under the Company's equity compensation plan, these shares were withheld by the Company to satisfy tax withholding obligations for employees in connection with the vesting of stock. Shares withheld for tax withholding obligations do not affect the total number of shares available for repurchase under any approved common stock repurchase plan. At December 31, 2022, the Company did not have an authorized stock repurchase plan in place.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Amounts presented in Item 7 are in thousands, except per share data.

Overview

We are a global company that designs, manufactures, and sells precision and specialty-controlled motion products and solutions used in a broad range of industries. Our target markets include Industrial, Vehicle, Medical, and Aerospace & Defense (A&D). We are headquartered in Amherst, NY, and have operations in the United States, Canada, Mexico, Europe, and Asia-Pacific. We are known worldwide for our expertise in electro-magnetic, mechanical, and electronic motion technology. We sell component and integrated controlled motion solutions to end customers and OEMs through our own direct sales force and authorized manufacturers' representatives and distributors. Our products include nano precision positioning systems, servo control systems, motion controllers, digital servo amplifiers and drives, brushless servo, torque, and coreless motors, brush motors, integrated motor-drives, gear motors, gearing, incremental and absolute optical encoders, active (electronic) and passive (magnetic) filters for power quality and harmonic issues, Industrial safety rated input/output Modules, Universal Industrial Communications Gateways, light-weighting technologies, and other controlled motion-related products.

Financial Overview

Highlights for our fiscal year ended December 31, 2022, include:

- Revenue was $502,988 for 2022 compared with $403,516 in 2021. The increase in revenues reflects improved sales in certain markets we serve, specifically Industrial and A&D. The increase reflects the economic growth and increases in demand from many of our served markets, as certain markets were negatively affected in the prior year period due to the economic environment brought on by the COVID-19 pandemic. The acquisitions completed in 2021 and 2022 contributed an incremental $73,146 of revenues in 2022. Sales to U.S. customers were 58% of total sales for 2022 and 54% for 2021, with the balance of sales to customers primarily in Europe, Canada and Asia-Pacific.

- Gross profit was $157,259 for 2022, a 30% increase from $121,056 in 2021. As a percentage of revenue, gross margin increased 130 basis points to 31.3% in 2022 from 30.0% in 2021. The gross margin increase was largely driven by volume increases of higher margin products in our Industrial and A&D markets compared to lower volumes of pandemic related Medical market products with lower margins, combined with pricing and margin accretive acquisitions. The margin expansion was muted by higher material and labor costs as well as costs associated with addressing the challenging global supply chain environment to meet the needs of our customers.

- Operating income was $31,656 for 2022 compared with $26,026 for 2021, or 6% of revenue in each year.

- Net income was $17,389 for 2022, or $1.09 per diluted share, compared with $24,094, or $1.66 per diluted share, for 2021. Net income was 28% lower in 2022 compared to 2021, and earnings per diluted share decreased by 34% as the 2021 results include the impact of a $7,373 (or $0.51 per diluted share) discrete tax benefit in the first quarter of 2021.

- Bookings were a record $566,226 for 2022 compared with $468,449 for 2021, an increase of 21%. Backlog as of December 31, 2022 was $330,078, an increase of 32% from $249,927 at year end 2021. Included in backlog as of December 31, 2022 is $21,222 contributed by 2022 business acquisitions.

- Debt of $235,454, net of cash of $30,614, increased by $68,343 to $204,840 at December 31, 2022 from debt of $158,960, net of cash of $22,463 of $136,497 at December 31, 2021, primarily as a result of debt to fund acquisitions completed in 2022 and a finance lease obligation in connection with a manufacturing facility expansion.

- We declared and paid a dividend of $0.025 in each quarter of 2022 and declared and paid a dividend of $0.02 in the first quarter of 2021 and $0.025 per quarter for the remainder of 2021 pursuant to our quarterly dividend program. Dividends to shareholders for 2022 and 2021 were $0.10 and $0.095 per share, respectively. The dividend payout ratio was 9% and 6% for 2022 and 2021, respectively when compared with the diluted earnings per share of $1.09 and $1.66, respectively.

We remain focused on executing our strategy for growth while streamlining the organization and emphasizing continuous improvement in quality, delivery, cost and innovation as we drive the One Allied approach and expand our value proposition for our customers. Solid strides continue to be made with our multi-product, fully integrated solutions that are leading to increased business. Also, we continue to build a pipeline of exciting market-based application opportunities. Sales cycles are long and the time from being selected for the solution development to full rate production can be longer, yet we believe we continue to build a scalable foundation which can deliver strong returns on those investments.

Our Strategy

Our growth strategy is focused on becoming a leading global controlled motion solution provider in our selected target markets by further developing our products and services platform to utilize multiple Allied Motion technologies which create increased value solutions for our customers. Our strategy further defines Allied Motion as being a "technology/know-how" driven company and to be successful, we continue to invest in our areas of excellence.

We have set growth targets for our Company and we will focus and align our resources to meet those targets. First and foremost, we invest in our people as we believe that attracting and retaining the right people is the most important element in our strategy. We will continue to invest significantly in applied and design engineering resources.

Our strategic focus is addressing the critical issues that we believe are necessary to meet the stated long-term goals and objectives of the Company. The majority of the critical issues are focused on growth and profitability initiatives for the Company.

One of these initiatives includes product line platform development to meet the emerging needs of our target markets. Our platform development emphasizes a combination of our technologies to create increased value solutions for our customers. The emphasis with new opportunities has evolved from being an individual component provider to becoming a solutions provider whereby the new opportunities utilize multiple Allied Motion technologies in a system solution approach. We believe this approach will allow us to provide increased value to our customers and improved margins for our Company, and are demonstrated in our acquisitions completed in the second quarter of 2022 as well as the fourth quarter of 2021. Our strong financial condition, along with AST continuous improvement initiatives in quality, delivery, and cost allow us to have a positive outlook for the continued long-term growth of our Company.

Outlook for 2023

In recent years, we navigated a difficult environment related to the COVID-19 pandemic, while advancing our strategic priorities and delivering solid results. We experienced record orders in 2022, reflecting increases in our Vehicle and Industrial markets. This demand, combined with supply chain constraints, resulted in some inefficiencies and additional costs as our teams worked hard to support and meet customer demand and schedules.

While the economic outlook for 2023 remains uncertain and we expect continued upward pressure on material and labor costs, we believe we are in a strong operational, financial and reputational position. Our record level of backlog, diversified end market penetration and demonstrated agility position us well to perform across varied market trends and give us confidence that we can drive further efficiency, profitable growth and increased free cash flow while delivering long-term value for our shareholders.

In 2023, we will focus on leveraging our resources to expand our business in our selected target markets. In addition, we will continue to execute the ongoing critical issues as defined by our Board approved strategy.

The critical issues from that strategy include:

1) Further develop our structure to *Win* within our selected target markets and customers
2) Improve speed of play in all areas of our business through process improvement
3) Strengthen our balance sheet by improving working capital turns and driving margin improvement.

Allied Motion is an applied technology/know-how motion company, and to grow, we will continue to invest in the technical resources to ensure we can move forward with our mantra to "*create controlled motion solutions that change the game*" and to meet the emerging needs of our customers in our served market segments. We anticipate that our investment in these key resources will continue to drive our growth now and in the future. We expect to continue the shift from being a component supplier to a more complete solutions provider, along with the application of AST, to drive cost reduction.

Our global production footprint provides us with the opportunity to be a value added supplier for global companies who require support around the world. We will continue to evaluate and find areas to leverage our current manufacturing and sales footprint to drive sales and improve efficiencies.

In addition to our strategy described above, time and resources have been spent during 2022 to further understand the ESG ecosystem and developments impacting stakeholder expectations and assess our performance. The Company has a number of initiatives focused on individual components of ESG, and, under the oversight of the Board of Directors is continuing to integrate ESG with our broader strategy and Enterprise Risk Management (ERM). The strategy will include looking to further enhance the Company's ability to meet ongoing and emerging challenges, including the impacts of the COVID-19 pandemic.

Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements which have been prepared in accordance with Generally Accepted Accounting Principles ("GAAP"). We make estimates and assumptions in the preparation of our consolidated financial statements that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosures of contingent assets and liabilities. We base our estimates and judgments upon historical experience and other factors that are believed to be reasonable under the circumstances. Changes in estimates or assumptions could result in a material adjustment to the consolidated financial statements.

We have identified several critical accounting estimates. An accounting estimate is considered critical if both: (a) the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment involved, and (b) the impact of changes in the estimates and assumptions would have a material effect on the consolidated financial statements. This listing is not a comprehensive list of all of our accounting policies. For further information regarding the application of these and other accounting policies, See Note 1, *Business and Summary of Significant Accounting Policies* of the notes to consolidated financial statements contained in Item 8 of this report for additional information.

The Company's critical accounting policies and estimates include:

Revenue Recognition

The Company considers control of most products to transfer at a single point in time when control is transferred to the customer, generally when the products are shipped in accordance with an agreement and/or purchase order. Control is defined as the ability to direct the use of and obtain substantially all of the remaining benefits of the product. The Company satisfies its performance obligations under a contract with a customer by transferring goods and services generally in exchange for monetary consideration from the customer. The Company considers the customer's purchase order, and the Company's corresponding sales order acknowledgment as the contract with the customer. In the normal course of business, the Company does not accept product returns unless the item is defective as manufactured. The Company establishes provisions for estimated returns and warranties. All contracts include a standard warranty clause to guarantee that the product complies with agreed specifications.

Inventories

Inventories are measured on a first-in, first-out basis at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory costing requires complex calculations that include assumptions for overhead absorption, scrap, sample calculations, manufacturing yield estimates, costs to sell, and the determination of which costs may be capitalized. The valuation of inventory requires us to estimate obsolete or excess inventory, as well as inventory that is not of saleable quality.

Historically, our inventory adjustment has been adequate to cover our losses. However, variations in methods or assumptions could have a material impact on our results. If our demand forecast for specific products is greater than actual demand and we fail to reduce manufacturing output accordingly, we could be required to record additional inventory write-downs or expense a greater amount of overhead costs, which would negatively impact our net income. As of December 31, 2022, we have $117,108 of inventory recorded on our consolidated balance sheet, representing approximately 20% of total assets. A 1% write-down of our inventory would decrease our 2022 net income by approximately $860, or $0.05 per diluted share.

Evaluation of Goodwill for impairment

We test the reporting unit's goodwill for impairment as of October 31st of each fiscal year and between annual tests if an event occurs or circumstances change that may indicate that the fair value of the reporting unit is below its carrying value. In conducting this annual impairment test, we may first perform a qualitative assessment of whether it is more-likely-than-not that a reporting unit's fair value is less than its carrying value. If we determine that it is not more-likely-than-not that the fair value of the reporting unit is less than its carrying amount, no further goodwill impairment testing is required. If it is more-likely-than-not that the reporting unit's fair value is less than its carrying value, or if we elect not to perform a qualitative assessment of a reporting unit, a quantitative analysis is performed, in which the fair value of the reporting unit is compared to its carrying amount. If the carrying amount of the reporting unit exceeds its fair value, an impairment loss is recognized equal to the excess, limited to the amount of goodwill allocated to that reporting unit.

We performed a qualitative assessment of our single reporting unit as of October 31, 2022. As part of this analysis, we evaluated factors including, but not limited to, our market capitalization and stock price performance, macro-economic conditions, market and industry conditions, cost factors, the competitive environment, and the operational stability and overall financial performance of our reporting unit. The assessment indicated that it was more-likely-than-not that the fair value of our reporting unit exceeded its carrying amount, and as such, a quantitative assessment was not performed.

We do not believe that our reporting unit is at risk for impairment. However, changes to the factors considered above could affect the estimated fair value of our reporting unit and could result in a goodwill impairment charge in a future period. As of December 31, 2022, we have $126,366 of goodwill recorded on our consolidated balance sheet, representing approximately 21% of total assets. A 1% write-down of our goodwill would decrease our 2022 net income approximately $924, or $0.06 per diluted share.

Business Combinations

The Company allocates the purchase price of an acquired company, including when applicable, the acquisition date fair value of contingent consideration between tangible and intangible assets acquired and liabilities assumed from the acquired business based on their estimated fair values, with the residual of the purchase price recorded as goodwill. Third party appraisal firms and other consultants are engaged to assist management in determining the fair values of certain assets acquired and liabilities assumed. Estimating fair values requires significant judgments, estimates and assumptions, including but not limited to: discount rates, future cash flows and the economic lives of trade names, technology, customer relationships, and property, plant and equipment. These estimates are based on historical experience and information obtained from the management of the acquired companies and are inherently uncertain.

During the year ended December 31, 2022, we completed three business combinations for an aggregate purchase price of $57,658. We identified and assigned value to identifiable intangible assets of customer lists, technology, and trade names, and estimated the useful lives over which these intangible assets would be amortized. The estimated fair values of these identifiable intangible assets were based upon discounted cash flow models, which include assumptions such as forecasted cash flows, customer attrition rates, discount rates, and royalty rates. The fair value estimates resulted in identifiable intangible assets, in the aggregate, of $28,611. The resulting goodwill, in the aggregate, from these three acquisitions was $21,556.

Stock-based Compensation

Compensation expense for time-based restricted stock units is measured at the grant date and recognized ratably over the vesting period. We determine the fair value of time-based and performance-based restricted stock units based on the closing market price of our common stock on the grant date. The recognition of compensation expense associated with performance-based restricted stock units requires judgment in assessing the probability of meeting the performance goals, as well as defined criteria for assessing achievement of the performance-related goals. For purposes of measuring compensation expense, the number of shares ultimately expected to vest is estimated at each reporting date based on management's expectations regarding the relevant performance criteria. The performance shares begin vesting only upon the achievement of the performance criteria. The achievement of the performance goals can impact the valuation and associated expense of the restricted stock units.

The assumptions used in accounting for the share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if circumstances change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

Impact of Recently Issued Accounting Pronouncements

In the normal course of business, we evaluate all new accounting pronouncements issued by the Financial Accounting Standards Board ("FASB"), Securities and Exchange Commission ("SEC"), Emerging Issues Task Force ("EITF") or other authoritative accounting bodies to determine the potential impact they may have on our consolidated financial statements. See Note 1, *Business and Summary of Significant Accounting Policies* of the notes to consolidated financial statements contained in Item 8 of this report for additional information about these recently issued accounting standards and their potential impact on our financial condition or results of operations.

Operating Results

The following discussion is a comparison between fiscal year 2022 and fiscal year 2021 results. For a discussion of our results of operations for the year ended December 31, 2021 compared to the year ended December 31, 2020, please refer to Item 7 of Part II, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, which was filed with the SEC on March 9, 2022.

Year 2022 compared to 2021

	For the year ended December 31,		2022 vs. 2021 Variance	
(Dollars in thousands, except per share data)	**2022**	**2021**	**$**	**%**
Revenues	$ 502,988	$ 403,516	$ 99,472	25 %
Cost of goods sold	345,729	282,460	63,269	22 %
Gross profit	157,259	121,056	36,203	30 %
Gross margin percentage	31.3 %	30.0 %		
Operating costs and expenses:				
Selling	21,877	17,249	4,628	27 %
General and administrative	50,677	42,419	8,258	19 %
Engineering and development	38,561	27,818	10,743	39 %
Business development	3,319	1,299	2,020	156 %
Amortization of intangible assets	11,169	6,245	4,924	79 %
Total operating costs and expenses	125,603	95,030	30,573	32 %
Operating income	31,656	26,026	5,630	22 %
Interest expense	7,692	3,236	4,456	138 %
Other expense (income), net	283	(323)	606	NM %
Total other expense	7,975	2,913	5,062	174 %
Income before income taxes	23,681	23,113	568	2 %
Income tax (provision) benefit	(6,292)	981	(7,273)	NM %
Net income	$ 17,389	$ 24,094	$ (6,705)	(28)%
Effective tax rate	26.6 %	(4.2)%		
Diluted earnings per share	$ 1.09	$ 1.66	$ (0.57)	(34)%
Bookings	$ 566,226	$ 468,449	$ 97,777	21 %
Backlog	$ 330,078	$ 249,927	$ 80,151	32 %

REVENUES: The increase in revenues in 2022 reflects improved sales in certain markets we serve, specifically Industrial and A&D. The increase reflects the economic recovery and the increases in demand from many of our served markets, as certain markets were negatively affected in the prior year period due to the economic environment brought on by the COVID-19 pandemic. Our sales for 2022 were comprised of 58% to U.S. customers and 42% to customers primarily in Europe, Canada and Asia-Pacific. The overall increase in revenue was due to a 30% volume increase partially offset by a 5% unfavorable currency impact. The acquisitions completed in 2021 and 2022 contributed an incremental $73,146 of revenues in 2022. See information included in “Non – GAAP Measures” below for a discussion of the non-GAAP measure and reconciliation of revenue to revenue excluding foreign currency impacts.

ORDER BOOKINGS AND BACKLOG: The 22% increase in orders in 2022 compared to 2021 is due to a 27% increase in volume partially offset by a 5% unfavorable currency impact. The increase in bookings during 2022 compared to 2021 is largely due to increases in our Industrial and A&D markets reflecting improvements in the general economy along with growth in our core businesses. The overall increase in orders was due to a 27% volume increase partially offset by a 6% unfavorable currency impact. The acquisitions completed in 2021 and 2022 contributed an incremental $120,529 of orders in 2022. The increase in backlog as of December 31, 2022, compared to December 31, 2021 includes incremental backlog of $21,222 from the three acquisitions that were completed during 2022.

GROSS PROFIT AND GROSS MARGIN: Gross margins improved to 31.3% for 2022, compared to 30.0% for 2021. The increase in gross margin percentage was largely driven by volume increases of higher margin products in our Industrial and A&D markets compared to lower volumes of pandemic related Medical market products with lower margins, combined with pricing and margin accretive acquisitions. The margin expansion was muted by higher material and labor costs as well as costs associated with addressing the challenging global supply chain environment to meet the needs of our customers.

SELLING EXPENSES: Selling expenses increased 27% during 2022 compared to 2021 primarily due to increased costs in connection with our acquisitions as well as sales commissions related to the revenue growth. Selling expenses as a percentage of revenues were comparable at 4% during 2022 and 2021.

GENERAL AND ADMINISTRATIVE EXPENSES: General and administrative expenses increased by 19% during 2022 compared to 2021 due primarily to increased costs in connection with our acquisitions. As a percentage of revenues, general and administrative expenses were 10% and 11% in 2022 and 2021, respectively.

ENGINEERING AND DEVELOPMENT EXPENSES: Engineering and development expenses increased by 39% in 2022 compared to 2021. The increase is primarily due to increased costs in connection with our acquisitions and the continued ramp up of development projects to meet the future needs of target markets, as well as supporting growing customer application development needs. As a percentage of revenues, engineering and development expenses were comparable at 8% and 7% for the years ended December 31, 2022 and 2021, respectively.

BUSINESS DEVELOPMENT COSTS: The increase in business development costs in 2022 compared to 2021 is due to additional acquisition related costs due to increased merger and acquisition activity and costs related to manufacturing footprint rationalization.

AMORTIZATION OF INTANGIBLE ASSETS: Amortization of intangible assets increased 79% in 2022 compared to 2021, due to the inclusion of the full year of intangible asset amortization of the 2021 acquisitions and the incremental intangible asset amortization from the 2022 acquisitions.

INTEREST EXPENSE: Interest expense increased by 138% in 2022 compared to 2021 primarily due to higher debt levels in 2022 compared to 2021, largely relating to business acquisition activity, and, to a lesser extent, higher interest rates, offset in part by interest rate swaps.

INCOME TAXES: For 2022 and 2021, the effective income tax rate was 26.6% and (4.2)%, respectively. The effective rate differs from the statutory rate primarily due to state income taxes, the impact of foreign tax provisions in the US, the impact of the mix of foreign and domestic income and foreign tax rates, section 162(m) compensation limits, and the benefit of Research and Development tax credits. The effective tax rate for 2021 includes a tax benefit of 32.3% related to the recognition of net operating loss carryforwards primarily resulting from tax legislation enacted in New Zealand and 5.6% related to investment tax credits recorded in 2021. The effective rate for 2021 is partially offset by a 7.2% discrete tax provision related to a valuation allowance recorded on a foreign subsidiary's deferred tax assets.

NET INCOME AND ADJUSTED NET INCOME: Net income decreased during 2022 compared to 2021, reflecting the impact of the effect of a $7,373 discrete income tax benefit in the first quarter of 2021. Operating income increased, reflecting increased revenues and higher gross margin, partially offset by an increase in operating expenses.

Adjusted net income for the years ended December 31, 2022 and 2021 was $29,972 and $23,176, respectively. Adjusted diluted earnings per share for 2022 and 2021 were $1.88 and $1.60, respectively. Adjusted net income and adjusted diluted earnings per share are non-GAAP measures. See information included in "Non–GAAP Measures" below for a discussion of the non-GAAP measure and reconciliation of net income to Adjusted net income and diluted earnings per share to Adjusted diluted earnings per share.

EBITDA AND ADJUSTED EBITDA: EBITDA was $56,859 for 2022 compared to $44,456 for 2021. Adjusted EBITDA was $65,549 and $49,937 for 2022 and 2021, respectively. EBITDA and Adjusted EBITDA are non-GAAP measures. EBITDA consists of income before interest expense, provision (benefit) for income taxes, and depreciation and amortization. Adjusted EBITDA also excludes stock-based compensation expense, foreign currency gain/loss and certain other items. Refer to information included in “Non-GAAP Measures” below for a discussion of the non-GAAP measure and a reconciliation of net income to EBITDA and Adjusted EBITDA.

Non-GAAP Measures

Revenue excluding foreign currency exchange impacts, EBITDA, Adjusted EBITDA, Adjusted net income and Adjusted diluted earnings per share are provided for information purposes only and are not measures of financial performance under GAAP.

Management believes the presentation of these financial measures reflecting non-GAAP adjustments provides important supplemental information to investors and other users of our financial statements in evaluating the operating results of the Company as distinct from results that include items that are not indicative of ongoing operating results. In particular, those charges and credits that are not directly related to operating unit performance, and that are not a helpful measure of the performance of our underlying business particularly in light of their unpredictable nature. These non-GAAP disclosures have limitations as analytical tools, should not be viewed as a substitute for revenue and net income determined in accordance with GAAP, and should not be considered in isolation or as a substitute for analysis of the Company’s results as reported under GAAP, nor is it necessarily comparable to non-GAAP performance measures that may be presented by other companies. In addition, supplemental presentation should not be construed as an inference that the Company’s future results will be unaffected by similar adjustments to net income determined in accordance with GAAP.

The Company believes that revenue excluding foreign currency exchange impacts is a useful measure in analyzing sales results. The Company excludes the effect of currency translation from revenue for this measure because currency translation is not under management’s control, is subject to volatility and can obscure underlying business trends. The portion of revenue attributable to currency translation is calculated as the difference between the current period revenue and the current period revenue after applying foreign exchange rates from the prior period.

The Company believes EBITDA is often a useful measure of a Company’s operating performance and is a significant basis used by the Company’s management to measure the operating performance of the Company’s business because EBITDA excludes charges for depreciation, amortization and interest expense that have resulted from our debt financings, acquisitions, as well as our provision for income tax expense. EBITDA is frequently used as one of the bases for comparing businesses in the Company’s industry.

The Company also believes that Adjusted EBITDA provides helpful information about the operating performance of its business. Adjusted EBITDA excludes stock-based compensation expense, as well as business development costs, foreign currency gains/losses on short-term assets and liabilities, and other items that are not indicative of the Company’s core operating performance. EBITDA and Adjusted EBITDA do not represent and should not be considered as an alternative to net income, operating income, net cash provided by operating activities or any other measure for determining operating performance or liquidity that is calculated in accordance with GAAP.

Management uses Adjusted net income and Adjusted diluted earnings per share to assess the Company’s consolidated financial and operating performance. Adjusted net income and Adjusted diluted earnings per share are provided for informational purposes only and are not a measure of financial performance under GAAP. These measures help management make decisions that are expected to facilitate meeting current financial goals as well as achieving optimal financial performance. Adjusted net income provides management with a measure of financial performance of the Company based on operational factors as it removes the impact of certain non-routine items from the Company’s operating results. Adjusted diluted earnings per share provides management with an indication of how Adjusted net income would be reflected on a per share basis for comparison to the GAAP diluted earnings per share measure. Adjusted net income is a key metric used by senior management and the Company’s Board of Directors to review the consolidated financial performance of the business. This measure adjusts net income determined in accordance with GAAP to reflect changes in financial results associated with the highlighted expense and income items.

The Company's calculation of revenue excluding foreign currency exchange impacts for 2022 is as follows (in thousands):

	For the year ended December 31, 2022	For the year ended December 31, 2021
Revenue as reported	$ 502,988	$ 403,516
Currency impact unfavorable (favorable)	22,263	(8,332)
Revenue excluding foreign currency exchange impacts	$ 525,251	$ 395,184

The Company's calculation of EBITDA and Adjusted EBITDA for 2022 and 2021 is as follows (in thousands):

	Year ended December 31, 2022	Year ended December 31, 2021
Net income as reported	$ 17,389	$ 24,094
Interest expense	7,692	3,236
Provision (benefit) for income tax	6,292	(981)
Depreciation and amortization	25,486	18,107
EBITDA	56,859	44,456
Stock-based compensation expense	5,073	4,161
Business development costs	3,319	1,299
Foreign currency loss	298	21
Adjusted EBITDA	$ 65,549	$ 49,937

The Company's calculation of Adjusted net income and Adjusted diluted earnings per share for years ended December 31, 2022 and 2021 is as follows (in thousands, except per share data):

	For the year ended December 31,			
	2022	Per diluted share	2021	Per diluted share
Net income as reported	$ 17,389	$ 1.09	$ 24,094	$ 1.66
Non-GAAP adjustments, net of tax				
Discrete income tax benefit	—	—	(7,373)	(0.51)
Amortization of intangible assets - net	9,812	0.62	4,938	0.34
Income tax valuation allowance	—	—	506	0.04
Foreign currency loss - net	228	0.01	18	—
Business development costs - net	2,542	0.16	998	0.07
Non-GAAP adjusted net income and diluted earnings per share	$ 29,971	$ 1.88	$ 23,181	$ 1.60

Liquidity and Capital Resources

The Company’s liquidity position as measured by cash and cash equivalents increased by $8,151 to a balance of $30,614 at December 31, 2022 from 2021.

	Year Ended December 31, 2022	Year Ended December 31, 2021	2022 vs. 2021 $
Net cash provided by operating activities	$ 5,596	$ 25,402	$ (19,806)
Net cash used in investing activities	(60,011)	(60,970)	959
Net cash provided by financing activities	63,605	35,832	27,773
Effect of foreign exchange rates on cash	(1,039)	(932)	(107)
Net increase (decrease) in cash and cash equivalents	$ 8,151	$ (668)	$ 8,819

Of the $30,614 cash and cash equivalents on hand at December 31, 2022, $18,566 was located at our foreign subsidiaries and may be subject to withholding tax if repatriated to the U.S.

During 2022, the cash provided by operating activities decreased from 2021 due largely to increases in working capital, primarily inventory, due to strategic decisions to secure critical components given the supply chain environment.

The cash used in investing activities in 2022 remained consistent with 2021, as similar capital expenditures and acquisition-related cash outflows occurred in each year. The Company expects 2023 capital expenditures to be approximately $18,000 to $23,000.

The increase in cash provided by financing activities in 2022 from 2021 includes Amended Revolving Facility borrowings of $71,000 to fund business acquisition activity in the second quarter of 2022, as compared to the $50,500 to fund the three acquisitions in the fourth quarter of 2021. Debt payments of $7,585 and $12,248 were made during 2022 and 2021, respectively. At December 31, 2022, the Company had $227,060 of obligations under the Amended Revolving Facility, excluding deferred financing costs.

The Amended Credit Agreement includes covenants and restrictions that limit the Company’s ability to incur additional indebtedness, make certain investments, create, incur or assume certain liens, merge, consolidate or sell all or substantially all of its assets and enter into transactions with an affiliate of the Company on other than an arms’ length transaction. These covenants, which are described more fully in the Amended Credit Agreement, to which reference is made for a complete statement of the covenants, are subject to certain exceptions. The Amended Credit Agreement contains financial covenants that require that the Company maintain a minimum interest coverage ratio of at least 3.0 to 1.0 at the end of each fiscal quarter. In addition, the Company’s Leverage Ratio at the end of any fiscal quarter shall not be greater than 4.0 to 1.0 ratio (reduced to 3.5:1.0 for quarters ending on or after December 31, 2023); provided that the Company may elect to temporarily increase the Leverage Ratio by 0.5x during the twelve-month period following a material acquisition under the Amended Credit Agreement (“acquisition leverage increase”), subject to certain exceptions. The Company was in compliance with all covenants at December 31, 2022.

As of December 31, 2022, the unused Amended Revolving Facility was $52,940. The amount available to borrow may be lower and may vary from period to period based upon our debt and EBITDA levels, which impacts our covenant calculations. The Amended Credit Agreement matures in February 2025.

There were no borrowings under the China Facility during 2022 or 2021.

The Company declared dividends, in total, of $0.10 and $0.095 per share during 2022 and 2021, respectively. The Company’s working capital, capital expenditure and dividend requirements are expected to be funded from cash provided by operations and amounts available under the Amended Credit Agreement (refer to Note 7, *Debt Obligations*, of the notes to consolidated financial statements for definition and terms).

Although there is ongoing uncertainty related to the continued impact of COVID-19 and variants on our future results, we believe our diverse markets, our strong market position in many of our businesses, and the steps we have taken to strengthen our balance sheet, such as retaining cash to support shorter term needs and amending our revolving credit facility in 2022 leaves us well-positioned to manage our business through the ongoing impacts of the pandemic as it continues to unfold. We continually assess our liquidity and cash positions and have assessed the impact of COVID-19 on our Company. Based on our analysis, we believe our existing balances of cash, the flexibility of our Amended Credit Agreement and our currently anticipated operating cash flows will be more than sufficient to meet our cash needs arising in the ordinary course of business for the next twelve months.

Item 7A. Qualitative and Quantitative Disclosures about Market Risk

Foreign Currency

We have international operations in The Netherlands, Sweden, Germany, China, Portugal, Canada, Czech Republic, Mexico, the United Kingdom and New Zealand which expose us to foreign currency exchange rate fluctuations due to transactions denominated in Euros, Swedish Krona, Chinese Renminbi, Canadian dollar, Czech Krona, Mexican pesos, British Pound Sterling, and New Zealand dollar, respectively. We continuously evaluate our foreign currency risk and we take action from time to time in order to best mitigate these risks. A hypothetical 10% change in the value of the U.S. dollar in relation to our most significant foreign currency exposures would have had an impact of approximately $17,514 on our 2022 sales. This amount is not indicative of the hypothetical net earnings impact due to partially offsetting impacts on cost of sales and operating expenses in those currencies. We estimate that foreign currency exchange rate fluctuations decreased sales in 2022 compared to 2021 by approximately $22,263.

We translate all assets and liabilities of foreign operations, where the U.S. dollar is not the functional currency, at the period-end exchange rate and translate sales and expenses at the average exchange rates in effect during the period. The net effect of these translation adjustments is recorded in the consolidated financial statements as comprehensive income. The translation adjustment were losses of $9,516 and $7,193 for 2022 and 2021, respectively. Translation adjustments are not adjusted for income taxes as they relate to permanent investments in our foreign subsidiaries. A hypothetical 10% change in the value of the U.S. dollar in relation to our most significant foreign currency net assets would have had an impact of approximately $15,335 and $11,000 on our foreign net assets as of December 31, 2022 and 2021, respectively.

Beginning in the first quarter of 2021, we began entering into contracts to hedge our short-term balance sheet exposure, primarily intercompany, that are denominated in currencies (Euro, Mexican Peso, Canadian Dollar, New Zealand Dollar, Chinese Renminbi, Swedish Krona) other than the subsidiary’s functional currency and are adjusted to current values using period-end exchange rates. The resulting gains or losses are recorded in other (income) expense, net in the consolidated statements of income and comprehensive income. To minimize foreign currency exposure, the Company had foreign currency contracts with notional amounts of $18,981 and $13,500 at December 31, 2022 and 2021, respectively. The foreign currency contracts are recorded in the consolidated balance sheets at fair value and resulting gains or losses are recorded in other expense (income), net in the consolidated statements of income and comprehensive income. During the years ended December 31, 2022 and 2021, we recorded losses of $1,109 and $170, respectively, which is included in other expense (income), net and generally offset the gains or losses from the foreign currency adjustments on the intercompany balances that are also included in other expense (income), net. Net foreign currency transaction gains and losses included in total other expense (income), net amounted to gains of $298 in 2022 and losses of $21 in 2021.

Interest Rates

Interest rates on our Amended Credit Agreement are based on Term SOFR plus a margin of 1.00% to 2.25% (1.75% at December 31, 2022), depending on the Company’s ratio of total funded indebtedness to consolidated EBITDA. We use interest rate derivatives to add stability to interest expense and to manage our exposure to interest rate movements. We primarily use interest rate swaps as part of our interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount. In February 2017, the Company entered into three interest rate swaps with a combined notional amount of $40,000 that matured in February 2022. In March 2020, the Company entered into two additional interest rate swaps with a combined notional amount of $20,000 that increased to $60,000 in March 2022 and matures in December 2024. In March 2022 the Company entered into an additional interest rate swap with a notional amount of $40,000 that matures in December

2026.

As of December 31, 2022, we had $227,060 outstanding under the Amended Revolving Facility (excluding deferred financing fees), of which $100,000 is currently being hedged. Refer to Note 7, *Debt Obligations*, of the notes to consolidated financial statements for additional information about our outstanding debt. A hypothetical one percentage point (100 basis points) change in the Base Rate on the $127,060 of unhedged floating rate debt outstanding at December 31, 2022 would have an impact of approximately $1,271 on our interest expense for 2022. A hypothetical one percentage point (100 basis points) change in the Base Rate on the $99,395 of unhedged floating rate debt outstanding at December 31, 2021 would have an impact of approximately $994 on our interest expense for 2021.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Allied Motion Technologies Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Allied Motion Technologies Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of income and comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 7, 2023 expressed an unqualified opinion on the Company's internal control over financial reporting.

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 Matter

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 critical audit matters does not alter in any way our opinion on the 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.

Inventories – Refer to Note 1 to the financial statements

Critical Audit Matter Description

Inventories are measured on a first-in, first-out basis at the lower of cost or net realizable value. The valuation of inventory requires the Company to estimate obsolete or excess inventory, as well as inventory that is not of saleable quality. The Company's estimate of the appropriate amount of obsolete or excess inventory, as well as inventory that is not of saleable quality, uses certain inputs and involves judgment. Such inputs include data associated with historic trends, the demand forecast for inventory on-hand which includes customer orders, and item specific estimates about the timing or level of demand for a specific part. Inventories at December 31, 2022 totaled approximately $117.1 million.

We identified the estimate of obsolete or excess inventory, as well as inventory that is not of saleable quality, as a critical audit matter because of the significant amount of judgment required by management when evaluating the demand forecast for inventory on-hand and assumptions for item specific estimates about the timing or level of demand for a specific part. This required a high degree of auditor judgment and an increased extent of effort when performing audit procedures to evaluate the reasonableness of the demand forecast for inventory on-hand and item specific estimates about the timing or level of demand for a specific part.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the valuation of obsolete or excess inventory, as well as inventory that is not of saleable quality, included the following, among others:

- We tested the design, implementation, and operating effectiveness of controls over management's review of the periodic calculation of the valuation for obsolete or excess inventory, as well as inventory that is not of saleable quality.
- We tested management's process for determining the valuation of inventory, including:
  - We evaluated the appropriateness of specified inputs supporting management's estimate, including the historic inventory trends and the demand forecasts.
  - We tested the demand forecast for inventory on-hand by obtaining documentation to support customer orders, historical and future sales used in the Company's analysis.
  - We evaluated the appropriateness of management's methodology and assumptions used in developing the estimate, including item specific estimates about the timing or level of demand for a specific part.
  - We evaluated management's ability to accurately estimate obsolete or excess inventory, as well as inventory that is not of saleable quality by comparing actual results to management's historical estimates.
  - We evaluated inventory write-offs subsequent to December 31, 2022 for indications that the estimate for obsolete or excess inventory, as well as inventory that is not of saleable quality may be understated.
  - We evaluated inventory ratios such as days sales of inventory and inventory turnover on a quarter-by-quarter basis.

/s/ Deloitte & Touche LLP

Williamsville, New York
March 7, 2023

We have served as the Company's auditor since 2018.

ALLIED MOTION TECHNOLOGIES INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 30,614	$ 22,463
Trade receivables, net of provision for credit losses of $1,192 and $506 at December 31, 2022 and December 31, 2021, respectively	76,213	51,239
Inventories	117,108	89,733
Prepaid expenses and other assets	12,072	12,522
Total current assets	236,007	175,957
Property, plant, and equipment, net	68,640	56,983
Deferred income taxes	4,199	5,321
Intangible assets, net	119,075	103,786
Goodwill	126,366	106,633
Operating lease assets	22,807	16,983
Other long-term assets	11,253	5,122
Total Assets	$ 588,347	$ 470,785
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 39,467	$ 36,714
Accrued liabilities	48,121	41,656
Total current liabilities	87,588	78,370
Long-term debt	235,454	158,960
Deferred income taxes	6,262	5,040
Pension and post-retirement obligations	3,009	3,932
Operating lease liabilities	18,795	12,792
Other long-term liabilities	21,774	23,929
Total liabilities	372,882	283,023
Commitments and contingencies (Note 11)		
Stockholders' Equity:		
Common stock, no par value, authorized 50,000 shares; 15,978 and 15,361 shares issued and outstanding at December 31, 2022 and December 31, 2021, respectively	83,852	68,097
Preferred stock, par value $1.00 per share, authorized 5,000 shares; no shares issued or outstanding	—	—
Retained earnings	143,576	127,757
Accumulated other comprehensive loss	(11,963)	(8,092)
Total stockholders' equity	215,465	187,762
Total Liabilities and Stockholders' Equity	$ 588,347	$ 470,785

See accompanying notes to consolidated financial statements.

ALLIED MOTION TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(In thousands, except per share data)

	For the year ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Revenues	$ 502,988	$ 403,516	$ 366,694
Cost of goods sold	345,729	282,460	258,119
Gross profit	157,259	121,056	108,575
Operating costs and expenses:			
Selling	21,877	17,249	15,392
General and administrative	50,677	42,419	38,301
Engineering and development	38,561	27,818	25,487
Business development	3,319	1,299	473
Amortization of intangible assets	11,169	6,245	5,928
Total operating costs and expenses	125,603	95,030	85,581
Operating income	31,656	26,026	22,994
Other expense, net:			
Interest expense	7,692	3,236	3,716
Other expense (income), net	283	(323)	502
Total other expense, net	7,975	2,913	4,218
Income before income taxes	23,681	23,113	18,776
Income tax (provision) benefit	(6,292)	981	(5,133)
Net income	$ 17,389	$ 24,094	$ 13,643
Basic earnings per share:			
Earnings per share	$ 1.13	$ 1.67	$ 0.96
Basic weighted average common shares	15,448	14,413	14,243
Diluted earnings per share:			
Earnings per share	$ 1.09	$ 1.66	$ 0.95
Diluted weighted average common shares	15,951	14,517	14,333
Net income	$ 17,389	$ 24,094	$ 13,643
Other comprehensive (loss) income:			
Foreign currency translation adjustment	(9,516)	(7,193)	8,410
Change in accumulated income (loss) on derivatives	5,376	1,618	(1,161)
Pension adjustments	269	770	(5)
Comprehensive income	$ 13,518	$ 19,289	$ 20,887

See accompanying notes to consolidated financial statements.

ALLIED MOTION TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except per share data)

	Common Stock				Accumulated Other Comprehensive Income (Loss)			
(In thousands except per share data)	**Shares**	**Amount**	**Unamortized Cost of Equity Awards**	**Retained Earnings**	**Foreign Currency Translation Adjustments**	**Accumulated income (loss) on derivatives**	**Pension Adjustments**	**Total Stockholders' Equity**
Balances, December 31, 2019	14,399	$ 41,642	$ (4,506)	$ 92,589	$ (8,626)	$ (277)	$ (1,628)	$ 119,194
Stock transactions under employee benefit stock plans	48	1,252						1,252
Issuance of restricted stock, net of forfeitures	231	5,223	(4,851)					372
Stock compensation expense			3,550					3,550
Shares withheld for payment of employee payroll taxes	(46)	(1,032)						(1,032)
Comprehensive (loss) income					8,410	(1,526)	(5)	6,879
Tax effect						365		365
Net income				13,643				13,643
Dividends to stockholders - $0.08 per share				(1,167)				(1,167)
Balances, December 31, 2020	14,632	47,085	(5,807)	105,065	(216)	(1,438)	(1,633)	143,056
Stock transactions under employee benefit stock plans	32	988						988
Issuance of restricted stock, net of forfeitures	96	3,465	(3,363)					102
Share issuance in connection with acquisitions	653	23,496						23,496
Stock compensation expense			4,161					4,161
Shares withheld for payment of employee payroll taxes	(52)	(1,928)						(1,928)
Comprehensive (loss) income					(7,193)	2,110	997	(4,086)
Tax effect						(492)	(227)	(719)
Net income				24,094				24,094
Dividends to stockholders - $0.095 per share				(1,402)				(1,402)
Balances, December 31, 2021	15,361	73,106	(5,009)	127,757	(7,409)	180	(863)	187,762
Stock transactions under employee benefit stock plans	36	1,217						1,217
Issuance of restricted stock, net of forfeitures	168	5,729	(5,734)					(5)
Share issuance in connection with acquisitions	463	11,103						11,103
Stock compensation expense			5,073					5,073
Shares withheld for payment of employee payroll taxes	(50)	(1,633)						(1,633)
Comprehensive (loss) income					(9,516)	7,089	361	(2,066)
Tax effect						(1,713)	(92)	(1,805)
Net income				17,389				17,389
Dividends to stockholders - $0.10 per share				(1,570)				(1,570)
Balances, December 31, 2022	15,978	$ 89,522	$ (5,670)	$ 143,576	$ (16,925)	$ 5,556	$ (594)	$ 215,465

See accompanying notes to consolidated financial statements.

ALLIED MOTION TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	For the year ended		
	December 31, 2022	**December 31, 2021**	**December 31, 2020**
Cash Flows From Operating Activities:			
Net income	$ 17,389	$ 24,094	$ 13,643
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation and amortization	25,486	18,107	15,985
Deferred income taxes	(3,722)	(6,135)	(519)
Provision for excess and obsolete inventory	1,628	534	1,106
Stock-based compensation expense	5,073	4,161	3,550
Debt issue cost amortization recorded in interest expense	202	141	144
Other	393	415	(299)
Changes in operating assets and liabilities, net of acquisition:			
Trade receivables	(22,202)	(170)	2,711
Inventories	(27,800)	(22,874)	(4,686)
Prepaid expenses and other assets	887	(3,670)	(2,264)
Accounts payable	2,791	8,293	(1,874)
Accrued liabilities	5,471	2,506	(2,659)
Net cash provided by operating activities	5,596	25,402	24,838
Cash Flows From Investing Activities:			
Consideration paid for acquisitions, net of cash acquired	(44,101)	(47,254)	(14,728)
Purchase of property and equipment	(15,910)	(13,716)	(9,371)
Net cash used in investing activities	(60,011)	(60,970)	(24,099)
Cash Flows From Financing Activities:			
Proceeds from issuance of long-term debt	74,731	51,379	26,979
Principal payments of long-term debt and finance lease obligations	(7,585)	(12,248)	(16,897)
Payment of debt issuance costs	(391)	—	(401)
Dividends paid to stockholders	(1,536)	(1,371)	(1,160)
Tax withholdings related to net share settlements of restricted stock	(1,614)	(1,928)	(1,032)
Net cash provided by financing activities	63,605	35,832	7,489
Effect of foreign exchange rate changes on cash	(1,039)	(932)	1,487
Net decrease in cash and cash equivalents	8,151	(668)	9,715
Cash and cash equivalents at beginning of period	22,463	23,131	13,416
Cash and cash equivalents at end of period	$ 30,614	$ 22,463	$ 23,131
Supplemental disclosure of cash flow information:			
Stock issued for acquisitions	$ 11,103	$ 23,496	$ —
Property, plant and equipment purchases in accounts payable or accrued expenses	$ 620	$ 835	$ 596

See accompanying notes to consolidated financial statements.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

1. BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business

Allied Motion Technologies Inc. ("Allied Motion" or the "Company") is engaged in the business of designing, manufacturing and selling precision and specialty controlled motion components and systems, which include integrated system solutions as well as individual controlled motion products, to a broad spectrum of customers throughout the world primarily for the Industrial, Vehicle, Medical, and Aerospace & Defense markets.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions are eliminated in consolidation.

For business combinations, net assets acquired and liabilities assumed are recorded at their estimated fair values.

Cash and Cash Equivalents

Cash and cash equivalents include instruments which are readily convertible into cash (original maturities of three months or less) and which are not subject to significant risk of changes in interest rates.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The provision for credit losses is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable; however, changes in circumstances relating to accounts receivable may result in a requirement for additional provisions in the future. Activity in the provision for credit losses for 2022 and 2021 was as follows (in thousands):

	December 31, 2022	December 31, 2021
Beginning balance	$ 506	$ 382
Additional reserves	803	174
Write-offs	(107)	(44)
Effect of foreign currency translation	(10)	(6)
Ending balance	$ 1,192	$ 506

Inventories

Inventories include costs of materials, direct labor and manufacturing overhead, and are stated at the lower of cost (first-in, first-out basis) or net realizable value, as follows (in thousands):

	December 31, 2022	December 31, 2021
Parts and raw materials	$ 89,100	$ 65,223
Work-in-process	11,686	9,529
Finished goods	16,322	14,981
	$ 117,108	$ 89,733

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Property, Plant and Equipment

Property, plant and equipment is classified as follows (in thousands):

	Useful lives	December 31, 2022	December 31, 2021
Land		$ 965	$ 979
Building and improvements	5 - 39 years	25,093	14,398
Machinery, equipment, tools and dies	3 - 15 years	89,144	82,898
Construction work in progress		14,197	9,582
Furniture, fixtures and other	3 - 10 years	22,462	21,794
		151,860	129,651
Less accumulated depreciation		(83,220)	(72,668)
Property, plant, and equipment, net		$ 68,640	$ 56,983

Depreciation expense is provided using the straight-line method over the estimated useful lives of the assets. Amortization of building improvements is provided using the straight-line method over the life of the lease term or the life of the asset, whichever is shorter. Maintenance and repair costs are charged to operations as incurred. Major additions and improvements are capitalized. The cost and related accumulated depreciation of retired or sold property are removed from the accounts and the resulting gain or loss, if any, is reflected in earnings.

Depreciation expense was $12,676, $11,862 and $10,057 in 2022, 2021 and 2020, respectively.

Intangible Assets

Intangible assets, other than goodwill, are initially recorded at fair value and are amortized over their estimated useful lives using an accelerated or straight-line method which approximates the pattern of expected cash flows over the remaining useful lives of the intangible assets.

Impairment of Long-Lived Assets

The Company reviews the carrying values of its long-lived assets, including property, plant and equipment and intangible assets, on an annual basis and whenever events or changes in circumstances indicate that such carrying values may not be recoverable. Long-lived assets are recorded at their carrying amounts if the projected cash flows from their use will recover their carrying amounts on an undiscounted basis and without considering interest. If projected cash flows are less than their carrying value, the long-lived assets must be reduced to their estimated fair value. Judgment is required to project such cash flows and, if required, estimate the fair value of the impaired long-lived assets. The Company did not record any impairment charges for the years ended December 31, 2022, 2021 or 2020.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of identifiable net tangible and intangible assets acquired in a business combination.

Goodwill is not amortized, but is reviewed for impairment at least annually or more frequently if impairment indicators arise. The Company has defined one reporting unit that is the same as its operating segment. Goodwill is evaluated for impairment by first performing a qualitative assessment to determine whether a quantitative goodwill test is necessary. If it is determined, based on qualitative factors, that the fair value of the reporting unit may be more likely than not less than its carrying amount, or if significant adverse changes in the Company's future financial performance occur that could materially impact fair value, a quantitative goodwill impairment test would be required. Additionally, the

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Company can elect to forgo the qualitative assessment and perform the quantitative test. If the qualitative assessment indicates that the quantitative analysis should be performed, or if management elects to bypass a qualitative assessment, the Company then evaluates goodwill for impairment by comparing the fair value of the reporting unit to its carrying amount, including goodwill.

At October 31, 2022, the Company performed its annual goodwill impairment test and determined, after performing a qualitative test of the reporting unit, that it is more likely than not that the fair value of the reporting unit exceeds its carrying amount. Accordingly, there was no indication of impairment and the quantitative impairment test was not performed. The Company did not record any goodwill impairment charges for the years ended December 31, 2022, 2021 or 2020.

Other Long-Term Assets

Other long-term assets include interest rate derivatives that the Company has entered into in response to the variable interest rate exposure on long-term debt, as well as securities that the Company has purchased with the intent of funding the deferred compensation arrangements for certain executives of the Company. These items are accounted for at fair value on a recurring basis. Any changes in value are included in net income in the Company's consolidated statements of income and comprehensive income.

Warranty

The Company offers warranty coverage for its products. The length of the warranty period for its products is generally three months to two years and varies based on the product sold. The Company estimates the costs of repairing products under warranty based on the historical average cost of the repairs. The assumptions used to estimate warranty accruals are re-evaluated periodically in light of actual experience and, when appropriate, the accruals are adjusted. Estimated warranty costs are recorded at the time of sale of the related product, and are considered a cost of goods sold.

Changes in the Company's reserve for product warranty claims during 2022, 2021 and 2020 were as follows (in thousands):

	December 31, 2022	December 31, 2021	December 31, 2020
Beginning balance	$ 1,869	$ 1,571	$ 1,075
Warranty reserves acquired	45	15	465
Provision	(66)	543	34
Warranty expenditures	409	(204)	(97)
Effect of foreign currency translation	(97)	(56)	94
Ending balance	$ 2,160	$ 1,869	$ 1,571

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31, 2022	December 31, 2021
Compensation and fringe benefits	$ 15,818	$ 14,666
Accrued business acquisition consideration	12,500	12,388
Warranty reserve	2,160	1,869
Operating lease liabilities - current	4,224	4,532
Finance lease obligations - current	377	—
Deferred revenue	4,807	2,425
Other accrued expenses	8,235	5,776
	$ 48,121	$ 41,656

Foreign Currency Translation

The assets and liabilities of the Company's foreign subsidiaries are translated into U.S. dollars using end of period exchange rates. Changes in reported amounts of assets and liabilities of foreign subsidiaries that occur as a result of changes in exchange rates between foreign subsidiaries' functional currencies and the U.S. dollar are included in foreign currency translation adjustment. Foreign currency translation adjustment is included in accumulated other comprehensive loss, a component of stockholders' equity in the accompanying consolidated statements of stockholders' equity. Revenue and expense transactions use an average rate prevailing during the month of the related transaction. Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency of each of the operating locations are included in the other (income) expense, net as incurred.

Revenue Recognition

Refer to Note 3, *Revenue Recognition*, for description of the Company's policies regarding revenue recognition.

Engineering and Development Costs

The Company is engaged in a variety of engineering and design activities as well as basic research and development activities directed to the substantial improvement or new application of the Company's existing technologies. Engineering and design as well as research and development costs are expensed as incurred.

Basic and Diluted Earnings per Share

Basic earnings per share is computed by dividing net income or loss by the weighted average number of shares of common stock outstanding. Diluted earnings per share is determined by dividing the net income by the sum of: (1) the weighted average number of common shares outstanding and (2) if not anti-dilutive, the effect of potential common shares determined utilizing the treasury stock method.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Basic and diluted weighted-average shares outstanding are as follows (in thousands):

	Year ended December 31,		
	2022	2021	2020
Basic weighted average shares outstanding	15,448	14,413	14,243
Dilutive effect of potential common shares	503	104	90
Diluted weighted average shares outstanding	15,951	14,517	14,333

For 2022, 2021 and 2020, the anti-dilutive common shares excluded from the calculation of diluted income per share were immaterial.

Comprehensive Income

Comprehensive income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by and distributions to stockholders.

Fair Value Accounting

Authoritative guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the measurement date.

The guidance establishes a framework for measuring fair value, which utilizes observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. Preference is given to observable inputs. These two types of inputs create the following three-level fair value hierarchy:

Level 1: Quoted prices for identical assets or liabilities in active markets.

Level 2: Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations whose inputs or significant value drivers are observable.

Level 3: Significant inputs to the valuation model that are unobservable.

The Company's financial assets and liabilities include cash and cash equivalents, accounts receivable, debt obligations, accounts payable, and accrued liabilities. The carrying amounts reported in the consolidated balance sheets for these assets approximate fair value because of the immediate or short-term maturities of these financial instruments.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The following table presents the Company's financial assets that are accounted for at fair value on a recurring basis as of December 31, 2022 and 2021, respectively, by level within the fair value hierarchy (in thousands):

	December 31, 2022		
	Level 1	Level 2	Level 3
Assets (liabilities)			
Pension plan assets	$5,324	$ —	$ —
Deferred compensation plan assets	3,870	—	—
Foreign currency hedge contracts	—	48	—
Interest rate swaps, net	—	7,236	—
Contingent consideration	—	—	(4,100)

	December 31, 2021		
	Level 1	Level 2	Level 3
Assets (liabilities)			
Pension plan assets	$6,899	$ —	$ —
Deferred compensation plan assets	4,636	—	—
Foreign currency hedge contracts	—	39	—
Interest rate swaps, net	—	220	—
Contingent consideration	—	—	(4,900)

The contingent consideration fair value measurement in connection with the acquisition of ALIO Industries ("ALIO") is based on significant inputs not observable in the market and therefore constitute Level 3 inputs within the fair value hierarchy. The Company determines the initial fair value of contingent consideration liabilities using a Monte Carlo valuation model, which involves a simulation of future earnings generated during the earn out-period using management's best estimates, or a probability-weighted discounted cash flow analysis.

Derivative Financial Instruments

Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") No. 815, *Derivatives and Hedging* ("ASC 815"), provides the disclosure requirements for derivatives and hedging activities with the intent to provide users of financial statements with an enhanced understanding of: (a) how and why an entity uses derivative instruments, (b) how the entity accounts for derivative instruments and related hedged items, and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. Further, qualitative disclosures are required that explain the Company's objectives and strategies for using derivatives, as well as quantitative disclosures about the fair value of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative instruments.

As required by ASC 815, the Company records all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may enter into derivative contracts that are intended to economically hedge certain of its risk, even though hedge accounting does not apply, or the Company elects not to apply hedge accounting.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Income Taxes

The current provision for income taxes represents actual or estimated amounts payable or refundable on tax return filings each year. Deferred tax assets and liabilities are recorded for the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts reported in the accompanying consolidated balance sheets, and for operating loss and tax credit carryforwards. The change in deferred tax assets and liabilities for the period measures the deferred tax provision or benefit for the period. Effects of changes in enacted tax laws on deferred tax assets and liabilities are reflected as adjustments to the tax provision or benefit in the period of enactment. A valuation allowance may be provided to the extent management deems it is more likely than not that deferred tax assets will not be realized. The ultimate realization of net deferred tax assets is dependent upon the generation of future taxable income, in the appropriate taxing jurisdictions, during the periods in which temporary differences, net operating losses and tax credits become realizable. Management believes that it is more likely than not that the Company will realize the benefits of these temporary differences and operating loss and tax credit carryforwards, net of valuation allowances.

It is the Company's policy to include interest and penalties related to income tax liabilities in income tax expense on the consolidated statements of income and comprehensive Income. In addition, the Company records uncertain tax positions in accordance with ASC 740, *Income Taxes*, ("ASC 740").

Pension and Postretirement Welfare Plans

The Company records the service cost component of net benefit costs in cost of goods sold, selling, and general and administrative expenses. The interest cost component of net benefit costs is recorded in interest expense and the remaining components of net benefit costs, amortization of net losses and expected return on plan assets is recorded in other expense, net.

Concentration of Credit Risk

Trade receivables subject the Company to the potential for credit risk. To reduce this risk, the Company performs evaluations of its customers’ financial condition and creditworthiness at the time of sale, and updates those evaluations when necessary. See Note 13, *Segment Information*, for additional information regarding customer concentration.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions. Such estimates and assumptions affect the reported amounts of assets and liabilities as well as disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Stock Split

On March 10, 2021, the Board of Directors approved a 3-for-2 common stock split to be paid in the form of a stock dividend to holders of record on April 16, 2021. The additional shares were issued on April 30, 2021. In lieu of fractional shares, shareholders received a cash payment based on the closing share price of the common stock on the record date. All share and per share information presented in the consolidated financial statements have been adjusted to reflect the stock split on a retrospective basis for all periods presented.

Twinsburg Consolidation

In September 2021, the Company announced its plans to consolidate its manufacturing facility in Twinsburg, Ohio with its Watertown, New York and Reynosa, Mexico facilities in 2022. Costs of $913 and $545 are included in business development on the consolidated statement of income and comprehensive income for the years ended December 31, 2022 and 2021, respectively, related to the consolidation of the Twinsburg facility. Costs incurred include accelerated lease costs, severance and other payroll related costs, and accelerated depreciation. The consolidation has been completed as of December 31, 2022. There are no expenses anticipated to be incurred in 2023 nor any associated accrued liabilities as of December 31, 2022.

Accounting pronouncements not yet adopted

In December 2022, the FASB issued Accounting Standards Update ("ASU") 2022-06, "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848" from December 31, 2022 to December 31, 2024, which is superseding the date from ASU No. 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." This ASU relates to LIBOR or other referenced rates that will be discontinued due to reference rate reform. The update provides optional expedients to modify contracts under these referenced rates for all entities. The standard is optional, effective for any interim reporting period beginning March 12, 2020 through December 31, 2024. The Company is assessing the impact of adopting the standard on our consolidated financial statements.

2. ACQUISITIONS

FPH Group

On May 30, 2022, the Company acquired 100% of the direct and indirect legal and beneficial ownership of the shares of FPH Group Inc., a corporation incorporated pursuant to the laws of the Province of Ontario and the membership interests of Transtar International, LLC, a Michigan limited liability company, collectively "FPH". FPH is an Ontario, Canada headquartered industry leader in the development of technically advanced, reliable and cost-effective electrical drive systems which provide high torque and precision motion for the defense industry, as well as light weighting technologies for existing and future ground-based vehicles in the defense industry. FPH provides concept engineering, prototyping, validation, and production. FPH also develops composites, advanced materials and hybrid products and systems that achieve significant weight reduction and higher strength. This acquisition provides the Company with a deeper penetration within defense applications including the necessary manufacturing licenses and certifications.

The initial purchase price was $42,159 consisting of cash of $39,359 funded through borrowings under the Amended Revolving Facility, $550 in Company stock (22,886 shares at $24.01 closing stock price on May 27, 2022), and $2,250 in the form of 93,728 exchangeable shares (based on the closing price of an equivalent share of the Company's common stock) of an indirect wholly-owned subsidiary of the Company, each of which is initially exchangeable into one share of Company common stock, subject to adjustment, in accordance with a Support Agreement entered into concurrently with the closing of the transaction. Subsequent to the acquisition date, the Company made measurement period adjustments to the initial purchase price allocation due to adjustments to closing working capital and income tax matters which resulted in a decrease of the purchase price of $1,119, a decrease in trade receivables of $61, an increase of deferred income tax liabilities of $1,607, an increase in other current liabilities of $621, and an increase to goodwill of $1,170. The purchase price allocation is subject to adjustments based on a final determination of certain tax matters.

The Company incurred $1,057 of transaction costs related to the acquisition of FPH, which are included in business development on the condensed consolidated statements of income and comprehensive income.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The preliminary allocation of the purchase price paid for FPH is based on estimated fair values of the assets acquired and liabilities assumed of FPH as of May 30, 2022, and is as follows (in thousands):

Cash and cash equivalents	$	1,755
Trade receivables		3,100
Inventories		4,576
Other assets, net		174
Property, plant, and equipment		624
Right of use assets		4,165
Intangible assets		22,611
Goodwill		14,484
Other current liabilities		(1,577)
Deferred revenue		(776)
Lease liabilities		(4,165)
Net deferred income tax liabilities		(3,931)
Net purchase price	$	41,040

The intangible assets acquired consist of customer lists of $16,173, technology of $5,731, and a trade name of $707, which are being amortized over 12, 10 and 10 years, respectively. Goodwill generated in the acquisition is related to the assembled workforce, synergies between Allied Motion's other operations and FPH that are expected to occur as a result of the combined engineering knowledge, the ability of each of the operations to integrate each other's products into more fully integrated system solutions and Allied Motion's ability to utilize FPH's management knowledge in providing complementary product offerings to the Company's customers.

The operating results of this acquisition are included in the consolidated financial statements beginning on the date of the acquisition. Revenue of FPH included within the consolidated statements of income and comprehensive income for the year ended December 31, 2022 was $12,113. Earnings were $607 inclusive of $1,426 of intangible amortization in the year ended December 31, 2022.

The goodwill resulting from the FPH acquisition is tax deductible.

ThinGap and Airex

On May 24, 2022, the Company acquired 100% of the outstanding stock of ThinGap, Inc. ("ThinGap"), a privately-owned California headquartered developer and manufacturer of high performance, zero clogging slotless motors for use in aerospace, defense, and medical applications that require precise performance in a compact, yet high-torque-to-volume solutions. ThinGap designs, engineers, and manufactures low profile, brushless DC motor kits and assemblies that utilize a proprietary wave-wound stator architecture and highly optimized rotors. ThinGap expands the Company's precision motion capabilities and advances its strategy to provide integrated motion solutions in the robotics, semiconductor, and instrumentation markets.

On June 17, 2022, the Company acquired 100% of the membership interests of Airex, LLC ("Airex"), a privately-owned New Hampshire headquartered developer of high precision electromagnetic components and solutions for the aerospace and defense, life sciences, semiconductor, and commercial industrial applications. Airex combines its patented winding technology with robotic manufacturing to produce linear motors – ironless and iron core, rotary motors, voice coils, wound electromagnetic components and sub-components. Airex expands the Company's motor offerings as well as enhances its quality systems to support broad mission critical defense programs, as well as other high demanding industries.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The purchase price, collectively, for ThinGap and Airex was $16,527, comprised of $8,224 in cash funded through borrowings under the Amended Revolving Credit Facility and $8,303 in Company stock (376,500 shares, of which 29,631 shares are subject to an indemnification holdback, at a weighted average stock price of $22.05). Subsequent to the acquisition dates, the Company made measurement period adjustments to the initial purchase price allocation due to adjustments to closing working capital which resulted in an increase of purchase price of $91, an increase in deferred revenue of $181, and an increase to goodwill of $272. These purchase price allocations are subject to adjustments based on a final determination of certain tax matters.

The Company incurred $257 of transaction costs related to these acquisitions in 2022, which are included in business development on the condensed consolidated statements of income and comprehensive income.

The preliminary allocation of the purchase price paid is based on estimated fair values of the assets acquired and liabilities assumed as of May 24, 2022 for ThinGap and June 17, 2022 for Airex and is, collectively, as follows:

Cash and cash equivalents	$	1,074
Trade receivables		1,295
Inventories		1,686
Other assets, net		636
Property, plant, and equipment		202
Right of use assets		888
Intangible assets		6,000
Goodwill		7,072
Other current liabilities		(574)
Deferred revenue		(426)
Lease liabilities		(888)
Net deferred income tax liabilities		(347)
Net purchase price	$	16,618

The intangible assets acquired consist of customer lists of $3,800, technology of $2,000 and trade names of $200, which are being amortized over weighted average useful lives of 10, 12.5 and 10 years, respectively. Goodwill generated in these acquisitions is related to the assembled workforce, synergies with Allied Motion's other operations that are expected to occur as a result of the combined engineering knowledge, the ability of the operations to integrate products into more fully integrated system solutions and Allied Motion's ability to utilize ThinGap and Airex management knowledge in providing complementary product offerings to the Company's customers.

The operating results of these acquisitions are included in the consolidated financial statements beginning on the date of the acquisition. Revenue included within the consolidated statement of income and comprehensive (loss) income for the year ended December 31, 2022, related to ThinGap and Airex, collectively, was $4,217. Earnings were $337 inclusive of $653 of intangible amortization for the year ended December 31, 2022, respectively.

The goodwill resulting from the ThinGap acquisition is not tax deductible. The goodwill resulting from the Airex acquisition is tax deductible.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

2021 Acquisitions

Spectrum Controls

On December 30, 2021, the Company acquired Spectrum Controls, Inc. ("Spectrum Controls"), a Washington headquartered innovator and manufacturer of industrial Input/Output ("I/O") and universal communications gateway products. Spectrum Controls designs and manufactures a wide range of highly sophisticated I/O modules, marquee displays, and industrial gateways for broad industrial controls applications through partnerships with programmable logic controller ("PLC") manufacturers and distributors. This acquisition provides the Company with the opportunity to enhance its position as a value-added solutions supplier to the industrial automation and industrial controls market.

The purchase price was $68,711, consisting of $44,046 paid at closing, $26,076 in cash funded through borrowings under the Amended Revolving Facility and $17,970 in Company stock (502,512 shares at $35.76 closing stock price on December 29, 2021). The remaining $24,665 of purchase price represents the acquisition date fair value of two remaining payments of $12,500 each to be paid in two equal installments no later than January 4, 2023 and January 4, 2024, respectively, comprised of 50% cash and 50% in Company stock. As of December 31, 2022, $12,500 is included in accrued liabilities and $12,277 is included in other long-term liabilities on the consolidated balance sheet. On January 4, 2023, the contractual payment of both cash and Company stock was made for the first required deferred acquisition payment. Subsequent to the acquisition date, the Company made immaterial measurement period adjustments to the initial purchase price allocation due to adjustments to closing working capital. The allocation of the purchase price is final.

The Company incurred $191 and $93 of transaction costs related to the acquisition of Spectrum Controls in 2022 and 2021, respectively, which are included in business development on the consolidated statements of income and comprehensive income.

The allocation of the purchase price paid for Spectrum Controls is based on fair values of the assets acquired and liabilities assumed of Spectrum Controls as of December 30, 2021 and is as follows (in thousands):

Cash and cash equivalents	$ 96
Trade receivables	3,612
Inventories	4,052
Other assets, net	560
Property, plant and equipment	278
Intangible assets	34,800
Goodwill	26,608
Current liabilities	(1,267)
Net purchase price	$ 68,739

The intangible assets acquired consist of customer lists of $21,000, technology of $13,500, and a trade name of $300, which are being amortized over 18, 10 and 10 years, respectively. Goodwill generated in the acquisition is related to the assembled workforce, synergies between Allied Motion's other operations and Spectrum Controls that are expected to occur as a result of the combined engineering knowledge, the ability of each of the operations to integrate each other's products into more fully integrated system solutions and Allied Motion's ability to utilize Spectrum Controls' management knowledge in providing complementary product offerings to the Company's customers.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The operating results of this acquisition are included in the consolidated financial statements beginning on the date of the acquisition. Revenue and earnings related to Spectrum Controls included within the consolidated statement of income and comprehensive income for the year ended December 31, 2021 were inconsequential.
The goodwill resulting from the Spectrum Controls acquisition is tax deductible.

ORMEC & ALIO

On November 2, 2021, the Company acquired 100% of the outstanding stock of ORMEC Systems Corp. (“ORMEC”), a New York headquartered developer and manufacturer of mission critical electro-mechanical automation solutions and motion control products including multi-axis controls, electronic drives and actuators for the automation and aerospace industries. In addition to its products, ORMEC designs and manufactures complete electro-mechanical and software solutions for custom automation applications. ORMEC strengthens the Company’s technical expertise and adds a higher level of precision motion control systems and solutions to its offerings.

On November 4, 2021, the Company acquired 100% of ALIO Industries (“ALIO”), a Colorado headquartered innovator and manufacturer of advanced linear and rotary motion systems for nano-precision applications. ALIO designs, engineers, and manufactures nano technology motion systems for state-of-the-art applications in silicon photonics, micro assembly, digital pathology, genome sequencing, laser processing and microelectronics. ALIO is well recognized for their technology and expertise in nanometer level positioning. This expertise in high precision positioning and robotic technology solutions is expected to enhance the Company’s portfolio of motion solution offerings.

The purchase price, collectively, for ORMEC and ALIO was $33,458, comprised of $23,333 in cash funded through borrowings under the Amended Revolving Credit Facility, $5,526 in Company stock (150,038 shares at a weighted average stock price of $36.83), and the fair value of contingent consideration of $4,900, offset by a $301 estimated working capital provision. Subsequent to the acquisition dates, the Company made immaterial measurement period adjustments to the initial purchase price allocation due to adjustments to closing working capital. The allocation of purchase price is final.

The Company incurred $130 and $409 of transaction costs related to these acquisitions in 2022 and 2021, respectively, which is included in business development on the consolidated statements of income and comprehensive income.

The allocation of the purchase price paid is based on fair values of the assets acquired and liabilities assumed as of November 2, 2021 for ORMEC and November 4, 2021 for ALIO and is, collectively, as follows (in thousands):

Cash and cash equivalents	$	2,059
Trade receivables		1,416
Inventories		2,802
Other assets, net		88
Property, plant and equipment		669
Right of use assets		1,005
Intangible assets		10,200
Goodwill		20,114
Other current liabilities		(1,028)
Deferred revenue		(2,063)
Lease liabilities		(1,005)
Net deferred income tax liabilities		(662)
Net purchase price	$	33,595

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The intangible assets acquired consist of technology of $5,700, customer lists of $4,000, and trade names of $500, which are being amortized over weighted average useful lives of 11, 6 and 10 years, respectively. Goodwill generated in these acquisitions is related to the assembled workforce, synergies with Allied Motion's other operations that are expected to occur as a result of the combined engineering knowledge, the ability of the operations to integrate products into more fully integrated system solutions and Allied Motion's ability to utilize ORMEC and ALIO's management knowledge in providing complementary product offerings to the Company's customers.

The operating results of these acquisitions are included in the consolidated financial statements beginning on the date of the acquisition. Revenue included within the consolidated statement of income and comprehensive income for the year ended December 31, 2021, related to ORMEC and ALIO, collectively, was $2,063 and earnings were not material. The acquisition of ALIO includes contingent consideration initially measured at a fair value of $4,900. This consideration was reduced by $800 during the year ended December 31, 2022, based upon fair valuation of the contingent consideration, and due to an anticipated shift in the timing of the earnings of the acquired entity, largely reflecting supply chain issues experienced within the industry. Contingent consideration of $4,100 is included in other long-term liabilities as of December 31, 2022. A further explanation of the valuation process is disclosed in Note 1, *Business and Summary of Significant Accounting Policies*. The contingent consideration represents the estimated fair value of the Company's obligations, under a purchase agreement, to make additional payments if certain earnings goals are met through 2024.

The goodwill resulting from the ORMEC acquisition is not tax deductible. The goodwill resulting from the ALIO acquisition is tax deductible.

Pro Forma Financial Information

The following pro forma financial information presents the combined results of operations if the FPH, ThinGap, and Airex acquisitions had occurred as of January 1, 2021 and Spectrum Controls, ORMEC, and ALIO as of January 1, 2020.

	Year ended December 31,		
	2022	2021	2020
Revenues	$ 513,803	$ 470,589	$ 415,577
Income before income taxes	28,032	22,883	17,633

The pro forma information includes certain adjustments, including depreciation and amortization expense, interest expense, and certain other adjustments, together with related income tax effects. The pro forma amounts do not reflect adjustments for anticipated operating efficiencies that the Company expects to achieve as a result of these acquisitions. The pro forma financial information is for informational purposes only and does not purport to present what the Company's results would have been had these transactions actually occurred on the date presented or to project the combined company's results of operations or financial position for any future period.

3. REVENUE RECOGNITION

Performance Obligations

Performance Obligations Satisfied at a Point in Time

The Company considers control of most products to transfer at a single point in time when control is transferred to the customer, generally when the products are shipped in accordance with an agreement and/or purchase order. Control is defined as the ability to direct the use of and obtain substantially all of the remaining benefits of the product.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The Company satisfies its performance obligations under a contract with a customer by transferring goods and services in exchange for generally monetary consideration from the customer. The Company considers the customer's purchase order, and the Company's corresponding sales order acknowledgment as the contract with the customer. For some customers, control, and a sale, is transferred at a point in time when the product is delivered to a customer.

Sales, value add, and other taxes the Company collects concurrent with revenue-producing activities are excluded from revenue.

Nature of Goods and Services

The Company sells component and integrated controlled motion solutions to end customers and original equipment manufacturers ("OEM's") through the Company's own direct sales force and authorized manufacturers' representatives and distributors. The Company's products include brushed and brushless DC motors, brushless servo and torque motors, coreless DC motors, integrated brushless motor-drives, gearmotors, gearing, modular digital servo drives, motion controllers, incremental and absolute optical encoders, active and passive filters for power quality and harmonic issues, and other controlled motion-related products. The Company's target markets include Industrial, Vehicle, Medical, and Aerospace & Defense.

Determining the Transaction Price

The majority of the Company's contracts have an original duration of less than one year. For these contracts, the Company applies the practical expedient and therefore does not consider the effects of the time value of money. For multiyear contracts, the Company uses judgment to determine whether there is a significant financing component. These contracts are generally those in which the customer has made an up-front payment. Contracts that management determines to include a significant financing component are discounted at the Company's incremental borrowing rate. The Company incurs interest expense and accrues a contract liability. As the Company satisfies performance obligations and recognizes revenue from these contracts, interest expense is recognized simultaneously. Management does not have any contracts that include a significant financing component as of December 31, 2022.

Disaggregation of Revenue

The Company disaggregates revenue from contracts with customers into geographical regions and target markets. The Company determines that disaggregating revenue into these categories achieves the disclosure objective to depict how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. As noted in Note 13, *Segment Information*, the Company's business consists of one reportable segment.

The revenues by geography in the table below are revenues derived from the Company's foreign subsidiaries as provided in Note 13. A reconciliation of disaggregated revenue to segment revenue as well as revenue by geographical regions is provided in Note 13. The Company's disaggregated revenues are as follows (in thousands):

	Year ended December 31,		
Target Market	**2022**	**2021**	**2020**
Industrial	$ 193,290	$ 135,440	$ 114,143
Vehicle	130,436	129,835	110,365
Medical	85,113	86,129	83,191
Aerospace & Defense	70,193	31,746	39,711
Other	23,956	20,366	19,284
Total	$ 502,988	$ 403,516	$ 366,694

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Geography	Year ended December 31, 2022	2021	2020
North America (primarily U.S.)	$ 337,768	$ 239,528	$ 214,203
Europe	130,018	129,414	126,985
Asia-Pacific	35,202	34,574	25,506
Total	$ 502,988	$ 403,516	$ 366,694

Contract Balances

When the timing of the Company's delivery of product is different from the timing of the payments made by customers, the Company recognizes either a contract asset (performance precedes customer payment) or a contract liability (customer payment precedes performance). Typically, contracts are paid in arrears and are recognized as receivables after the Company considers whether a significant financing component exists.

The opening and closing balances of the Company's contract liability are as follows (in thousands):

	December 31, 2022	2021
Contract liabilities in accrued liabilities	$ 4,807	$ 2,425
Contract liabilities in other long-term liabilities	19	242
	$ 4,826	$ 2,667

The difference between the opening and closing balances of the Company's contract liabilities primarily results from the timing difference between the Company's performance and the customer's payment as well as balances assumed in acquisitions.

Significant Payment Terms

The Company's contracts with its customers state the final terms of the sale, including the description, quantity, and price of each product or service purchased. Payments are typically due in full within 30-60 days of delivery. Since the customer agrees to a stated rate and price in the contract that do not vary over the contract, the majority of contracts do not contain variable consideration.

Returns, Refunds, and Warranties

In the normal course of business, the Company does not accept product returns unless the item is defective as manufactured. The Company establishes provisions for estimated returns and warranties. All contracts include a standard warranty clause to guarantee that the product complies with agreed specifications.

Practical Expedients

Incremental costs of obtaining a contract - the Company elected to expense the incremental costs of obtaining a contract when the amortization period for such contracts would have been one year or less.

Remaining performance obligations - the Company elected not to disclose the aggregate amount of the transaction price allocated to remaining performance obligations for its contracts that are one year or less, as the revenue is expected to be recognized within the next year.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Time value of money - the Company elected not to adjust the promised amount of consideration for the effects of the time value of money for contracts in which the anticipated period between when the Company transfers the goods or services to the customer and when the customer pays is equal to one year or less.

4. GOODWILL

The change in the carrying amount of goodwill for 2022 and 2021 is as follows (in thousands):

	December 31, 2022	December 31, 2021
Beginning balance	$ 106,633	61,860
Goodwill acquired (Note 2)	21,556	46,431
Impact of measurement period adjustments of acquisitions (Note 2)	291	—
Effect of foreign currency translation	(2,114)	(1,658)
Ending balance	$ 126,366	$ 106,633

The purchase price allocations for FPH, ThinGap, and Airex are not final as of December 31, 2022. Adjustments to these allocations may result in changes to the amounts recorded for goodwill in future periods. The purchase price allocation was finalized for ORMEC, ALIO and Spectrum Controls during 2022.

5. INTANGIBLE ASSETS

Intangible assets on the Company’s consolidated balance sheets consist of the following (in thousands):

		December 31, 2022			December 31, 2021		
	Life	Gross Amount	Accumulated Amortization	Net Book Value	Gross Amount	Accumulated Amortization	Net Book Value
Customer lists	5 - 18 years	$ 112,378	$ (34,377)	$ 78,001	$ 94,079	$ (27,639)	$ 66,440
Trade name	10 - 19 years	15,320	(6,900)	8,421	14,649	(5,927)	8,722
Design and technologies	10 - 15 years	41,212	(8,558)	32,654	34,241	(5,617)	28,624
Total		$ 168,910	$ (49,835)	$ 119,075	$ 142,969	$ (39,183)	$ 103,786

Intangible assets resulting from the 2022 acquisitions of FPH, ThinGap, and Airex were $28,611 (Note 2). Intangible assets resulting from the 2021 acquisitions of ORMEC, ALIO and Spectrum Controls were $45,000 (Note 2). The intangible assets acquired consist of customer lists, technology, and trade names.

Total amortization expense for intangible assets for the years 2022, 2021 and 2020 was $11,169, $6,245 and $5,928, respectively.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

Estimated amortization expense for intangible assets is as follows (in thousands):

	Estimated Amortization Expense
2023	$ 12,206
2024	11,880
2025	11,864
2026	11,766
2027	11,323
Thereafter	60,036
Total estimated amortization expense	$ 119,075

6. STOCK-BASED COMPENSATION PLANS

Stock Incentive Plans

The Company's Stock Incentive Plans provide for the granting of stock awards, including stock options, stock appreciation rights, and restricted stock, to employees and non-employees, including directors of the Company.

As of December 31, 2022, the Company had 848,631 shares of common stock available for grant under stock incentive plans.

Restricted Stock

The following is a summary of restricted stock grants, fair value and performance based awards:

For the year ended December 31,	Unvested restricted stock awards	Weighted average grant date fair value	Awards with performance vesting requirements
2022	182,497	$ 33.21	111,251
2021	109,462	$ 32.06	63,432
2020	240,656	$ 22.34	150,605

The value at the date of award is amortized to compensation expense over the related service period, which is generally three years for time vested grants. Short-term performance based grants can be achieved over a period of one year, and long-term performance grants can be earned through December 31, 2023. Earned grants are then subject to either a 3 year or 5 year service period. Shares of non-vested restricted stock are forfeited if a recipient leaves the Company before the vesting date. Shares that are forfeited become available for future awards. For performance-based awards, the Company assesses the probability of the achievement of the awards during the year and recognizes expense accordingly.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The following is a summary of restricted stock activity during years 2022, 2021 and 2020:

	Number of shares
Balance, December 31, 2019	280,053
Awarded	240,656
Vested	(159,698)
Forfeited	(3,669)
Balance, December 31, 2020	357,342
Awarded	109,462
Vested	(162,419)
Forfeited	(10,808)
Balance, December 31, 2021	293,577
Awarded	182,497
Vested	(156,847)
Forfeited	(14,280)
Balance, December 31, 2022	304,947

The following is a summary of performance based restricted stock activity during years 2022, 2021 and 2020:

	Total performance grants
Outstanding, December 31, 2019	38,214
Awarded	150,605
Performance criteria met	(96,576)
Forfeited	(3,233)
Outstanding, December 31, 2020	89,010
Awarded	63,432
Performance criteria met	(42,290)
Forfeited	(10,229)
Outstanding, December 31, 2021	99,923
Awarded	111,251
Performance criteria met	(97,342)
Forfeited	(9,174)
Outstanding, December 31, 2022	104,658

The performance criteria and forfeitures in the above table did not occur until the Board of Directors approved them during the March 2023, March 2022 and March 2021 meetings.

Share-Based Compensation Expense

During 2022, 2021 and 2020 compensation expense net of forfeitures of $5,073, $4,161 and $3,550 was recorded, respectively. As of December 31, 2022, there was $7,527 of total unrecognized compensation expense related to restricted stock awards, of which approximately $4,902 is expected to be recognized in 2023.

Employee Stock Ownership Plan

The Company sponsors an Employee Stock Ownership Plan ("ESOP") that covers all non-union U.S. employees who work over 1,000 hours per year. The terms of the ESOP require the Company to make an annual contribution equal to the greater of: i) the Board established percentage of pretax income before the contribution (5% in 2022, 2021 and 2020)

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

or ii) the annual interest payable on any loan outstanding to the Company from the ESOP. Company contributions to the Plan accrued for 2022, 2021 and 2020, were $1,248, $1,206 and $988, respectively. These amounts are included in general and administrative costs in the consolidated statements of income and comprehensive income.

Defined Contribution Plan

The Company sponsors the Allied Motion 401(k) Tax Advantaged Investment Plan ("401(k)") which covers substantially all its U.S. based employees. The plan provides for the deferral of employee compensation under Section 401(k) and a discretionary Company match. In 2022, 2021 and 2020 this match was 100% per dollar of the first 3% of participant deferral and 50% per dollar of the next 2% contribution, up to 4% of a total 5% participant deferral. Net costs related to this defined contribution plan were $2,146, $1,672 and $1,774 in 2022, 2021 and 2020, respectively.

Dividends

For the years ended December 31, 2022, 2021 and 2020 a total of $0.100, $0.095 and $0.08 per share on all outstanding shares was declared and paid, respectively. Total dividends paid for the years ended December 31, 2022, 2021 and 2020 were $1,536, $1,371 and $1,160, respectively. Based on the terms of the Company's Credit Agreement, dividends paid to shareholders are acceptable, subject to the Company's compliance with the covenants under the Credit Agreement.

7. DEBT OBLIGATIONS

Debt obligations consisted of the following (in thousands):

	December 31, 2022	December 31, 2021
Long-term Debt		
Revolving Credit Facility, long-term (1)	$ 227,060	$ 159,395
Unamortized debt issuance costs	(625)	(435)
Finance lease obligations - noncurrent	9,019	—
Long-term debt	$ 235,454	$ 158,960

(1) The effective rate of the Revolving Credit Facility is 4.69% at December 31, 2022 including the impact of the Company's interest rate swaps.

Amended Revolving Credit Facility

The Second Amended and Restated Credit Agreement (the "Amended Credit Agreement"), dated as of August 23, 2022, includes a $280 million revolving credit facility (the "Amended Revolving Facility"), increased from $225 million in the previous credit agreement, under which comparative periods are reported. Additionally, the referenced index was amended to be the Term Standard Overnight Financing Rate ("SOFR"), whereas the previous credit agreement utilized the London Interbank Offering Rate (LIBOR) as the referenced interest rate. The Amended Credit Agreement eliminates the previous $75 million accordion feature and maintains the original maturity date of February 2025.

Borrowings under the Amended Revolving Facility bear interest at an annual rate equal to the Adjusted SOFR (as defined in the Amended Credit Agreement) which is subject to a floor of 0.00% plus an appicable rate ranging from 1.00% to 2.25% based on the Company's ratio of total funded indebtedness to consolidated trailing twelve-month EBITDA (the "Total Leverage Ratio"). At December 31, 2022, the applicable SOFR-based borrowing rate was 1.75%. A credit spread adjustment of 0.10% to 0.275% is also carried on the Amended Revolving Facility. In addition, the Company is required to pay a commitment fee of between 0.10% and 0.275% annually on the unused portion of the Amended Revolving Facility, also based on the Company's Total Leverage Ratio. The Amended Revolving Facility is secured by substantially all of the Company's non-realty assets and is fully and unconditionally guaranteed by certain of the Company's subsidiaries.

The Amended Credit Agreement includes covenants and restrictions that limit the Company's ability to incur additional indebtedness, make certain investments, create, incur or assume certain liens, merge, consolidate or sell all or substantially all of its assets and enter into transactions with an affiliate of the Company on other than an arms' length transaction. These covenants, which are described more fully in the Amended Credit Agreement, to which reference is made for a complete statement of the covenants, are subject to certain exceptions. The Amended Credit Agreement contains financial covenants that require that the Company maintain a minimum interest coverage ratio of at least 3.0 to 1.0 at the end of each fiscal quarter. In addition, the Company's Leverage Ratio at the end of any fiscal quarter shall not be greater than 4.0 to 1.0 ratio (reduced to 3.5:1.0 for quarters ending on or after December 31, 2023); provided that the Company may elect to temporarily increase the Leverage Ratio by 0.5x during the twelve-month period following a material acquisition under the Amended Credit Agreement ("acquisition leverage increase"), subject to certain exceptions. The Company was in compliance with all covenants at December 31, 2022.

As of December 31, 2022, the unused Amended Revolving Facility was $52,940. The amount available to borrow may be reduced based upon the Company's debt and EBITDA levels, which impacts its covenant calculations.

Other

The China Credit Facility provides credit of $1,450 (Chinese Renminbi 10,000) ("the China Facility"). The China Facility is a demand revolving facility used for working capital and capital equipment needs at the Company's China operations. The term is annual and may be cancelled at the bank's discretion. The interest rate shall be agreed upon by the Lender and the Borrower before the Utilization Date (as defined in the China Facility) and shall be specified in the Utilization Request (as defined in the China Facility). Collateral for the facility is a guarantee issued by the Company. There were no borrowings under the China Facility during 2022 or 2021.

8. DERIVATIVE FINANCIAL INSTRUMENTS

The Company is exposed to certain risks arising from both its business operations and economic conditions. The Company principally manages its exposures to a wide variety of business and operational risks through management of its core business activities. The Company manages economic risks, including interest rate, and foreign exchange risk primarily through the use of derivative financial instruments.

Beginning in the first quarter of 2021, the Company began entering into foreign currency contracts with 30-day maturities to hedge its short-term balance sheet exposure, primarily intercompany, that are denominated in currencies (Euro, Mexican Peso, New Zealand Dollar, Chinese Renminbi, Swedish Krona, and Canadian Dollar) other than the subsidiary's functional currency and are adjusted to current values using period-end exchange rates. The resulting gains or losses are recorded in other (income) expense, net in the consolidated statements of income and comprehensive income. To minimize foreign currency exposure, the Company had foreign currency contracts with notional amounts of $18,891 at December 31, 2022. The foreign currency contracts are recorded in the consolidated balance sheets at fair value and resulting gains or losses are recorded in other expense (income), net in the consolidated statements of income and comprehensive income. During the year ended December 31, 2022, the Company had losses of $1,109 on foreign currency contracts which is included in other expense (income), net and generally offset the gains or losses from the foreign currency adjustments on the intercompany balances that are also included in other expense (income), net.

The Company's objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company primarily uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount. In February 2017, the Company entered into three interest rate swaps with a combined notional of $40,000 that matured in February 2022. In March 2020, the Company entered into two additional interest rate swaps with a combined notional amount of $20,000 that increased to $60,000 in March 2022 and matures in December 2024. In March 2022 the Company entered into an additional interest rate swap with a notional amount of $40,000 that matures in December 2026. As of December 31, 2022, the Company holds notional amounts of $100,000 in interest rate derivatives.

The changes in the fair value of derivatives designated and that qualify as cash flow hedges is recorded in accumulated other comprehensive income (loss) and is subsequently reclassified into earnings in the period that the hedged forecasted transaction affects earnings. During 2022 and 2021, such derivatives were used to hedge the variable cash flows associated with existing variable-rate debt.

The Company estimates that an additional $3,534 will be reclassified as a reduction to interest expense over the next twelve months. Additionally, the Company does not use derivatives for trading or speculative purposes.

The table below presents the fair value of the Company's derivative financial instruments as well as their classification on the consolidated balance sheets as of December 31, 2022 and 2021 (in thousands):

Derivatives designated as hedging instruments	Balance Sheet Location	Asset Derivatives Fair value as of: December 31, 2022	Asset Derivatives Fair value as of: December 31, 2021
Foreign currency contracts	Prepaid expenses and other assets	$ 48	$ 39
Interest rate products	Other long-term assets	7,236	340
		$ 7,284	$ 379

Derivatives designated as hedging instruments	Balance Sheet Location	Liability Derivatives Fair value as of: December 31, 2022	Liability Derivatives Fair value as of: December 31, 2021
Foreign currency contracts	Accrued liabilities	$ —	$ —
Interest rate products	Accrued liabilities	—	120
		$ —	$ 120

The table below presents the effect of cash flow hedge accounting on other comprehensive (loss) income (OCI) for the years ended December 31, 2022, 2021 and 2020 (in thousands):

Derivatives in cash flow hedging relationships	Amount of pre-tax loss recognized in OCI on derivatives Year ended December 31, 2022	2021	2020
Interest rate products	$ 7,621	$ 1,180	$ (2,163)

Location of gain (loss) reclassified from accumulated OCI into income	Amount of pre-tax gain (loss) reclassified from accumulated OCI into income Year ended December 31, 2022	2021	2020
Interest expense	$ 532	$ (929)	$ (637)

The table below presents the effect of the Company's derivative financial instruments on the consolidated statements of income and comprehensive income for the years ended December 31, 2022, 2021 and 2020 (in thousands):

		Total amounts of income and expense line items presented that reflect the effects of cash flow hedges recorded		
		Year ended December 31,		
Derivatives designated as hedging instruments	**Income Statement Location**	**2022**	**2021**	**2020**
Interest rate products	Interest Expense	$ 7,692	$ 3,236	$ 3,716

The tables below present a gross presentation, the effects of offsetting, and a net presentation of the Company's derivatives as of December 31, 2022 and 2021. The net amounts of derivative assets or liabilities can be reconciled to the tabular disclosure of fair value. The tabular disclosure of fair value provides the location that derivative assets and liabilities are presented on the consolidated balance sheets (in thousands).

***Derivative assets*:**

				Gross amounts not offset in the consolidated balance sheets		
As of December 31, 2022	**Gross amounts of recognized assets**	**Gross amounts offset in the consolidated balance sheets**	**Net amounts of assets presented in the consolidated balance sheets**	**Financial instruments**	**Cash collateral received**	**Net amount**
Derivatives	$ 7,284	$ —	$ 7,284	$ —	$ —	$ 7,284

				Gross amounts not offset in the consolidated balance sheets		
As of December 31, 2021	**Gross amounts of recognized assets**	**Gross amounts offset in the consolidated balance sheets**	**Net amounts of assets presented in the consolidated balance sheets**	**Financial instruments**	**Cash collateral received**	**Net amount**
Derivatives	$ 387	$ 8	$ 379	$ —	$ —	$ 379

Derivative liabilities:

				Gross amounts not offset in the consolidated balance sheets		
As of December 31, 2022	**Gross amounts of recognized liabilities**	**Gross amounts offset in the consolidated balance sheets**	**Net amounts of liabilities presented in the consolidated balance sheets**	**Financial instruments**	**Cash collateral received**	**Net amount**
Derivatives	$ —	$ —	$ —	$ —	$ —	$ —

				Gross amounts not offset in the consolidated balance sheets		
As of December 31, 2021	**Gross amounts of recognized liabilities**	**Gross amounts offset in the consolidated balance sheets**	**Net amounts of liabilities presented in the consolidated balance sheets**	**Financial instruments**	**Cash collateral received**	**Net amount**
Derivatives	$ 120	$ —	$ 120	$ —	$ —	$ 120

The Company has agreements with each of its derivative counterparties that contain a provision where if the Company either defaults or is capable of being declared in default on any of its indebtedness, then the Company could also be declared in default on its derivative obligations.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

9. INCOME TAXES

The provision for income taxes is based on income before income taxes as follows (in thousands):

	For the year ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Domestic	$ 7,707	$ 10,642	$ 8,478
Foreign	15,974	12,471	10,298
Income before income taxes	$ 23,681	$ 23,113	$ 18,776

Components of the total income tax provision (benefit) are as follows (in thousands):

	For the year ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Current provision			
Domestic	$ 5,903	$ 1,866	$ 2,167
Foreign	4,111	3,288	3,485
Total current provision	10,014	5,154	5,652
Deferred provision			
Domestic	(3,915)	649	288
Foreign	193	(6,784)	(807)
Total deferred (benefit) provision	(3,722)	(6,135)	(519)
Income tax provision (benefit)	$ 6,292	$ (981)	$ 5,133

The provision (benefit) for income taxes differs from the amount determined by applying the federal statutory rate as follows:

	For the year ended		
	December 31, 2022	December 31, 2021	December 31, 2020
Tax provision, computed at statutory rate	21.0 %	21.0 %	21.0 %
State tax, net of federal impact	1.3 %	2.2 %	4.2 %
Change in valuation allowance	(0.1)%	7.2 %	0.0 %
Effect of foreign tax rate differences	3.9 %	3.9 %	4.3 %
Permanent items, other	0.2 %	0.2 %	(0.2)%
Section 162(m) compensation	3.1 %	3.0 %	2.2 %
R&D Credit	(3.9)%	(2.8)%	(3.6)%
Effect of Tax Cuts and Jobs Act	0.1 %	1.2 %	(1.3)%
Subpart F income	(0.1)%	(1.0)%	1.3 %
Investment tax credits	0.0 %	(5.6)%	0.0 %
Net operating loss carryforwards	0.0 %	(37.2)%	0.0 %
Unrecognized tax benefits	0.0 %	4.9 %	0.0 %
Other	1.1 %	(1.2)%	(0.6)%
Provision for income taxes	26.6 %	(4.2)%	27.3 %

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The tax effects of significant temporary differences and credit and operating loss carryforwards that give rise to the net deferred tax assets and tax liabilities are as follows (in thousands):

	December 31, 2022	December 31, 2021
Noncurrent deferred tax assets:		
Employee benefit plans	$ 2,122	$ 2,085
Net operating loss and tax credit carryforwards	8,277	9,802
Accrued expenses and reserves	1,672	915
Research and development costs	4,520	—
Other	328	218
Total noncurrent deferred tax assets	16,919	13,020
Valuation allowance	(3,031)	(2,896)
Net noncurrent deferred tax assets:	$ 13,888	$ 10,124
Net noncurrent deferred tax liabilities:		
Property and equipment	$ 3,187	$ 3,238
Goodwill and intangibles	10,944	6,484
Interest rate swap derivatives	1,678	—
Other	142	121
Total noncurrent deferred tax liabilities	$ 15,951	$ 9,843
Net deferred tax asset/(deferred tax liability)	$ (2,063)	$ 281
Presented as follows:		
Noncurrent deferred income tax assets	$ 4,199	$ 5,321
Noncurrent deferred income tax liabilities	(6,262)	(5,040)
Net deferred tax liability	$ (2,063)	$ 281

As of December 31, 2022, the Company has the following gross carryforwards available (in thousands):

Jurisdiction	Tax Attribute	Amount (in thousands)	Begin to expire
U.S. State	Net Operating Losses [(1)]	$ 11,189	2024
International	Net Operating Losses - Unlimited Carryforward [(1)]	$ 21,133	No expiration
U.S. Federal	Foreign Tax Credits	$ 1,003	2028
International	R&D Tax Credits	$ 374	2024
U.S. Federal	R&D Tax Credits	$ 95	2036

(1) Net operating losses (NOL's) are presented as pre-tax amounts.

Realization of the Company's recorded deferred tax assets is dependent upon the Company generating sufficient taxable income in the appropriate tax jurisdictions in future years to obtain benefit from the reversal of net deductible temporary differences and from utilization of net operating losses and tax credit carryforwards. Management considers the scheduled reversal of deferred tax liabilities, projected verifiable future taxable income and tax planning strategies in making this assessment.

In 2022, noncurrent deferred tax assets includes the effects of capitalization and amortization of R&D expenses as required by the 2017 Tax Cuts and Jobs Act. The Company generated excess foreign tax credits in 2017 due to the one-time transition tax required by enactment of the Tax Cuts and Jobs Act in the amount of $910 and foreign tax credits were generated in the amount of $92 as a result of a dividend paid from Canada. The Company determined it is more likely than not that it will not realize a tax benefit from these credits. The Company has incurred net operating losses in certain states with a tax effected benefit of $429 that it is more likely than not will not be realized. Additionally, the Company has carryforwards of net operating losses and tax credits generated in foreign jurisdictions and has determined it is more likely than not it would not realize a tax benefit of $1,600. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed. The Company believes that it is more likely than not that it will realize the benefits of its deferred tax assets, net of valuation allowances as of December 31, 2022.

The Company files income tax returns in various U.S. and foreign taxing jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal and state tax examinations in its major tax jurisdictions for periods before 2019. With few exceptions, the Company is no longer subject to tax examinations in the foreign jurisdictions for periods prior to 2017.

Due to a New Zealand tax legislation change in 2021 allowing for the use of pre-acquisition net operating loss carryforwards to be utilized on the acquirer's future period tax returns, the Company recognized $8,328 of net operating loss carryforwards generated in pre-acquisition periods by the Dynamic Controls New Zealand entities. The net operating loss carryforwards are now available for use by the Company beginning with the New Zealand tax returns filed for the 2020 tax period. The Company evaluated the tax legislation and considered the tax periods open for adjustment by the tax authorities which include the 2016-2020 tax years and has determined it is more likely than not it will not realize a benefit on $1,125 of the net operating loss carryforwards. The Company reduced the unrecognized tax benefit in 2021 as a result of the seller filing its 2020 New Zealand tax return and utilizing $68 of the net operating loss carryforwards. The Company reduced the unrecognized tax benefit in 2022 by $192 as a result of the lapse in the statute of limitations on the 2016 tax return. The Company will adjust this unrecognized tax benefit in light of changing facts and circumstances and with the lapse of the statute of limitations. The lapse of the statute of limitations would be recorded as an adjustment to the provision for income taxes in the period of the statute closure.

The summary of changes to the unrecognized tax benefit for the year ended December 31, 2022 is as follows (in thousands):

		December 31, 2022
Beginning balance	$	1,057
Additions from tax legislation changes for net operating loss carryforwards		—
Reductions related to net operating loss usage on 2020 tax returns		(192)
Currency Translation		(79)
Ending balance	$	786

(1) No other unrecognized tax benefits were recognized in periods prior to the year ended December 31, 2021 that, if recognized, would reduce the effective tax rate.

It is the Company’s policy to include interest and penalties related to income tax liabilities in income tax expense in the consolidated statements of income and comprehensive income. In addition, the Company records uncertain tax positions in accordance with ASC 740. No interest or penalties related to income tax liabilities were recognized for the years ended December 31, 2022, 2021 and 2020.

In general, it is the practice and intention of the Company to reinvest the earnings of its non-domestic subsidiaries in activities outside the United States. Exceptions may be made on a year-by-year basis to repatriate earnings of certain foreign subsidiaries based on cash needs in the United States. In 2021, the Company distributed a portion of these foreign earnings which have been previously taxed in the United States and remitted $236 of foreign withholding taxes.

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

In 2021, the Company made distributions between its German subsidiaries and remitted $1,493 of foreign withholding taxes. No deferred tax liabilities have been recorded for these distributions as the foreign withholding taxes are refundable on the German income tax return filed in 2022. No further withholding taxes are anticipated to be paid in future years related to this distribution and it is not anticipated to be remitted to the United States.

The Company does not intend to distribute the remaining previously taxed earnings resulting from the one-time transition tax under the Tax Cuts and Jobs Act or capital in foreign subsidiaries, and has not recorded any deferred taxes related to such amounts. The remaining excess of the amount for financial reporting over the tax basis of investments in foreign subsidiaries is permanently reinvested, and the determination of any deferred tax liability on this amount is not practicable.

10. LEASES

The Company has operating leases for office space, manufacturing facilities and equipment, computer equipment and automobiles. Many leases include one or more options to renew, some of which include options to extend the leases for a long-term period, and some leases include options to terminate the leases within 30 days. In certain of the Company's lease agreements, the rental payments are adjusted periodically to reflect actual charges incurred for capital area maintenance, utilities, inflation and/or changes in other indexes.

The Company’s finance lease obligations relate to a manufacturing facility. As of December 31, 2022, finance lease assets of $8,839 are included in property, plant, and equipment, net, finance lease obligations of $377 are included in accrued liabilities, and $9,019 are included in long-term debt on the consolidated balance sheet.

For the years ended December 31, 2022 and 2021, the components of operating lease expense were as follows (in thousands):

	December 31, 2022	December 31, 2021
Fixed operating lease expense	$ 5,507	$ 5,105
Variable operating lease expense	187	707
Short-term lease expense	1,246	237
	$ 6,940	$ 6,049

Supplemental cash flow information related to the Company’s operating and finance leases for the years ended December 31, 2022 and 2021 are as follows (in thousands):

	December 31, 2022	December 31, 2021
Cash paid for amounts included in the measurement of operating leases	$ 5,191	$ 5,321
Cash paid for amounts included in the measurement of finance lease obligations	$ 736	$ —
Right of use ("ROU") assets obtained in exchange for operating lease obligations	$ 9,592	$ 2,482
ROU assets obtained in acquisitions for operating lease obligations (Note 2)	$ 5,053	$ 1,005
ROU assets obtained in exchange for finance lease obligations	$ 9,471	$ —

ALLIED MOTION TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

The following table presents weighted average remaining lease term and discount rates related to the Company's operating leases as of December 31, 2022 and 2021:

	December 31,	
	2022	2021
Weighted average remaining lease term (in years)	6.75	6.41
Weighted average discount rate	3.66 %	2.28 %

The following table presents the maturity of the Company's operating and finance lease liabilities as of December 31, 2022 (in thousands):

	Operating Leases	Finance Leases
2023	5,027	799
2024	4,446	815
2025	3,688	831
2026	3,316	848
2027	2,832	867
Thereafter	6,773	8,769
Total undiscounted cash flows	$ 26,082	$ 12,929
Less: present value discount	(3,064)	(3,533)
Total lease liabilities	$ 23,018	$ 9,396

As of December 31, 2022, the Company has entered into leases for building renewal and expansion, with future minimum lease payments of $7,999 that have not yet commenced.

The Company leases certain facilities from companies for which a member of management is a part owner. In connection with such leases, the Company made payments to the lessor of $1,529 and $706 during the years ended December 31, 2022 and 2021, respectively. Future minimum lease payments under these leases as of December 31, 2022 are $13,455.

11. COMMITMENTS AND CONTINGENCIES

Severance Benefit Agreements

As of December 31, 2022, the Company has annually renewable employment agreements with certain of its executive officers. Among other things, the agreements provide for payments and other benefits if the employee's employment terminates under certain circumstances, including the employee's death, disability, voluntary resignation with good reason and involuntary termination without cause, as well as voluntary resignation with good reason and involuntary termination without cause within 90 days prior to or 24 months following a change in control of the Company.

Litigation

The Company is involved in certain actions that have arisen out of the ordinary course of business. Management believes that resolution of the actions will not have a significant adverse effect on the Company's consolidated financial statements.

12. DEFERRED COMPENSATION ARRANGEMENTS

The Company has a deferred compensation arrangement with its Chief Executive Officer. This arrangement provides the Board and its committees with another mechanism to provide pay for performance based incentive compensation. It also allows for the Chief Executive Officer to make certain deferrals into the plan. The amount of the liability is comprised of liabilities from previous contributions. Amounts accrued relating to previous periods are $3,870 and $4,636 as of

December 31, 2022 and 2021, respectively, which is included in other long-term liabilities in the consolidated balance sheets at December 31, 2022 and 2021.

13. SEGMENT INFORMATION

The Company operates in one segment for the manufacture and marketing of controlled motion products and solutions for OEM and end user applications. The Company's chief operating decision maker has been identified as the Chief Executive Officer and President, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. Existing guidance, which is based on a management approach to segment reporting, establishes requirements to report selected segment information quarterly and to report annually entity-wide disclosures about products and services, major customers, and the countries in which the entity holds material assets and reports revenue.

Financial information related to the foreign subsidiaries is summarized below (in thousands):

	For the year ended December 31,		
	2022	2021	2020
Revenues derived from foreign subsidiaries	$ 165,220	$ 163,988	$ 152,491

Identifiable foreign fixed assets were $34,879 and $32,807 as of December 31, 2022 and 2021, respectively.

Revenues derived from foreign subsidiaries and identifiable assets outside of the United States are primarily attributable to Europe, China, Mexico and New Zealand.

Sales to customers outside of the United States by all subsidiaries were $214,017, $185,288 and $171,847 during 2022, 2021 and 2020, respectively.

For 2022, 2021 and 2020 one customer accounted for 11%, 15% and 15% of revenues, respectively, and as of December 31, 2022 and 2021 for 8% and 10% of trade receivables, respectively.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

Item 9A. Controls and Procedures.

Conclusion regarding the effectiveness of disclosure controls and procedures.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer (principal accounting officer), evaluated the effectiveness of our 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”)) as of December 31, 2022. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on management’s evaluation of our disclosure controls and procedures as of December 31, 2022, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective.

Management’s report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in “Internal Control — Integrated Framework (2013)” issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In making our assessment of the Company’s internal control over financial reporting as of December 31, 2022, we excluded from our assessment the internal control over financial reporting at ThinGap, Inc. (“ThinGap”), which was acquired on May 24, 2022, FPH Group Inc. and Transtar International, LLC (collectively, “FPH”), which was acquired on May 30, 2022, and Airex, LLC (“Airex”), which was acquired on June 17, 2022 and whose financial statements collectively constitute 26% and 11% of net and total assets, respectively, 3% of revenues, and 5% of net income of the consolidated financial statement amounts as of and for the year ended December 31, 2022.

Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its attestation report which is included below.

Our system of internal control over financial reporting was designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance and 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.

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2022, there have been no changes in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Allied Motion Technologies Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Allied Motion Technologies Inc. and subsidiaries (the “Company”) as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated March 7, 2023 expressed an unqualified opinion on those consolidated financial statements.

As described in Management’s Report on Internal Control Over Financial Reporting, management excluded from its assessment the internal control over financial reporting at ThinGap, Inc. (“ThinGap”), which was acquired on May 24, 2022, FPH Group Inc. and Transtar International, LLC (collectively, “FPH”), which was acquired on May 30, 2022, and Airex, LLC (“Airex”), which was acquired on June 17, 2022, and whose financial statements collectively constitute 26% and 11% of net and total assets, respectively, 3% of revenues, and 5% of net income of the consolidated financial statement amounts as of and for the year ended December 31, 2022. Accordingly, our audit did not include the internal control over financial reporting at ThinGap, FPH, or Airex.

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/ Deloitte & Touche LLP
Williamsville, New York
March 7, 2023

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The Company's definitive proxy statement which will be filed with the SEC pursuant to Registration 14A within 120 days of the end of the Company's fiscal year is incorporated herein by reference.

Item 11. Executive Compensation.

The Company's definitive proxy statement which will be filed with the SEC pursuant to Registration 14A within 120 days of the end of the Company's fiscal year is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The Company's definitive proxy statement which will be filed with the SEC pursuant to Registration 14A within 120 days of the end of the Company's fiscal year is incorporated herein by reference.

Equity Compensation Plan Information

The following table shows the equity compensation plan information of the Company at December 31, 2022:

Plan category	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	848,631

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The Company's definitive proxy statement which will be filed with the SEC pursuant to Registration 14A within 120 days of the end of the Company's fiscal year is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

The Company's definitive proxy statement which will be filed with the SEC pursuant to Registration 14A within 120 days of the end of the Company's fiscal year is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

a) The following documents are filed as part of this Report:

1. Consolidated Financial Statements

a) Consolidated Balance Sheets as of December 31, 2022 and December 31, 2021.

b) Consolidated Statements of Income and Comprehensive Income for the years ended December 31, 2022, 2021, and 2020.

c) Consolidated Statements of Stockholders' Equity for the years ended December 31, 2022, 2021, and 2020.

d) Consolidated Statements of Cash Flows for the years ended December 31, 2022, 2021, and 2020.

e) Notes to Consolidated Financial Statements.

f) Reports of Independent Registered Public Accounting Firm (PCAOB ID No. 34).

2. Financial Statement Schedules

Financial statement schedules have been omitted because either they are not applicable, or the required information is included in the financial statements or the notes thereto.

3. Exhibits

Exhibit No.	Subject
3.1	Amended and Restated Articles of Incorporation of the Company. (Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed June 16, 2010.)
3.2	Bylaws of the Company. (Incorporated by reference to Exhibit 3 to the Company's Form 8-K filed November 4, 2019.)
4.1	Description of Securities of Allied Motion Technologies Inc. (filed herewith.)
10.1*	2007 Stock Incentive Plan as amended. (Incorporated by reference to Exhibit 10 to the Company's Registration Statement on Form S-8 filed with the SEC on March 19, 2014.)
10.2*	2017 Omnibus Incentive Plan. (Incorporated by reference to Exhibit A to the Company's Proxy Statement dated April 4, 2017.)
10.3*	Employment Agreement between Allied Motion Technologies Inc. and Richard S. Warzala, as Amended and Restated, effective March 22, 2016. (Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended March 31, 2016.)
10.4*	Change of Control Agreement between Allied Motion Technologies Inc. and Richard S. Warzala, as Amended and Restated, effective December 22, 2008. (Incorporated by reference to Exhibit 10.7 to the Company's Form 10-K for the year ended December 31, 2008.)

Exhibit No.	Subject
10.5*	Amendment to Employment Agreement and Change of Control Agreement for Richard S. Warzala dated and effective as of December 28, 2017 between Allied Motion Technologies Inc. and Richard S. Warzala. (Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed January 3, 2018.)
10.6*	Second Amendment to Employment Agreement for Richard S. Warzala dated and effective as of August 6, 2020 between Allied Motion Technologies Inc. and Richard S. Warzala. (Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed August 11, 2020.)
10.7*	Third Amendment to Employment Agreement for Richard S. Warzala dated and effective as of March 17, 2021 between Allied Motion Technologies Inc. and Richard S. Warzala. (Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended March 31, 2021.)
10.8*	Deferred Compensation Plan, as Amended and Restated, effective May 31, 2011. (Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 2011.)
10.9*	Form of Employment Agreement (Entered into with Michael R. Leach, Robert P. Maida, Ashish R. Bendre and Geoffrey C. Rondeau each dated March 17, 2021.) (Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed March 23, 2021.)
10.10*	Managing Director's Contract of Employment between Heidrive GmbH and Helmut Pirthauer dated December 3, 2016. (Incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed March 23, 2021.)
10.11*	First Amendment to Managing Director's Contract of Employment between Heidrive GmbH and Helmut Pirthauer dated March 12, 2018. (Incorporated by reference to Exhibit 10.4 to the Company's Form 8-K filed March 23, 2021.)
10.12*	Second Amendment to Managing Director's Contract of Employment between Heidrive GmbH and Helmut Pirthauer dated March 18, 2021. (Incorporated by reference to Exhibit 10.5 to the Company's Form 8-K filed March 23, 2021.)
10.13*	Director Compensation Program, Stock Ownership Requirements and Stock-in-Lieu of Cash Retainer Plan (Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 2021.)
10.14	Second Amended and Restated Credit Agreement dated as of August 23, 2022 among Allied Motion Technologies Inc. and Allied Motion Technologies B.V. as Borrowers, HSBC Bank USA, National Association, as Administrative Agent, the lenders from time to time party thereto, and HSBC Bank USA, National Association, KeyBank National Association, Wells Fargo Bank, National Association and JPMorgan Chase Bank, N.A., as Joint Lead Arrangers (Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed August 29, 2022).
21	List of Subsidiaries (filed herewith).
23.1	Consent of Deloitte & Touche LLP (filed herewith).
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

Exhibit No.	Subject
32.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.1 SCH	Inline XBRL Taxonomy Extension Schema Document *(filed herewith)*.
101.2 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document *(filed herewith)*.
101.3 DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document *(filed herewith)*.
101.4 LAB	Inline XBRL Taxonomy Extension Label Linkbase Document *(filed herewith)*.
101.5 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document *(filed herewith)*.
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in exhibits 101.*) *(filed herewith)*.

* Denotes management contract or compensatory plan or arrangement.

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.

ALLIED MOTION TECHNOLOGIES INC.

By: /s/ MICHAEL R. LEACH
Michael R. Leach
Senior Vice President & Chief Financial Officer
Date: March 7, 2023

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 in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ RICHARD S. WARZALA Richard S. Warzala	President, Chief Executive Officer and Chairman of the Board	March 7, 2023
/s/ MICHAEL R. LEACH Michael R. Leach	Senior Vice President & Chief Financial Officer	March 7, 2023
/s/ RICHARD D. FEDERICO Richard D. Federico	Lead Director of the Independent Directors	March 7, 2023
/s/ ROBERT B. ENGEL Robert B. Engel	Director	March 7, 2023
/s/ STEVEN C. FINCH Steven C. Finch	Director	March 7, 2023
/s/ JAMES J. TANOUS James J. Tanous	Director	March 7, 2023
/s/ NICOLE R. TZETZO Nicole R. Tzetzo	Director	March 7, 2023
/s/ MICHAEL R. WINTER Michael R. Winter	Director	March 7, 2023

ALLIED MOTION TECHNOLOGIES INC.
DESCRIPTION OF CAPITAL STOCK

The following summary of our capital stock is subject to and qualified by the provisions of our Amended and Restated Articles of Incorporation dated June 10, 2010 (“Articles of Incorporation”) and our By-laws dated October 31, 2019 (“By-laws”) copies of which are incorporated herein by reference. Additionally, the Colorado Business Corporation Act (the “CBCA”), also affects the terms of our capital stock.

Authorized Capitalization

Our authorized capital stock consists of 50,000,000 authorized shares of common stock, no par value per share (“Common Stock”), and 5,000,000 shares of preferred stock, $1 par value per share (“Preferred Stock”). As of the close of business on March 7, 2023, 16,067,289 of Common Stock were issued and outstanding and no shares of Preferred Stock were issued and outstanding. Updates to the number of shares outstanding will be made on the cover page of our annual or quarterly reports for subsequent fiscal years or fiscal quarters that we file with the Securities and Exchange Commission.

Voting Rights

Except as otherwise provided for any series of Preferred Stock, all voting rights are vested in the holders of Common Stock. Each holder of Common Stock has one vote for each share held on each matter to be voted on by our shareholders. There is no cumulative voting in the election of directors.

Dividends

After all accumulated and unpaid dividends required to be paid upon any shares of Preferred Stock for all previous dividend periods have been paid or set apart, and after or concurrently with the setting aside of any and all amounts then required to be set aside for any sinking fund obligation, then dividends may be declared upon and paid to the holders of Common Stock.

Rights Upon Liquidation

In the event of voluntary or involuntary liquidation or dissolution of Allied Motion, after payment in full of all amounts required to be paid to the holders of the Preferred Stock, the holders of Common Stock are entitled to share ratably in all remaining assets of Allied Motion.

Other Matters

There are no cumulative voting rights while our Common Stock is listed on a national securities exchange, such as Nasdaq. Our Common Stock does not carry any redemption rights or any preemptive rights enabling a holder to subscribe for, or receive shares of, any class of our

Common Stock or any other securities convertible into shares of any class of our Common Stock. All outstanding shares of Common Stock are fully paid and non-assessable.

Trading Market

The Common Stock is registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and is listed on the NASDAQ Global Select Market under the symbol “AMOT”. American Stock Transfer & Trust Company serves as our transfer agent.

Relationship to Preferred Stock

The rights of a holder of shares of Common Stock will be subject to, and may be adversely affected by, the rights of holders of Preferred Stock that may be issued in the future. Our board of directors has the authority to divide any or all of the shares of Preferred Stock into, and to authorize the issuance of, one or more series of Preferred Stock. Before issuance of shares of each series, our board of directors is required to fix for each such series, subject to the provisions of the CBCL and the Articles of Incorporation, the powers, designations, preferences and other special rights of such series, including such provisions as may be desired concerning voting, redemption, dividends, dissolution or the distribution of assets, conversion or exchange, and such other matters as may be fixed by resolution of the board of directors.

Certain Provisions Affecting Control of Our Company

General. Certain provisions of our Articles of Incorporation, By-laws and the CBCL operate with respect to extraordinary corporate transactions, such as mergers, reorganizations, tender offers, sales or transfers of substantially all of our assets or our liquidation of the Company, and could have the effect of delaying or making more difficult a change in control of our company in certain circumstances.

Election and Removal of Directors. Our Articles of Incorporation and By-laws require that directors may be removed without cause only with the approval of holders of two-thirds of the voting power of our outstanding capital stock entitled to vote in the election of directors. Under our Articles of Incorporation and By-laws, any vacancy on our board of directors, including vacancies resulting from an increase in the number of directors, may be filled by a majority of the remaining directors in office. Our By-laws authorize up to nine members on our board of directors; provided that the maximum number may be increased from time to time by an amendment to the By-laws. The board of directors may, pursuant to a resolution adopted by a majority of the entire board, increase the size of our board up to the maximum number directors permitted under the By-laws and designate the directors to fill the vacancies.

Special Meeting of Shareholders. Under our By-laws and the CBCA, special meetings of our shareholders may be called by our president or the board of directors or upon written demand by the holders of shares representing at least ten percent of all votes entitled to be cast on any issue proposed to be considered at the meeting.

Requirements for Advance Notice of Shareholder Nominations and Proposals. Our By-laws establish advance notice procedures with respect to shareholder proposals and the nomination of candidates for election of directors. These procedures may impede shareholders' ability to bring matters before a meeting of shareholders or make nominations for directors at a meeting of shareholders.

Shareholder Action by Written Consent. Our By-laws require that actions by our shareholders without a meeting must be in writing and signed by each shareholder entitled to vote on such action.

Approval of Sale of Assets; Mergers. Under our Articles of Incorporation, the sale, lease, exchange or other disposition of all or substantially all of our property and assets must be authorized or ratified by the affirmative vote of the holders of at least two-thirds of the capital stock then issued and outstanding, unless any class or series of stock is entitled to vote thereon as a class, in which event the authorization requires the affirmative vote of the holders of two-thirds of the shares of each class of shares entitled to vote as a class on the transaction. Under our Articles of Incorporation and Colorado law, a merger with or into us must be approved by at least two-thirds of the voting power of each class or series of capital stock entitled to vote as a group on the merger.

Limitations on Liability. Our Articles of Incorporation provide that no person who is or was a director will be personally liable to us or to our shareholders for monetary damages for breach of fiduciary duty as a director, subject to certain exceptions under the CBCA. Our By-Laws also provide for the indemnification of our directors and officers to the fullest extent authorized by the CBCA. Under the CBCA, a director may be paid expenses in advance of any proceeding for which indemnification may be payable, subject to certain conditions, including delivery to us of an undertaking by or on behalf of the director or officer to repay all amounts so paid in advance if it is ultimately determined that the director or officer is not entitled to be indemnified. We have also obtained policies of directors' and officers' liability insurance. These policies insure our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances. The existence of such limitation on liability, indemnification and insurance may impede a change of control of us to the extent that a hostile acquirer seeks to litigate its contest for control with our directors and officers.

EXHIBIT 21

LIST OF SUBSIDIARIES

1000212261 Ontario Inc., incorporated in Ontario, Canada

Airex, LLC, a limited liability company, incorporated in New Hampshire

Allied Motion Changzhou Motors Company, Ltd., incorporated in China

Allied Motion Changzhou Trading Co. Ltd., incorporated in China

Allied Motion Canada Inc., incorporated in Ontario, Canada

Allied Motion Christchurch, a limited liability company, incorporated in New Zealand

Allied Motion Dordrecht BV, incorporated in The Netherlands

Allied Motion Portugal Lda, incorporated in Portugal

Allied Motion Stockholm AB, incorporated in Sweden

Allied Motion Twinsburg, LLC, a limited liability company, incorporated in Delaware

Alio GmbH, a German limited liability company, incorporated in Germany

Alio Industries LLC, a limited liability company, incorporated in Colorado

Dynamic Connect (Suzhou) Hi-Tech Electronics Co. Ltd, incorporated in China

Dynamic Controls Suzhou Holdings New Zealand, incorporated in New Zealand

Dynamic Controls, incorporated in New Zealand

Dynamic Europe Limited, incorporated in the United Kingdom

Emoteq Corporation, incorporated in Colorado

FPH Group Inc., incorporated in Ontario, Canada

Globe Motors de Mexico, S.A. de C.V., incorporated in Mexico

Globe Motors, Inc., incorporated in Delaware

Heidrive GmbH, a German limited liability company, incorporated in Germany

Heidrive s.r.o., a Czech limited liability company, incorporated in Czech Republic

Kinetic Machine Development, LLC, a limited liability company, incorporated in New York

Motor Products Corporation, incorporated in Delaware

Ormec Systems Corp, incorporated in New York

Pasotec GmbH, a German limited liability company, incorporated in Germany

Spectrum Controls, incorporated in Washington

Stature Electric, Inc., incorporated in Pennsylvania

TCI, LLC, a limited liability company, incorporated in Wisconsin

ThinGap, Inc., incorporated in Delaware

Transtar International, LLC, a limited liability company, incorporated in Michigan

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-149279, 333-155889, 333-170563, 333-187369, and 333-217654 on Form S-8, and Registration Statement Nos. 333-119090 and 333-259840 on Form S-3 of our reports dated March 7, 2023, relating to the financial statements of Allied Motion Technologies Inc. and the effectiveness of Allied Motion Technologies Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

Williamsville, New York
March 7, 2023

EXHIBIT 31.1

CERTIFICATION

I, Richard S. Warzala, certify that:

1. I have reviewed this annual report on Form 10-K of Allied Motion Technologies Inc. (the “registrant”);

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 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. 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 controls over financial reporting.

Date: March 7, 2023

/s/ RICHARD S. WARZALA
Richard S. Warzala
President, Chief Executive Officer and Chairman of the Board

EXHIBIT 31.2

CERTIFICATION

I, Michael R. Leach, certify that:

1. I have reviewed this annual report on Form 10-K of Allied Motion Technologies Inc. (the “registrant”);

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 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. 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 controls over financial reporting.

Date: March 7, 2023

/s/ MICHAEL R. LEACH
Michael R. Leach
Senior Vice President & Chief Financial Officer

EXHIBIT 32.1

Certification of Periodic Financial Reports
Pursuant to 18 U.S.C. Section 1350

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Allied Motion Technologies Inc. (the “Company”) certifies to his knowledge that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2022 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 that Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 7, 2023

/s/ RICHARD S. WARZALA
Richard S. Warzala
President, Chief Executive Officer and Chairman of the Board

EXHIBIT 32.2

Certification of Periodic Financial Reports
Pursuant to 18 U.S.C. Section 1350

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Allied Motion Technologies Inc. (the “Company”) certifies to his knowledge that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2022 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 that Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 7, 2023

/s/ MICHAEL R. LEACH
Michael R. Leach
Senior Vice President & Chief Financial Officer