

**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, 2020

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 001-10716

TRIMAS CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or
Organization)

38-2687639

(IRS Employer Identification No.)

38505 Woodward Avenue, Suite 200

Bloomfield Hills, Michigan 48304

(Address of Principal Executive Offices, Including Zip Code)

(248) 631-5450

(Registrant's telephone number, including area code)

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

<u>Title of Each Class:</u>	<u>Trading symbol(s)</u>	<u>Name of Each Exchange on Which Registered:</u>
Common stock, \$0.01 par value	TRS	The NASDAQ Stock Market LLC

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 definition of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting common equity held by non-affiliates of the Registrant as of June 30, 2020 was approximately \$1.0 billion, based upon the closing sales price of the Registrant's common stock, \$0.01 par value, reported for such date on the NASDAQ Global Select Market. For purposes of this calculation only, directors, executive officers and the principal controlling shareholder or entities controlled by such controlling shareholder are deemed to be affiliates of the Registrant.

As of February 19, 2021, the number of outstanding shares of the Registrant's common stock, \$0.01 par value, was 43,178,165 shares.

Portions of the Registrant's Proxy Statement for the 2021 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein.

TRIMAS CORPORATION INDEX

	<u>Page No.</u>
Forward-Looking Statements	3
Trademarks and Service Marks	3
PART I.	
Item 1.	Business
Item 1A.	Risk Factors
Item 1B.	Unresolved Staff Comments
Item 2.	Properties
Item 3.	Legal Proceedings
Item 4.	Mine Safety Disclosures
Supplementary Item.	Information about our Executive Officers
PART II.	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities
Item 6.	Selected Financial Data
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk
Item 8.	Financial Statements and Supplementary Data
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
Item 9A.	Controls and Procedures
Item 9B.	Other Information
PART III.	
Item 10.	Directors, Executive Officers and Corporate Governance
Item 11.	Executive Compensation
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters
Item 13.	Certain Relationships and Related Transactions, and Director Independence
Item 14.	Principal Accountant Fees and Services
PART IV.	
Item 15.	Exhibits and Financial Statement Schedules
Item 16.	Form 10-K Summary
Signatures	99

Forward-Looking Statements

This report may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 about our financial condition, results of operations and business. These forward-looking statements can be identified by the use of forward-looking words, such as “may,” “could,” “should,” “estimate,” “project,” “forecast,” “intend,” “expect,” “anticipate,” “believe,” “target,” “plan” or other comparable words, or by discussions of strategy that may involve risks and uncertainties.

These forward-looking statements are subject to numerous assumptions, risks and uncertainties which could materially affect our business, financial condition or future results including, but not limited to: the severity and duration of the ongoing coronavirus (“COVID-19”) pandemic on our operations, customers and suppliers, as well as related actions taken by governmental authorities and other third parties in response, each of which is uncertain, rapidly changing and difficult to predict; general economic and currency conditions; material and energy costs; risks and uncertainties associated with intangible assets, including goodwill or other intangible asset impairment charges; competitive factors; future trends; our ability to realize our business strategies; our ability to identify attractive acquisition candidates, successfully integrate acquired operations or realize the intended benefits of such acquisitions; information technology and other cyber-related risks; the performance of our subcontractors and suppliers; supply constraints; market demand; intellectual property factors; litigation; government and regulatory actions, including, without limitation, climate change legislation and other environmental regulations, as well as the impact of tariffs, quotas and surcharges; our leverage; liabilities imposed by our debt instruments; labor disputes; changes to fiscal and tax policies; contingent liabilities relating to acquisition activities; the disruption of operations from catastrophic or extraordinary events, including natural disasters and public health crises; the potential impact of Brexit; our future prospects; and other risks that are discussed in Part I, Item 1A, “Risk Factors.” The risks described in this report are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deemed to be immaterial also may materially adversely affect our business, financial position and results of operations or cash flows.

The cautionary statements set forth above should be considered in connection with any subsequent written or oral forward-looking statements that we or persons acting on our behalf may issue. We caution readers not to place undue reliance on the statements, which speak only as of the date of this report. We do not undertake any obligation to review or confirm analysts' expectations or estimates or to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events, except as required by law.

We disclose important factors that could cause our actual results to differ materially from our expectations implied by our forward-looking statements under Part II, Item 7, “Management's Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere in this report. These cautionary statements qualify all forward-looking statements attributed to us or persons acting on our behalf. When we indicate that an event, condition or circumstance could or would have an adverse effect on us, we mean to include effects upon our business, financial and other conditions, results of operations, prospects and ability to service our debt.

Trademarks and Service Marks

We own or have rights to trademarks, service marks or trade names that we use in connection with the operation of our business. Solely for convenience, some of the copyrights, trademarks, service marks and trade names referred to in this Annual Report on Form 10-K are listed without the ©, ® and ™ symbols, but we will assert, to the fullest extent under applicable law, our rights to our copyrights, trademarks, service marks, trade names and domain names. The trademarks, service marks and trade names of other companies appearing in this Annual Report on Form 10-K are, to our knowledge, the property of their respective owners.

PART I

Item 1. Business

Overview

TriMas is a diversified manufacturer and provider of products for customers primarily in the consumer products, aerospace and industrial markets. Our wide range of innovative product solutions are engineered and designed to solve application-specific challenges that our customers face. We believe our businesses share important and distinguishing characteristics, including: well-recognized and leading brand names in the focused markets we serve; innovative product technologies and features; customer approved processes and qualified products; established distribution networks; relatively low ongoing capital investment requirements; strong cash flow conversion and long-term growth opportunities. With approximately 3,200 employees in eleven countries, we manufacture and supply products globally to a wide range of companies, with nearly 75% of our 2020 revenue generated from sales into North America.

During 2020, our net sales were \$770.0 million, operating loss was \$88.3 million, which included non-cash goodwill and indefinite-lived intangible asset impairment pre-tax charges of approximately \$134.6 million in the Aerospace segment, and net cash provided by operating activities was \$127.4 million.

On December 20, 2019, we completed the previously announced divestiture of our Lamons business ("Lamons"), a transaction entered into on November 1, 2019 with an investment fund sponsored by First Reserve. Lamons was sold for approximately \$137 million in cash. The financial results of Lamons were previously reported within our Specialty Products segment, and are presented as discontinued operations for all periods presented in the financial statements attached hereto.

Our Competitive Strengths

Our operations are reported in three segments: Packaging, Aerospace and Specialty Products. We believe TriMas is uniquely positioned because of a number of competitive strengths, including:

- *Well-Recognized and Established Brands.* Our main brands include Rieke®, Affaba & Ferrari™, Taplast™ and Rapak® (reported in Packaging); TriMas Aerospace™, Monogram Aerospace Fasteners™, Allfast Fastening Systems®, Mac Fasteners™, RSA Engineered Products and Martinic Engineering™ (reported in Aerospace); and Norris Cylinder™ and Arrow® Engine Company (reported in Specialty Products). We believe each of our go-to-market brands are well-recognized and firmly established in the focused markets we serve. We believe our brands represent high standards and a commitment to quality and service that our customers rely on when they make their sourcing decisions.
- *Innovative and Proprietary Manufacturing and Product Technologies.* We believe each of our businesses is well-positioned through years of refined manufacturing know-how, innovative product development, application engineering and solutions design. We believe our manufacturing competencies and installed capital base would be difficult and costly to replicate, providing us an advantage. We continue to place a priority on investing in innovation to protect and enhance our product designs, brand names and manufacturing methods.
- *Customer-Focused Solutions and Long-Term Customer Relationships.* We work collaboratively with our customers to design new product applications that help satisfy rapidly changing preferences in the consumer product marketplace. As a recognized leader in many of our markets, customers partner with us during both the product development and production life cycle. These ongoing relationships, often developed over decades, coupled with our expertise in innovation and application engineering, position us to win new and replacement business with our customers when they launch new products or programs. Customers look to TriMas' businesses for these product innovations because of our long-standing, trusted relationships.
- *Well-Established, Extensive Distribution Channels.* Each of our businesses provides products through established distribution channels that cater to the specific needs of our customers' purchasing preferences. We developed many of these channels over decades, and believe they are a competitive differentiator for us across the markets we serve. In many cases, we provide products directly to our end markets through our locations, while in other cases, we supply to distribution companies that provide our customers with flexible purchasing solutions.

- *TriMas Business Model.* We implemented the TriMas Business Model ("TBM") in late 2016 to improve the management, performance and oversight of our businesses. The TBM is the framework that provides a platform of standards across TriMas, which allows the executive management team to communicate how we plan, budget, measure, review, incent and reward our employees. It provides the foundation for determining our priorities, executing our growth and productivity initiatives, and allocating capital and resources. Through the TBM, we set near- and long-term performance objectives and goals, including safety, financial, and talent development, measure these against defined objectives, and utilize a reliable communication and escalation process that provides for flexibility and adjustments if market expectations change. We believe the TBM enhances connectivity between our operations, and allows us to benefit from sharing best practices across each of our businesses. We believe that the TBM, through a culture of Kaizen and continuous improvement, helps drive long-term improvement in our performance. Since implementation, we have rationalized manufacturing, warehousing and office locations, streamlined fixed expenses and selling, general and administrative expenses in certain of our businesses, increased our focus on optimizing inventory levels and improved certain of our manufacturing processes. We believe actions driven by the TBM have provided a benefit to us and have augmented our cash conversion characteristics and performance overall. We will continue to rely on the TBM to drive continuous improvement and to unlock TriMas' value potential.

Our Growth Strategy

Guided by our experienced management team and our commitment to operational excellence, we are focused on the following components that comprise our core growth strategy:

- *Leverage the TriMas Business Model to Drive Performance.* A key tenet of the TBM is our commitment to operational excellence and continuous improvement. We adopted the use of Kaizen methodology within our operations, which is predicated on engaging our employees to improve all aspects of our businesses. We believe our operating performance will continue to benefit from the use of Kaizen as a means to drive our decision-making processes. In addition to continuous improvement, the TBM is also focused on environmental, health and safety, annual goal setting and measurement, flawless launches and talent development.
- *Accelerate Organic Growth through Innovation.* We continue to invest in organic growth in our most compelling market segments with the highest long-term return potential. We intend to leverage our brands, expand our product offerings to current and new customers, and introduce innovative products to meet our customers' needs and help solve their challenges. We believe our disciplined approach will allow us to defend and expand our product offerings, and grow our business over the longer term. In addition to product innovation, we also value process innovation and believe we can solidify our customer relationships using new innovative processes and manufacturing "know-how" to improve our quality, speed to market and overall competitiveness, increasing customer satisfaction, as well as our performance.
- *Expand our Core Platforms through Strategic Acquisitions.* We believe that TriMas has opportunities to grow through strategic acquisitions that enhance the strengths of our core businesses. Our primary focus is on acquisition candidates to build out our Packaging and Aerospace platforms, as we believe the markets they serve offer the highest long-term growth and performance profile. We typically seek "bolt-on" acquisitions, in which we acquire another industry participant or adjacent product lines that expand our existing product offerings, gain access to new customers, end markets and distribution channels, expand our geographic footprint and/or capitalize on scale and cost efficiencies.
- *Drive Enhanced Cash Conversion.* We use the TBM to drive management's decision-making processes to achieve our annual growth and profitability targets, as well as drive our businesses toward achieving market-leading returns and cash flow conversion. We believe our commitment to having well-defined strategies in place, setting and executing against annual goals and long-range targets, operating in a data-driven environment, and awarding our team on annual cash flow achievement will allow us to grow our businesses and enhance our cash flow and related cash conversion. We believe we have the ability to generate substantial cash flow for reinvestment in our businesses, strategic acquisitions and other capital allocation actions consistent with our long-term financial goals.

Our Reportable Segments

We report the results of our operations in three segments, which had net sales and operating profit/loss for the year ended December 31, 2020 as follows: Packaging (net sales: \$488.3 million; operating profit: \$94.0 million), Aerospace (net sales: \$167.7 million; operating loss: \$133.4 million, which includes non-cash goodwill and indefinite-lived intangible asset impairment charges) and Specialty Products (net sales: \$113.9 million; operating profit: \$4.4 million). For information pertaining to the net sales and operating profit attributed to our segments, refer to Note 22, "*Segment Information*," included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K.

Effective with the first quarter of 2020, we reported our machined components operations in Stanton, California, and Tolleson, Arizona, as part of the Aerospace segment. The operations were previously reported in the Specialty Products segment. The move of these operations into our Aerospace segment facilitated a more rapid approach to achieving anticipated synergies from the February 2020 RSA Engineered Products acquisition, allowing the Company to better leverage the machining competencies and resources across its aerospace businesses.

Each of our segments is described in more detail on the following pages.

Packaging (63% of 2020 net sales)

TriMas' Packaging segment consists primarily of the Rieke, Affaba & Ferrari, Taplast and Rapak brands. We believe our Packaging segment is a leading designer and manufacturer of specialty, highly-engineered polymeric and steel closure and dispensing systems for a range of end markets, including consumer packaging and industrial markets. We manufacture high-performance, value-added products that are designed to enhance its customers' ability to store, transport, process and dispense various products.

Our Packaging segment designs and manufactures dispensing products, (including foaming pumps, lotion and hand soap pumps, sanitizer pumps, beverage dispensers, perfume sprayers, nasal sprayers and trigger sprayers), polymeric and steel caps and closures (including food lids, flip-top closures, child resistance caps, drum and pail closures and flexible spouts), polymeric jar products, and fully integrated dispensers for fill-ready bag-in-box applications, all for a variety of consumer product markets including, but not limited to, beauty and personal care, home care, food and beverage, and pharmaceutical and nutraceutical, as well as the industrial market.

During 2020, we acquired the Rapak® brand in April and Affaba & Ferrari Srl in December to continue to expand our packaging platform. The acquisition of the Rapak brand included certain bag-in-box product lines and assets used in dairy, soda, smoothie and wine applications in the United States. Affaba & Ferrari, with a highly-automated manufacturing operation in Italy, designs and manufactures aseptic closures for energetic, juice and dairy drinks, as well as industrial closures and flex spouts with tamper evident and child-proof features.

During 2019, we acquired Plastic Srl and Taplast. Plastic Srl, with operations in Italy, is a manufacturer of single-bodied and assembled caps and closures for use in home care product applications. Taplast, with operations in Italy and Slovakia, is a designer and manufacturer of dispensers, closures and containers for the beauty and personal care, household, and food and beverage packaging markets.

TriMas' Packaging segment has the capability of manufacturing the majority of its products in North America, Europe or Asia, which allows us to evaluate manufacturing location decisions based on customer needs, timing, cost and capacity.

Competitive Strengths

We believe TriMas' Packaging segment benefits from the following competitive strengths in coordination with operating under TriMas' overarching strategy:

- *Strong Product Innovation.* Through its Global Innovation Centers located in India, the United Kingdom and the United States, our Packaging segment is focused on driving innovation across a broad range of dispensing and closure solutions for its customers. We have focused product development capabilities on consumer applications requiring special packaging forms, stylized containers and dispensing systems requiring a high degree of functionality and engineering, as well as evolving its industrial applications to include child resistant closures and other applications. Our Packaging segment has a consistent pipeline of new products ready for launch and continues to innovate to make products more environmentally friendly. For example, Rieke's product development programs have provided innovative and proprietary product solutions, such as the patented single-polymer Mono™-2e pump, which features six parts, all made from one material making it 100% recyclable. Taplast's AllPlastic™ pump, which contains 100% polyolefin materials, has a bellows technology that replaces the metal spring delivering an eco-friendly solution to our customers and consumers. In addition, Rieke, partnering with Amazon, also developed a range of products designed to meet the requirements of the high-growth e-commerce retail channel, including a proprietary dispenser locking mechanism to protect the integrity of packages and prevent liquids from leaking during shipment, such as the LDS™-2e, a lotion pump, which was developed to meet consumers' demands and ISTA 6 standards as required by Amazon. TriMas' Packaging segment's emphasis on highly-engineered solutions and product development has yielded numerous issued and enforceable patents, with many other patent applications pending. For example, 45 patents were filed and 84 patents were issued in 2020.
- *Customized Solutions that Enhance Customer Loyalty and Relationships.* A significant portion of our Packaging segment's products are customized designs that are developed and engineered to address specific customer technical, marketing and sustainability needs, helping to distinguish our customers' products from those of their competitors. For example, the customization of specialty plastic caps, closures and dispensers including branding, unique colors, collar sizes, lining and venting results in substantial customer loyalty. The substantial investment in flexible manufacturing cells allows us to offer both short lead-times for high volume products and customization for more moderate volume orders, which provides significant advantages to our consumer packaged goods customer base. In addition, we provide customized dispensing solutions including unique pump designs, precision metering, unique colors and special collar sizes to fit the customer's bottles. TriMas' Packaging segment is collaborating with customers to develop innovative products that are more eco-friendly and easier to recycle. We have also been successful in promoting the sale of complementary products in an effort to achieve preferred supplier status with several customers.
- *Global Sales and Manufacturing Footprint.* TriMas' Packaging segment maintains a global network of sales, manufacturing and distribution sites, to serve our global customer base. Our global customers often desire supply chain capability and a flexible manufacturing footprint close to their end markets which result in shorter supply chains, reduced carbon footprint and better sustainability. To serve our customers in Asia, we have design and manufacturing capacity and offer highly engineered dispensing solutions through locations in China, India and Vietnam, and increased our Asian market sales coverage. Additionally, Rieke opened a facility in San Miguel de Allende, Mexico, during 2017, to replace an older, smaller facility in Mexico City, and provide additional manufacturing capacity to support growth. We have also increased our sales coverage in Europe and Asia. Our acquisitions of Affaba & Ferrari in 2020, and Plastic Srl and Taplast in 2019, provide us with additional sales, design and manufacturing capacity in Europe, with additional manufacturing facilities in Italy and Slovakia. We believe this flexible footprint provides us with multiple alternatives for production to best meet customer requirements and helps mitigate the impacts of potential trade disruption. The majority of our Packaging segment's manufacturing facilities around the world have advanced injection molding machines required to manufacture precision engineered dispensing and closure components, as well as automated, high-speed assembly equipment for multi-component products.

Marketing, Customers and Distribution

TriMas' Packaging segment accesses its markets through direct sales to end-use customers, as well as through leading distributors, where it has enjoyed favorable, long-standing relationships. Rieke employs an internal sales force in North America, Europe and Asia, and has recently established a Global Strategic Account sales team. We also use third-party agents and distributors in key geographic markets, including Europe, South America and Asia, as well as agents and distributors primarily to sell to container manufacturers and to users or fillers of containers.

TriMas' Packaging segment's end customers include, but are not limited to, consumer packaged goods, cosmetic, personal care, pharmaceutical, nutraceutical, food, beverage, warehouse clubs, retailers, e-retailers, fast food retailers, industrial chemical, paint, petroleum, agricultural chemical and sanitary supply chemical companies. We may provide products directly to the end customer, but the end customers may also specify that our products be provided to fillers or packagers. We also supply major container manufacturers around the world, and maintain a customer service center that provides technical support, as well as other technical assistance to customers.

Our Packaging segment has manufacturing and distribution facilities in the United States, Mexico, the United Kingdom, Germany, Italy, Slovakia, China, India and Vietnam.

Competition

TriMas' Packaging segment has a broad range of products in both closures and dispensing systems, and therefore has various competitors in each of our product offerings. We do not believe that there is a single competitor that matches our entire product offering. Depending on the product and customers served, our competitors include Aptar, Bericap, Berry Global, [CLC Packaging](#), Greif, Phoenix Closures, Silgan (including the acquisition of Albea in 2020), Technocraft and TKPC.

Aerospace (22% of 2020 net sales)

Our Aerospace segment is comprised of TriMas Aerospace, which includes the Monogram Aerospace Fasteners, Allfast Fastening Systems, Mac Fasteners, RSA Engineered Products and Martinic Engineering brands. We believe TriMas Aerospace is a leading designer and manufacturer of a diverse range of products, including, but not limited to, highly-engineered fasteners, collars, blind bolts, rivets, ducting and connectors for air management systems, and other highly-engineered machined parts and components, for use in focused markets within the aerospace industry. In general, these products are customer-specific and are manufactured utilizing customer-qualified and proprietary processes. The products also satisfy rigorous customer approvals or meet unique aerospace industry standards, and as such, we believe there are a limited set of competitors.

We provide products to commercial, maintenance, repair and operations ("MRO"), and military and defense aerospace applications and platforms with sales to original equipment manufacturers ("OEMs"), supply chain distributors, MRO/aftermarket providers and tier one suppliers. Our customer-specified and/or qualified products are used in production of significant long-term aircraft programs, including several Boeing and Airbus commercial jetliner programs. Based on Boeing and Airbus' future aircraft delivery projections, we believe that commercial production will remain at stable levels through the next several years.

We believe our brands are well established and recognized in their markets. The TriMas Aerospace product offering is as follows:

- *Monogram Aerospace Fasteners ("Monogram")*. The product offering includes permanent threaded blind bolts, including high-strength, rotary-actuated blind bolts that allow sections of aircraft to be joined together when access is limited to only one side of the airframe, providing cost efficiencies over conventional two piece fastening devices. Monogram also provides collars and temporary fasteners used in aircraft construction and assembly.
- *Allfast Fastening Systems ("Allfast")*. The product offering includes solid and blind rivets, blind bolts, temporary fasteners and installation tools for the aerospace industry.
- *Mac Fasteners*. The product offering consists of high-volume, standard aerospace screws and bolts, manufactured to meet NAS, MS, AN and AS standards.
- *RSA Engineered Products ("RSA")*. In February of 2020, we acquired RSA, a manufacturer of complex, highly-engineered and proprietary ducting, connectors and related products for air management systems used in aerospace and defense applications.
- *Martinic Engineering ("Martinic")*. The product offering includes highly-engineered, precision machined, complex machine-to-print parts for aerospace applications, including auxiliary power units, as well as electrical, hydraulic and pneumatic systems.

Competitive Strengths

We believe TriMas Aerospace benefits from the following competitive strengths in coordination with operating under TriMas' overarching strategy:

- *Broad Product Portfolio of Established Brands.* We believe that TriMas Aerospace is a leading designer and manufacturer of engineered fasteners for the aerospace industry. The combination of the Monogram, Allfast and Mac Fasteners brands enables TriMas Aerospace to offer a wide range of fastener products which address a broad scope of customer requirements, providing scale to customers who continue to rationalize their supply base. In several of the product categories, including rotary-actuated blind bolts and blind and solid rivets, TriMas Aerospace has a meaningful market share with well-known and established brands. The combined product sets of the Monogram, Allfast and Mac Fasteners brands uniquely position us to benefit from platform-wide supply opportunities. In addition, RSA has extensive experience in providing air ducting, connectors and flexible joints used in hot engine bleed air, anti-icing and environmental control system applications. Martinic has a reputation, with more than 40 years of experience, of specializing in the high complexity machining of castings, forgings and bar stock for leading tier-one commercial and defense aerospace original equipment manufacturers.
- *Product Innovation.* We believe that TriMas Aerospace's engineering, research and development capability and new product focus are competitive advantages. For many years, TriMas Aerospace's product development programs have provided innovative and proprietary product solutions. The close working relationship between our sales and engineering teams and our customers' engineering teams is key to developing future products desired and required by our customers. Our innovation team adds value by working directly with our customers to address assembly and manufacturing process challenges to increase productivity, quality, speed and efficiency, while reducing overall installed cost. TriMas Aerospace has developed new fastener products that offer a flush break upon installation and is developing and testing other fastener designs which offer improved clamping characteristics on composite structures, improved aerodynamics and enhanced installed aesthetics. An example of such would include the newer Compositi-Lok4® fastener evolution, affording installed weight savings in concert with fuel efficient aircraft designs. TriMas Aerospace has also designed the next generation temporary fastener with an 800% increase in clamping force called Fastack® SC (Super Clamp). TriMas Aerospace has also expanded its fastener offerings to include other fastening product applications on current aircraft, including the expansion of its suite of collar families used in traditional two-sided assembly. We believe our customer-focused approach to provide cost-effective technical solutions will drive the development of new products and create new opportunities for growth.
- *Leading Manufacturing Capabilities and Processes.* We believe that TriMas Aerospace is a leading manufacturer of precision engineered components for the aerospace industry. Given industry regulatory requirements, as well as customer requirements, these products are required to be manufactured within tight tolerances and specifications, often out of hard-to-work-with and exotic materials including titanium, inconel and specialty steels. TriMas Aerospace is also capable of advanced precision CNC milling, high performance CNC turning and assembly, working in a variety of metals including super alloys, stainless steel, aircraft steel alloys, carbon steel alloys and aluminum alloys. Many of TriMas Aerospace's products, facilities and manufacturing processes are required to be qualified and/or certified. Key certifications in TriMas Aerospace include: AS9100:2009 Revision D; ISO9001:2008; TSO; and NADCAP for non-destructive testing, heat treatment, wet processes and materials testing. While proprietary products and patents are important, having proprietary manufacturing processes and capabilities makes TriMas Aerospace's products difficult to replicate. In addition, TriMas Aerospace is focused on continuously improving its processes and manufacturing operations by using the tools of Kaizen and automation, as applicable. The aerospace industry has strict requirements for quality and delivery, making process innovation and continuous improvement vital to TriMas Aerospace's success. We believe TriMas Aerospace's manufacturing processes, capabilities and quality focus create a competitive strength for the business.

Marketing, Customers and Distribution

TriMas Aerospace serves both OEM and aftermarket customers on a wide variety of platforms. Given the focused nature of many of our products, TriMas Aerospace relies upon a global sales and technical team that is knowledgeable of both OEM customers and the established network of independent distributors. Although the markets for fasteners are highly competitive, we provide products and services primarily for specialized applications, and compete principally on technology, quality and service. TriMas Aerospace works directly with aircraft manufacturers to develop and test new products and improve existing products. TriMas Aerospace's primary customers include OEMs, supply chain distributors, tier one suppliers and the United States government.

TriMas Aerospace's manufacturing facilities are located in the United States, and it exports products to Europe, South America and Asia.

Competition

Depending on the product and customers served, our primary competitors include Ateliers de la Haute Garonne, Cherry Aerospace - Precision Castparts Corp., Howmet Aerospace and LISI Aerospace, as well as a variety of aerospace and general industrial machined component manufacturers. We believe that we are a leader in the blind bolt market with significant market share in all blind fastener product categories in which we compete.

Specialty Products (15% of 2020 net sales)

Our Specialty Products segment is comprised of Norris Cylinder and Arrow Engine Company. We believe these businesses are well established and recognized in their respective markets.

- *Norris Cylinder.* We believe Norris Cylinder is a leading designer, manufacturer and distributor of highly-engineered steel cylinders for use in industrial, heating, ventilation and air conditioning ("HVAC"), construction, health care and defense end markets. We believe that Norris Cylinder is a leading provider of a complete line of large, intermediate and small size, high and low-pressure steel cylinders for the transportation, storage and dispensing of compressed gases. Norris Cylinder's large high-pressure seamless gas cylinders are used principally for shipping, storing and dispensing oxygen, nitrogen, argon, helium and other compressed gases. In addition, Norris Cylinder offers a complete line of steel cylinders used to contain and dispense acetylene gas for the welding and cutting industries. Norris Cylinder's products meet the rigorous standards required by the Department of Transportation ("DOT") or International Standards Organization ("ISO"), which certifies a cylinder's adequacy to perform in specific applications. Norris Cylinder markets cylinders primarily to domestic and international industrial gas producers and distributors, welding equipment distributors and equipment manufacturers. Given this customer base, Norris Cylinder tends to grow in times of increased industrial and infrastructure investment.
- *Arrow Engine.* Arrow Engine is a provider of natural gas powered wellhead engines, compressors and replacement parts, all engineered for use in oil and natural gas production and other industrial and commercial markets. As Arrow's engines can operate from the natural gas produced at the wellhead, we believe Arrow is uniquely positioned to provide its products for remote pump jack installations. Arrow Engine distributes its products through a worldwide distribution network, primarily focused in the United States and Canada. Arrow Engine manufactures its own engine line and also offers a wide variety of spare parts for various industrial engines not manufactured by Arrow Engine.

Competitive Strengths

We believe our Specialty Products segment benefits from the following competitive strengths in coordination with operating under TriMas' overarching strategy:

- *Leading Market Positions and Strong Brand Names.* Norris Cylinder, with more than 70 years of experience, is one of the worlds' largest manufacturers of high- and low-pressure steel cylinders, and the only manufacturer in the United States. We believe that Norris has a reputation for high-quality cylinders used in a variety of applications, including industrial gas, welding and cutting, government, medical, laboratories, food and beverage technology, breathing air, fire protection and aviation. We believe that Arrow Engine has also built a reputation for quality equipment, parts and accessories used in oil and natural gas production, and has a leading market position in the niche it serves.
- *Comprehensive Product Offering.* We believe that both Norris Cylinder and Arrow Engine offer a comprehensive product offering that meets its customers' needs. Norris Cylinder offers a complete line of large, intermediate and small size, high and low-pressure steel cylinders to its customers across a variety of end markets. Arrow Engine also provides a comprehensive product offering, including engines, compressors, chemical pumps, generator sets, electronics and replacement parts to a variety of oilfield and industrial markets.
- *Established and Extensive Distribution Channels.* Norris Cylinder has long-standing customer relationships and distributes directly to major gas companies, as well as distributing to domestic buying groups, OEMs, medium and small independent gas companies, and independent gas and welding distributors. Arrow Engine sells through a combination of a direct sales team and an established network of independent distributors.

Over the past several years, we realigned the cost structures of these businesses to better match recent demand levels. We are now focused on continuous improvement opportunities that will positively impact these businesses. We believe we are positioned well to leverage additional volume related to improvements in end market demand.

Marketing, Customers and Distribution

The primary customers of our Specialty Products segment operate in the industrial and upstream oil and gas end markets. Given the focused nature of many of our products, we rely upon a combination of a direct sales force and an established network of distributors with familiarity of the end-users. Norris Cylinder, for example, sells directly to customers and through distributors. Our primary customers include industrial gas producers and distributors, welding equipment distributors, and equipment manufacturers.

The Norris Cylinder and Arrow Engine manufacturing facilities are located in the United States.

Competition

Norris Cylinder competes against Worthington, Beijing Tianhai Industry Co., Faber and Vitkovic Cylinders, but is the only remaining steel cylinder manufacturer in the United States. In May 2012, the U.S. International Trade Commission made a unanimous final determination that Norris Cylinder had been materially injured by imports of DOT high-pressure steel cylinders that were being subsidized by the Government of China, as well as being dumped in the U.S. market by producers in China. As a result, trade duties were imposed on the subject imports for a five-year period to create a fairer competitive environment in the United States. The duty was extended and increased for an additional five-year period in 2017, and will be subject to renewal in 2022. Arrow Engine tends to compete against natural gas powered, lower horsepower, multi-cylinder engines from manufacturers such as Caterpillar, Chevy, Cummins and Ford industrial engines and electric motors.

TriMas' Acquisition Strategy

TriMas views accelerating its growth through acquisitions as core to achieving its overarching corporate growth strategy. Maintaining a relentless commitment to generating exceptional cash flow, along with a strong balance sheet, allows TriMas to execute against its acquisition strategy. Our primary focus is on acquisition candidates to build out our Packaging and Aerospace platforms, as we believe the markets they serve offer the highest long-term growth and performance profiles. We typically seek "bolt-on" acquisitions, in which we acquire another industry participant or adjacent product lines that expand our existing product offerings, gain access to new customers, end markets and distribution channels, expand our geographic footprint and/or capitalize on scale and cost efficiencies. While we would also consider opportunistic product line or bolt-on acquisitions in our Specialty Products segment, such transactions are of secondary focus.

Materials and Supply Arrangements

Our largest raw material purchases are for resins (such as polypropylene and polyethylene), steel, aluminum and other oil and metal-based purchased components. Raw materials and other supplies used in our operations are normally available from a variety of competing suppliers. In addition to raw materials, we purchase a variety of components and finished products from low-cost sources in China, India, Mexico, South Korea and Vietnam.

Polypropylene and polyethylene are generally commodity resins with multiple suppliers capable of providing product globally. Steel is purchased primarily from steel mills and service centers. Changing global dynamics for steel production and supply will continue to present a challenge to our business.

Historically, we have experienced volatility in costs of our raw material purchases and have worked with our suppliers to manage costs and disruptions in supply. We also utilize pricing programs to pass increased steel, resin and other raw material costs to customers. Although we may experience delays in our ability to implement price increases, we have been generally able to recover such increased costs.

Human Capital Resources

As of December 31, 2020, we employed approximately 3,200 people, of which approximately 50% were located outside the United States. We have one facility, located in Commerce, California (USA) where our hourly employees operate under a collective bargaining agreement, and which represents approximately 14% of our U.S. employees. We have four facilities outside of the United States where our employees are affiliated with state-controlled or trade unions, which covers approximately 41% of our non-U.S. employees.

We believe employee relations are good and are not aware of any present active union organizing activities at any of our facilities. We cannot predict the impact of any further unionization of our workplace. Our labor agreement with the United Automobile, Aerospace and Agricultural Implement Workers of America at our TriMas Aerospace facility in Commerce, California expires in August 2021 and we expect to enter into timely negotiations regarding the extension of our agreement.

TriMas focuses on a number of human capital resources objectives in managing its business, including our commitment to safety, employee engagement, diversity and inclusion, and talent development. These human capital resources objectives, taken together, may be material to understanding our business under certain circumstances. These objectives are reinforced by our Code of Conduct, our global policies, including our Global Human Rights Policy, and our commitment to sustainability as evidenced in our inaugural 2020 Sustainability Report. These objectives are reinforced by our Code of Conduct, our global policies, including our Global Human Rights Policy, and our commitment to sustainability as evidenced in our inaugural 2020 Sustainability Report.

Commitment to Safety

One of our primary objectives is the health and safety of our employees and anyone who conducts business on our behalf. The commitment to safety starts at the top levels of our organization. We believe a safe and secure workplace is fundamental and important to our success. TriMas is committed to providing a safe and healthy workplace, and complying with applicable safety and health laws, regulations and internal requirements. We are also committed to engaging our employees to continually improve health and safety by acting upon opportunities to reduce risk and improve our safety and health performance. TriMas maintains comprehensive safety programs focused on identifying hazards and eliminating risks that can lead to severe injuries.

Employee Engagement

At TriMas, a commitment to continuous improvement is one of our core values and imperative to our long-term success. We embrace the tools of Kaizen and work to foster a culture of employee engagement to drive performance improvements and operational excellence.

Diversity and Inclusion

We believe we are at our best when we bring together unique perspectives, experiences and ideas, and actively build diverse teams and inclusive work environments across our global locations. We believe that tapping into our employees' diverse backgrounds and experiences ensures we make better decisions and supports stronger operating performance. Our goal is to foster working environments that are fair and safe, where rights are respected and everyone can achieve their full potential. Our policies and practices strive to assure equal employment and advancement opportunities for all qualified people. We also work to maintain appropriate standards of conduct in the workplace and to be sensitive to the concerns of our diverse group of employees. We strive to maintain workplaces that are free from discrimination or harassment on the basis of race, religion, color, national origin, sex, age, genetic information, sexual orientation, gender identity, protected veteran status, disability or any other characteristic protected by applicable law.

Talent Development

We believe that a talented, engaged and dynamic workforce is vital to our success. We seek to hire, develop and retain individuals who embrace and thrive in our culture. Our culture is grounded in our values: Integrity, Customer-focused, Teamwork, Results-driven and Continuous Improvement. Our businesses strive to build robust talent pipelines through targeted recruitment initiatives across our global footprint. Our programs are intended to ensure seamless onboarding for our new employees. We identify and nurture talent through a culture that is designed to enable employees to succeed and grow into leadership positions. We believe that our diverse businesses and structure provide many opportunities for employees to follow their own path and advance their careers.

We support a culture of continuous development, and we provide employees with the opportunity to receive frequent performance feedback. On a regular basis throughout the year, employees have goal alignment, performance and career development discussions with their managers (via annual goal setting, mid-year and year-end performance and talent reviews). At these times, employees receive candid feedback on their performance against set objectives. These reviews evaluate each employee's strengths, skills and areas for opportunity, which are important for career development.

Seasonality

TriMas does not experience significant seasonal fluctuation, other than our fourth quarter, which has tended to be the lowest net sales quarter of the year given holiday shutdowns by certain of our customers and other customers deferring capital spending to the following year.

Environmental Matters

We are subject to increasingly stringent environmental laws and regulations, including those relating to air emissions, wastewater discharges, and chemical and hazardous waste management and disposal. Some of these environmental laws hold owners or operators of land or businesses liable for their own and for previous owners' or operators' releases of hazardous or toxic substances or wastes. Other environmental laws and regulations require obtaining and complying with environmental permits. To date, costs of complying with environmental, health and safety requirements have not been material. However, the nature of our operations and our long history of industrial activities at certain of our current or former facilities, as well as those acquired, could potentially result in material environmental liabilities.

Current environmental laws and regulations have not had a material impact on our business, capital expenditures or financial position. However, we must comply with existing and pending climate change legislation, regulation and international treaties or accords. Future events, including those relating to climate change or greenhouse gas regulation could require us to incur expenses related to the modification or curtailment of operations, installation of pollution control equipment or investigation and cleanup of contaminated sites. In addition to environmental laws and regulations, our operations are governed by variety of laws and regulations, including those relating to workplace safety and worker health, principally the Occupational Safety and Health Act and regulations thereunder. We believe that we are in material compliance with these laws and regulations and do not believe that future compliance with such laws and regulations will have a material adverse effect on our business, financial condition, results of operations and cash flows.

Intangible Assets

Our identified intangible assets, consisting of customer relationships, trademarks and trade names, and technology, are recorded at approximately \$206.2 million at December 31, 2020, net of accumulated amortization. The valuation of each of the identified intangibles was performed using broadly accepted valuation methodologies and techniques.

Customer Relationships. We have developed and maintained stable, long-term selling relationships with customer groups for specific branded products and/or focused market product offerings within each of our businesses. Useful lives assigned to customer relationship intangibles range from five to 25 years and have been estimated using historic customer retention and turnover data. Other factors considered in evaluating estimated useful lives include the diverse nature of focused markets and products of which we have significant share, how customers in these markets make purchases and these customers' position in the supply chain. We also monitor and evaluate the impact of other evolving risks including the threat of lower cost competitors and evolving technology.

Trademarks and Trade Names. Each of our businesses designs and manufactures products for focused markets under various trade names and trademarks (see discussion above by reportable segment). Our trademark/trade name intangibles are well-established and considered long-lived assets that require maintenance through advertising and promotion expenditures. Because it is our practice and intent to maintain and to continue to support, develop and market these trademarks/trade names for the foreseeable future, we consider our rights in these trademarks/trade names to have an indefinite life, except as otherwise dictated by applicable law.

Technology. We hold a number of United States and foreign patents, patent applications, and proprietary product and process-oriented technologies within all three of our reportable segments. We have, and will continue to dedicate, technical resources toward the further development of our products and processes in order to maintain our competitive position in the industrial, commercial and consumer end markets that we serve. Estimated useful lives for our technology intangibles range from one to 30 years and are determined in part by any legal, regulatory or contractual provisions that limit useful life. For example, patent rights have a maximum limit of 20 years in the United States. Other factors considered include the expected use of the technology by the operating groups, the expected useful life of the product and/or product programs to which the technology relates, and the rate of technology adoption by the industry.

International Operations

Approximately 22.7% of our net sales for the year ended December 31, 2020 were derived from sales by our businesses located outside of the United States, and approximately 37.4% of our long-lived assets as of December 31, 2020 were located outside of the United States. We operate manufacturing facilities in China, Germany, India, Italy, Mexico, Slovakia, the United Kingdom and Vietnam, in addition to our U.S. operations. In addition to the net sales derived from sales by our businesses located outside of the United States, we also generated approximately \$70.0 million of export sales from the United States.

Website Access to Company Reports

We use our corporate website, www.trimascorp.com, as a channel for routine distribution of important information, including news releases, company presentations and links to our businesses' websites, as well as our inaugural Sustainability Report, which we launched in December 2020. We also provide financial information on our website and post filings as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC"), including our annual, quarterly, and current reports on Forms 10-K, 10-Q and 8-K, our proxy statements and any amendments to those reports or statements. All such postings and filings are available under our Investors section of the website free of charge. The SEC also maintains a website, www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Annual Report on Form 10-K is not incorporated by reference into this Annual Report on Form 10-K unless expressly noted.

Item 1A. Risk Factors

You should carefully consider each of the risks described below, together with information included elsewhere in this Annual Report on Form 10-K and other documents we file with the SEC. The risks and uncertainties described below are those that we have identified as material, but are not the only risks and uncertainties facing us. Although the risks are organized by headings, and each risk is discussed separately, many of the risks are interrelated. Additional risks and uncertainties not currently known to us or that we currently believe are immaterial may also impact our business operations, financial results and liquidity.

Risks Relating to the COVID-19 Pandemic

The COVID-19 pandemic has had, and is expected to continue to have, a significant impact on the Company's operations and results.

Since late January 2020, we have been managing matters related to the global COVID-19 pandemic, including impacts to our operations and strategic supplier-partners in Asia, as well as our manufacturing operations in Europe and North America. We have experienced temporary disruptions in the operation of certain of our facilities due to elevated levels of absenteeism, which has impacted workforce staffing. In response, we were early adopters of many of the workplace guidelines published by the U.S. Centers for Disease Control and Prevention ("CDC") and implemented other precautionary measures as necessary to maintain social distancing. COVID-19 has also affected our customers and suppliers, and we have been and will continue to collaborate with them to minimize supply chain disruptions. We have also implemented pandemic and business continuity plans, as well as other precautionary measures on behalf of our customers and employees, including supporting remote work opportunities for certain of our employees. While we believe that all of these measures have been necessary and appropriate, they have resulted in additional costs and may adversely impact our business and financial performance in the future or expose us to additional unknown risks.

The COVID-19 pandemic has impacted our results of operations, and we expect it will continue to impact us in the future at varying levels. For example, due in part to the impact of the COVID-19 pandemic, sales for our dispensing and closure products increased, while sales in our Aerospace and Specialty Products segments decreased in 2020. Although it is not possible to predict the ultimate impact of COVID-19, including on our business, results of operations, financial position or cash flows, such impacts that may be material and include, but are not limited to: (i) shifting customer demand for many of our products, including those used in cosmetic, personal care, pharmaceutical, home care, food and beverage, and industrial markets, as well as aerospace markets; (ii) increased credit risk, including increased failure by customers experiencing business disruptions to make timely payments; (iii) reduced availability and productivity of employees, as well as increased costs associated with our high-deductible medical insurance plan if our employees become ill; (iv) increased operational risks as a result of manufacturing facility disruptions or remote work arrangements, including the potential effects on internal controls and procedures, as well as cybersecurity risks and increased vulnerability to security breaches, information technology disruptions and other similar events; (v) delays and disruptions in the availability of and timely delivery of materials and components used in our operations, as well as increased costs for such materials and components; (vi) customer requirements to accelerate the relocation of certain of our production lines to North America, which may increase our capital investment needs and launch costs; (vii) a negative impact on liquidity position; (viii) any impairment in value of tangible or intangible assets which could be recorded as a result of weaker economic conditions; and (ix) increased costs and less ability to access amounts available under our existing credit facility or more generally, access to and the availability of capital markets.

The extent of the COVID-19 pandemic's effect on our operational and financial performance will depend in large part on future developments, which cannot be predicted with confidence at this time. Future developments include the duration, scope and severity of the pandemic, the actions taken to contain or mitigate its impact, and the resumption of widespread economic activity. In addition, because we cannot predict the impact that COVID-19 will ultimately have, the actual impact may also exacerbate other risks discussed in this Item 1A.

Risks Relating to Our Business

Our businesses depend upon general economic conditions and we serve some customers in highly cyclical industries; as such, we may be subject to the loss of sales and margins due to an economic downturn or recession.

Our financial performance depends, in large part, on conditions in the markets that we serve in both the U.S. and global economies. Although with the sale of Lamons in December 2019 we significantly reduced our exposure to the oil and gas end market, we still are exposed to highly cyclical end markets for industrial goods (including our remaining exposure in oil and gas), and to a lesser extent, aerospace and consumer products. When combined with ongoing customer consolidation activity and periodic inventory reduction initiatives, an uncertain macro-economic and political climate could lead to reduced demand from our customers, variations in timing of sales to our customers, increased price competition for our products, increased risk of excess and obsolete inventories, uncollectible receivables, and higher overhead costs as a percentage of revenue, all of which could impact our operating margins. If our customers are adversely affected by these factors, we may experience lower product volume orders, which could have an unfavorable impact on our revenue and operating profit. Our ability to precisely forecast the level of our customers' orders is limited and can result in inefficiencies in scheduling our installed manufacturing capacity and result in sub-optimal business and financial results.

Many of the markets we serve are highly competitive, which could limit sales volumes and reduce our operating margins.

Many of our products are sold in competitive markets. We believe that the principal points of competition in our markets are price, product quality, delivery performance, design and engineering capabilities, product development, conformity to customer specifications, customer service and effectiveness of distribution. Maintaining and improving our competitive position will require continued investment by us in manufacturing, engineering, quality standards, marketing, customer service and support of our distribution networks. We may have insufficient resources in the future to continue to make such investments and, even if we make such investments, we may not be able to maintain or improve our competitive position. We also face the risk of lower-cost manufacturers located in China, India and other regions competing in the markets for our products and we may be driven as a consequence of this competition to increase our investment overseas. Making overseas investments can be highly complicated and we may not always realize the advantages we anticipate from any such investments. Competitive pressure may limit the volume of products that we sell and reduce our operating margins.

We may be unable to successfully implement our business strategies and achieve our strategic and financial objectives.

We have a long history of acquisitions and divestitures, and we continuously evaluate strategic opportunities and other investment activities. From time to time, we may engage in one or more strategic transactions. If we do so, it may or may not meet the intended strategic or financial objective.

Strategic acquisitions may require integration expense and actions that may negatively affect our results of operations and that could not have been fully anticipated beforehand. In addition, attractive strategic transaction opportunities may not be identified or pursued in the future, financing for strategic transactions may be unavailable on satisfactory terms and we may be unable to accomplish our strategic objectives in effecting a particular strategic transaction. We may encounter various risks in pursuing such strategic transactions, including the possible inability to integrate an acquired business into our operations, increased expenses, increased debt obligations to finance such strategic transactions and unanticipated problems or liabilities.

In addition, we may dispose of assets or businesses at a price or on terms that are less favorable than we had anticipated, or with the exclusion of assets that must be divested or run off separately. As we seek to sell or separate certain assets, equity interests or businesses, we may also encounter difficulty in finding buyers, managing interdependencies across multiple transactions and other Company initiatives, implementing separation plans or executing alternative exit strategies on acceptable terms, which could delay or prevent the accomplishment of our strategic and financial objectives. Moreover, the effect of dispositions over time will reduce our cash flow and earnings capacity and result in a less diversified portfolio of businesses, and we will have a greater dependency on remaining businesses for our financial results.

Accordingly, risks related to strategic acquisitions or dispositions may result in the disruption of our ongoing business, diversion of management's attention, the failure of such transactions to be completed, or the failure to realize the financial and strategic benefits contemplated at the time of a transaction, some or all of which could materially and adversely affect our business strategy, financial condition and results of operations.

We have significant goodwill and intangible assets, and future impairment of our goodwill and intangible assets could have a material negative impact on our financial results.

At December 31, 2020, our goodwill and intangible assets were approximately \$510.2 million and represented approximately 42.7% of our total assets. If we experience declines in sales and operating profit or do not meet our current and forecasted operating budget, we may be subject to goodwill and/or other intangible asset impairments in the future. While the fair value of our remaining goodwill exceeds its carrying value, significantly worse financial performance of our businesses, significantly different assumptions regarding future performance of our businesses or significant declines in our stock price could result in future impairment losses. Because of the significance of our goodwill and intangible assets, and based on the magnitude of historical impairment charges, any future impairment of these assets could have a material adverse effect on our financial results.

Increases in our raw material or energy costs or the loss of critical suppliers could adversely affect our profitability and other financial results.

We are sensitive to price movements in our raw materials supply base. Our largest material purchases are for resins (such as polypropylene and polyethylene), steel, aluminum and other oil and metal-based purchased components. Prices for these products fluctuate with market conditions, and have generally increased over time. We may be unable to offset the impact with price increases on a timely basis due to outstanding commitments to our customers, competitive considerations or our customers' resistance to accepting such price increases and our financial performance could be adversely impacted. A failure by our suppliers to continue to supply us with certain raw materials or component parts on commercially reasonable terms, or at all, could have a material adverse effect on us. To the extent there are energy supply disruptions or material fluctuations in energy costs, our margins could be materially adversely impacted.

Our business may be exposed to risks associated with an increasingly concentrated customer base.

While no individual customer accounted for 10% or more of our consolidated net sales for 2020, 2019 or 2018, our customer base has become, and may further become, increasingly concentrated as a result of our smaller revenue base following the 2019 sale of Lamons, or due to customer consolidations and/or through sales growth to existing customers. In 2020, our Packaging and Aerospace segments each had customers that comprised more than 10% of its segment revenue. As a result of these factors, changes to or reductions in the buying patterns of these larger customers may expose our business and results of operations to greater volatility. For example, prior to the outbreak of COVID-19, a large commercial aircraft manufacturer announced significant production delays and/or reductions on certain of its platforms for which we provide products, which has impacted our sales, profit and production efficiencies compared with historical levels and is expected to continue into the foreseeable future until and if these delays and/or reductions are lifted.

The mix and type of customers, and sales to any single customer, may vary significantly from quarter to quarter and from year to year, and have a significant impact on our financial condition, results of operations and cash flows. If customers do not place orders, or they substantially reduce, delay or cancel orders, we may not be able to replace the business, which may have a significant adverse impact on our results of operations and financial condition. Major customers may require that we localize manufacturing and supply capacity rather than sourcing from lower cost countries, or seek pricing, payment, intellectual property-related, or other commercial terms that are less favorable to us, which may have a negative impact on our business. The concentration of our customer base also increases our risks related to the financial condition of our customers, and the deterioration in financial condition of customers or the failure of customers to perform their obligations could have a material adverse effect on our results of operations and cash flows.

We are dependent on our manufacturing facilities for the production of our highly engineered products, which subjects us to risks associated with disruptions and changing technology and manufacturing techniques that could place us at a competitive disadvantage.

If our manufacturing facilities become unavailable either temporarily or permanently due to labor disruptions or circumstances beyond our control, such as geopolitical developments or logistical complications arising from acts of war, cyber-attacks, weather, global climate change, earthquakes or other natural disasters including public health crises, we may be unable to shift production to other facilities or to make up for lost production. For example, our Aerospace manufacturing facilities are predominately located in southern California, an area known for earthquakes, and are thus vulnerable to damage. Any new facility would need to comply with the necessary regulatory requirements, satisfy our specialized manufacturing requirements and require specialized equipment. Even though we carry business interruption insurance policies, any business interruption losses could exceed the coverage available or be excluded from our insurance policies. Any disruption of our ability to operate our business could result in a material decrease in our revenues or significant additional costs to replace, repair or insure our assets, which could have a material adverse impact on our financial condition and results of operations.

In addition, we believe that our customers rigorously evaluate their suppliers on the basis of price competitiveness, product quality, reliability and timeliness of delivery, technical expertise and development capability, new product innovation, product design capability, manufacturing expertise, operational flexibility, customer service and overall management. Our success depends on our ability to continue to meet our customers' changing expectations with respect to these criteria. We may be unable to install, maintain and certify equipment needed to produce products or upgrade or transition our manufacturing facilities without impacting production rates or requiring other operational efficiency measures at our facilities. We anticipate that we will remain committed to product research and development, advanced manufacturing techniques and service to remain competitive, which entails significant costs; however, we may be unable to address technological advances, implement new and more cost-effective manufacturing techniques, or introduce new or improved products, whether in existing or new markets, so as to maintain our businesses' competitive positions or to grow our businesses as desired.

A major failure of our information systems could harm our business; increased IT security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, and products.

We depend on integrated information systems to conduct our business. While we maintain some of our critical information systems, we are also dependent on third parties to provide important services relating to, among other things, operational technology at our facilities, human resources, electronic communications and certain finance functions. We may experience operating problems with our information systems as a result of system failures, viruses, computer hackers or other causes. Any significant disruption or slowdown of our systems could cause customers to cancel orders or cause standard business processes to become inefficient or ineffective.

We have experienced cyber-attacks in the past and, while none of these cyber-attacks resulted in a material disruption to our business, we may experience additional cyber-attacks in the future. Increased global IT security threats and more sophisticated and targeted computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data and communications. While we attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems, our networks and systems remain potentially vulnerable to advanced persistent threats. Furthermore, we may have little or no oversight with respect to security measures employed by third-party service providers, which may ultimately prove to be ineffective at countering threats. Depending on their nature and scope, such threats could potentially lead to the compromising of confidential information and communications, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness and results of operations.

Our ability to deliver products that satisfy customer requirements is dependent on the performance of our subcontractors and suppliers, as well as on the availability of raw materials and other components.

We rely on other companies, including subcontractors and suppliers, to provide and produce raw materials, integrated components and sub-assemblies and production commodities included in, or used in the production of, our products. If one or more of our suppliers or subcontractors experiences delivery delays or other performance problems, we may be unable to meet commitments to our customers or incur additional costs and penalties. In some instances, we depend upon a single source of supply. Any service disruption from one of these suppliers, either due to circumstances beyond the supplier's control, such as geopolitical developments or logistical complications due to weather, global climate change, earthquakes or other natural disasters, or as a result of performance problems or financial difficulties, could have a material adverse effect on our ability to meet commitments to our customers or increase our operating costs.

Trends in oil and natural gas prices may affect the demand for, and profitability of, our energy-related products and services, which could have an adverse effect on our business, consolidated results of operations, and consolidated financial condition.

The oil and gas industry historically has experienced periodic downturns. Demand for our energy-related products, such as pump jack engines and compressors, is sensitive to the level of production activity of, and the corresponding capital spending by, oil and natural gas companies. The level of production activity is directly affected by trends in oil (and related derivatives) and natural gas prices, which have been at lower levels over the past four years, and may continue to remain at depressed levels and be subject to future volatility.

Prices for oil and natural gas are subject to large fluctuations in response to changes in the supply of and demand for oil and natural gas, market uncertainty, geopolitical developments, alternative production methods and a variety of other factors that are beyond our control. Even the perception of longer-term lower oil and natural gas prices can reduce or defer major capital expenditures by our customers in the oil and gas industry.

A growing portion of our sales may be derived from international sources, which exposes us to certain risks which may adversely affect our financial results and impact our ability to service debt.

We have operations outside of the United States. Approximately 22.7% of our net sales for the year ended December 31, 2020 were derived from sales by our subsidiaries located outside of the U.S. In addition, we may expand our international operations through internal growth or acquisitions. International operations, particularly sales to emerging markets and manufacturing in non-U.S. countries, are subject to risks that are not present within U.S. markets, which include, but are not limited to, the following:

- volatility of currency exchange between the U.S. dollar and currencies in international markets;
- changes in local government regulations and policies including, but not limited to, foreign currency exchange controls or monetary policy, governmental embargoes, repatriation of earnings, expropriation of property, duty or tariff restrictions, investment limitations and tax policies;
- political and economic instability and disruptions, including labor unrest, civil strife, public health crises (including viral outbreaks such as the coronavirus), acts of war, guerrilla activities, insurrection and terrorism;
- legislation that regulates the use of chemicals;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the Foreign Corrupt Practices Act ("FCPA");
- compliance with international trade laws and regulations, including export control and economic sanctions, such as anti-dumping duties;
- difficulties in staffing and managing multi-national operations;
- limitations on our ability to enforce legal rights and remedies;
- tax inefficiencies in repatriating cash flow from non-U.S. subsidiaries that could affect our financial results and reduce our ability to service debt;
- reduced protection of intellectual property rights; and
- other risks arising out of foreign sovereignty over the areas where our operations are conducted.

In addition, we could be adversely affected by violations of the FCPA and similar worldwide anti-bribery laws as well as export controls and economic sanction laws. The FCPA and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business.

Our acquisition and disposition agreements by which we have acquired or sold companies, include indemnification provisions that may not fully protect us and may result in unexpected liabilities.

Certain of the agreements related to the acquisition and disposition of businesses require indemnification against certain liabilities related to the operations of the company for the previous owner. We cannot be assured that any of these indemnification provisions will fully protect us, and as a result we may incur unexpected liabilities that adversely affect our profitability and financial position.

Regulatory, Legal and Environmental Risks

Significant developments from the recent and potential changes in U.S. trade policies could have a material adverse effect on us and our financial condition and results of operations.

Free trade laws and regulations provide certain duties and tariffs on qualifying imports and exports, subject to compliance with the applicable classification and other requirements. The U.S. government has indicated its intent to alter its approach to international trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements and treaties with foreign countries. For example, beginning in October 2018, the U.S. government implemented additional tariffs on certain goods imported from China. These tariffs, and other governmental actions relating to international trade agreements or policies, the adoption and expansion of trade restrictions, or the occurrence of a trade war may adversely impact demand for our products, costs, customers, suppliers and/or the U.S. economy or certain sectors thereof and, as a result, adversely impact our business. These tariffs and actions may, directly or indirectly, lead to higher costs and cause us to increase prices to our customers which may reduce demand, or, if we are unable to increase prices, result in lowering our margin on products sold. For example, in the past two years, we experienced higher input costs as a direct result of recently imposed tariffs on certain raw materials and components imported from China. In certain cases, we have passed-through these incremental costs to the customer, while in some cases we have not changed pricing to retain or expand volume, and in other cases we are working to install capacity in facilities where there currently is no tariff. In addition, our U.S. suppliers raised prices for certain components in response to an overall increase in demand for domestic sources as a result of recently imposed tariffs. It remains unclear what the U.S. or foreign governments will or will not do with respect to tariffs, international trade agreements and policies on a short-term or long-term basis. Additional changes in laws or policies governing the terms of foreign trade, and in particular increased trade restrictions, tariffs or taxes on imports from countries where we manufacture or purchase products could have a material adverse effect on our business and financial results.

Compliance with and changes in tax laws, including tax reform legislation in the United States, could materially and adversely impact our financial condition, results of operations and cash flows.

We are subject to extensive tax liabilities, including federal, state and foreign income taxes and transactional taxes such as excise, sales and use, payroll, franchise, withholding and property taxes. Many tax liabilities are subject to periodic audits by taxing authorities, and such audits could subject us to additional tax as well as interest and penalties. New tax laws and regulations and changes in existing tax laws and regulations could result in increased expenditures by us for tax liabilities in the future and could materially and adversely impact our financial condition, results of operations and cash flows.

We may face liability associated with the use of products for which patent ownership or other intellectual property rights are claimed.

We may be subject to claims or inquiries regarding alleged unauthorized use of a third party's intellectual property. An adverse outcome in any intellectual property litigation could subject us to significant liabilities to third parties, require us to license technology or other intellectual property rights from others, require us to comply with injunctions to cease marketing or using certain products or brands, or require us to redesign, re-engineer, or re-brand certain products or packaging, any of which could affect our business, financial condition and operating results. If we are required to seek licenses under patents or other intellectual property rights of others, we may not be able to acquire these licenses on acceptable terms, if at all. In addition, the cost of responding to an intellectual property infringement claim, in terms of legal fees and expenses and the diversion of management resources, whether or not the claim is valid, could have a material adverse effect on our business, results of operations and financial condition.

We may be unable to adequately protect our intellectual property.

While we believe that our patents, trademarks, know-how and other intellectual property have significant value, it is uncertain that this intellectual property or any intellectual property acquired or developed by us in the future, will provide a meaningful competitive advantage. Our patents or pending applications may be challenged, invalidated or circumvented by competitors or rights granted thereunder may not provide meaningful proprietary protection. Moreover, competitors may infringe on our patents or successfully avoid them through design innovation. Policing unauthorized use of our intellectual property is difficult and expensive, and we may not be able to, or have the resources to, prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the U.S. The cost of protecting our intellectual property may be significant and have a material adverse effect on our financial condition and future results of operations.

We may incur material losses and costs as a result of product liability, recall and warranty claims brought against us.

We are subject to a variety of litigation incidental to our businesses, including claims for damages arising out of use of our products, claims relating to intellectual property matters and claims involving employment matters and commercial disputes. We currently carry insurance and maintain reserves for potential product liability claims. However, our insurance coverage may be inadequate if such claims do arise and any liability not covered by insurance could have a material adverse effect on our business. Although we have been able to obtain insurance in amounts we believe to be appropriate to cover such liability to date, our insurance premiums may increase in the future as a consequence of conditions in the insurance business generally or our situation in particular. Any such increase could result in lower operating profit or cause the need to reduce our insurance coverage. In addition, a future claim may be brought against us that could have a material adverse effect on us. Any product liability claim may also include the imposition of punitive damages, the award of which, pursuant to certain state laws, may not be covered by insurance. Our product liability insurance policies have limits that, if exceeded, may result in material costs that could have an adverse effect on our future profitability. In addition, warranty claims are generally not covered by our product liability insurance. Further, any product liability or warranty issues may adversely affect our reputation as a manufacturer of high-quality, safe products, divert management's attention, and could have a material adverse effect on our business.

In addition, our former Lamons business is a party to lawsuits related to asbestos contained in gaskets formerly manufactured by it or its predecessors. While we sold the Lamons business in December 2019, we retained the asbestos-related liability exposure. Some of this litigation includes claims for punitive and consequential as well as compensatory damages. We are not able to predict the outcome of these matters given that, among other things, claims may be initially made in jurisdictions without specifying the amount sought or by simply stating the minimum or maximum permissible monetary relief, and may be amended to alter the amount sought. Of the 4,655 claims pending at December 31, 2020, 40 set forth specific amounts of damages (other than those stating the statutory minimum or maximum). See Note 17, "*Commitments and Contingencies*," included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K for additional information.

Total settlement costs (exclusive of defense costs) for all such cases, some of which were filed over 25 years ago, have been approximately \$10.0 million. All relief sought in the asbestos cases is monetary in nature. To date, approximately 40% of our costs related to settlement and defense of asbestos litigation have been covered by our primary insurance. Effective February 14, 2006, we entered into a coverage-in-place agreement with our first level excess carriers regarding the coverage to be provided to us for asbestos-related claims when the primary insurance is exhausted. The coverage-in-place agreement makes asbestos defense costs and indemnity insurance coverage available to us that might otherwise be disputed by the carriers and provides a methodology for the administration of such expenses. The Company's primary insurance exhausted in November 2018, and the Company is solely responsible for defense costs and indemnity payments prior to the commencement of coverage under this agreement, the duration of which would be subject to the scope of damage awards and settlements paid. During this period, we may incur significant litigation costs in defending these matters. We also may be required to incur additional defense costs and pay damage awards or settlements or become subject to equitable remedies in the future that could adversely affect our businesses.

Our business may be materially and adversely affected by compliance obligations and liabilities under environmental laws and regulations.

We are subject to increasingly stringent environmental laws and regulations, including those relating to air emissions, wastewater discharges and chemical and hazardous waste management and disposal. Some of these environmental laws hold owners or operators of land or businesses liable for their own and for previous owners' or operators' releases of hazardous or toxic substances or wastes. Other environmental laws and regulations require obtaining and complying with environmental permits. To date, costs of complying with environmental, health and safety requirements have not been material. However, the nature of our operations and our long history of industrial activities at certain of our current or former facilities, as well as those acquired, could potentially result in material environmental liabilities.

While we must comply with existing and pending climate change legislation, regulation and international treaties or accords, current laws and regulations have not had a material impact on our business, capital expenditures or financial position. Future events, including those relating to climate change or greenhouse gas regulation, could require us to incur expenses related to the modification or curtailment of operations, installation of pollution control equipment or investigation and cleanup of contaminated sites.

Economic conditions and regulatory changes following the United Kingdom's exit from the European Union could have a material adverse effect on our business and results of operations.

The United Kingdom's exit from the European Union and the resulting significant change to the United Kingdom's relationship with the European Union and with countries outside the European Union (and the laws, regulations and trade deals impacting business conducted between them) could disrupt the overall economic growth or stability of the United Kingdom and the European Union and negatively impact our operations. The United Kingdom exited the European Union on January 31, 2020. These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could have a material adverse effect on our business, financial condition and results of operations and reduce the price of our equity shares. We operate manufacturing facilities internationally, including in the United Kingdom. Accordingly, the United Kingdom's withdrawal from the European Union may have an adverse impact on our international operations, particularly in the United Kingdom.

Our reputation, ability to do business, and results of operations may be impaired by legal compliance risks.

While we strive to maintain high standards, our internal controls and compliance systems may not always protect us from acts committed by our employees, agents, or business partners that would violate U.S. and/or non-U.S. laws or adequately protect our confidential information, including the laws governing payments to government officials, bribery, fraud, anti-kickback and false claims rules, competition, export and import compliance, money laundering, and data privacy laws, as well as the improper use of proprietary information or social media. Any such allegations, violations of law or improper actions could subject us to civil or criminal investigations in the U.S. and in other jurisdictions, could lead to substantial civil or criminal, monetary and non-monetary penalties, and related shareholder lawsuits, could lead to increased costs of compliance, could damage our reputation and could have a material effect on our financial statements.

Risks Related to our Debt and Other Financial Obligations

We have debt principal and interest payment requirements that may restrict our future operations and impair our ability to meet our obligations.

As of December 31, 2020, we have approximately \$346.3 million of outstanding debt. We are subject to variable interest rates on our revolving credit facility. Such interest rates are based on the London Interbank Offered Rate ("LIBOR") plus 1.50%. We may experience increases in our interest expense as a result of general increases in interest rate levels, which could be affected by the replacement of LIBOR as the benchmark interest rate. We had \$50.5 million outstanding under our revolving credit facility as of December 31, 2020.

Our degree of leverage and level of interest expense may have important consequences, including:

- should our leverage increase, it may place us at a competitive disadvantage as compared with our less leveraged competitors and make us more vulnerable in the event of a downturn in general economic conditions or in any of our businesses;
- our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate may be limited;
- a substantial portion of our cash flow from operations will be dedicated to the payment of annual interest and future principal obligations on our indebtedness, thereby reducing the funds available to us for operations, capital expenditures, acquisitions, future business opportunities or obligations to pay rent in respect of our operating leases; and
- our operations are restricted by our debt instruments, which contain certain financial and operating covenants, and those restrictions may limit, among other things, our ability to borrow money in the future for working capital, capital expenditures, acquisitions, rent expense or other purposes.

Our ability to service our debt and other obligations will depend on our future operating performance, which will be affected by prevailing economic conditions and financial, business and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow, and future financings may not be available to provide sufficient net proceeds, to meet these obligations or to successfully execute our business strategies. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources.*"

Restrictions in our debt instruments limit our ability to take certain actions and breaches thereof could impair our liquidity.

Our revolving credit facility and the indenture governing our senior notes contain covenants that restrict our ability to:

- pay dividends or redeem or repurchase capital stock;
- incur additional indebtedness and grant liens;
- make acquisitions and joint venture investments; and
- sell assets.

Our debt instruments also require us to comply with financial covenants relating to, among other things, interest coverage and leverage. We may not be able to satisfy these covenants in the future or be able to pursue our strategies within the constraints of these covenants. Substantially all of the assets of our domestic subsidiaries are pledged as collateral. Borrowings under the foreign currency sub limit are secured by a pledge of the assets of the foreign subsidiary borrowers that are party to our revolving credit facility. A breach of a covenant contained in our debt instruments could result in an event of default under one or more of our debt instruments and our lease financing arrangements. Such breaches would permit the lenders to declare all amounts borrowed thereunder to be due and payable, and the commitments of such lenders to make further extensions of credit could be terminated. Each of these circumstances could materially and adversely impair our liquidity.

Our borrowing costs may be impacted by our credit ratings developed by various rating agencies.

Two major ratings agencies, Standard & Poor's and Moody's, evaluate our credit profile on an ongoing basis and have each assigned ratings for our long-term debt. If our credit ratings were to decline, our ability to access certain financial markets may become limited, the perception of us in the view of our customers, suppliers and security holders may worsen and as a result, we may be adversely affected.

We have significant operating lease obligations and our failure to meet those obligations could adversely affect our financial condition.

We lease many of our manufacturing and distribution branch facilities, and certain capital equipment. Our rental expense in 2020 under these operating leases was approximately \$9.4 million. A failure to pay our rental obligations would constitute a default allowing the applicable landlord to pursue any remedy available to it under applicable law, which would include taking possession of our property and, in the case of real property, evicting us. These leases are categorized as operating leases and are not considered indebtedness for purposes of our debt instruments.

Human Capital Risks

We may be subject to further unionization and work stoppages at our facilities or our customers may be subject to work stoppages, which could seriously impact the profitability of our business.

As of December 31, 2020, we have one facility, located in Commerce, California (USA) where our hourly employees operate under a collective bargaining agreement, and which represents approximately 14% of our U.S. employees. We have four facilities outside of the United States where our employees are affiliated with state-controlled or trade unions, which covers approximately 41% of our non-U.S. employees. Our labor agreement with the United Automobile, Aerospace and Agricultural Implement Workers of America at our TriMas Aerospace facility in Commerce, California expires in 2021. We are not aware of any present active union organizing drives at any of our other facilities. We cannot predict the impact of any further unionization of our workplace.

Many of our direct or indirect customers have unionized work forces. Strikes, work stoppages or slowdowns experienced by these customers or their suppliers could result in slowdowns or closures of assembly plants where our products are utilized. In addition, organizations responsible for shipping our customers' products may be impacted by occasional strikes or other activity. Any interruption in delivery of our customers' products may reduce demand for our products and have a material adverse effect on us.

Healthcare costs for active employees may exceed projections and may negatively affect our financial results.

We maintain a range of healthcare benefits for our active employees pursuant to labor contracts and otherwise. Healthcare benefits for active employees are provided through comprehensive hospital, surgical and major medical benefit provisions or through health maintenance organizations, all of which are subject to various cost-sharing features. Some of these benefits are provided for in fixed amounts negotiated in labor contracts with the respective unions. If our costs under our benefit programs for active employees exceed our projections, our business and financial results could be materially adversely affected. Additionally, foreign competitors and many domestic competitors provide fewer benefits to their employees, and this difference in cost could adversely impact our competitive position.

We depend on the services of key individuals and relationships, the loss of which could materially harm us.

Our success will depend, in part, on the efforts of our key leadership, including key technical, commercial and manufacturing personnel. Our future success will also depend on, among other factors, our ability to retain or attract other qualified personnel. The loss of the services of any of our key employees or the failure to retain or attract employees could have a material adverse effect on us.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties
Properties

Our principal manufacturing facilities range in size from approximately 10,000 square feet to approximately 255,000 square feet. Except as set forth in the table below, all of our manufacturing facilities are owned. The leases for our manufacturing facilities have terms that expire from 2021 through 2030 and are generally renewable, at our option, for various terms, provided that we are not in default under the lease agreements. Substantially all of our owned U.S. real properties are subject to liens in connection with our credit facility. Our executive offices are located in Bloomfield Hills, Michigan under a lease through February 2028. Our buildings have been generally well maintained, are in good operating condition and are adequate for current production requirements.

The following list sets forth the location of our principal owned and leased manufacturing and other facilities used in continuing operations and identifies the principal segment utilizing such facilities as of December 31, 2020:

	Packaging	Aerospace	Specialty Products
United States:			
Alabama			Huntsville
Arkansas	Atkins ⁽¹⁾		
Arizona		Mesa ⁽¹⁾ Tolleson	
California	Irwindale ⁽¹⁾ Rohnert Park ⁽¹⁾ Union City ⁽¹⁾	City of Industry ⁽¹⁾ Commerce ⁽¹⁾ Simi Valley ⁽¹⁾ Stanton ⁽¹⁾	
Illinois	Woodridge ⁽¹⁾		
Indiana	Auburn ⁽¹⁾ Hamilton ⁽¹⁾ Indianapolis ⁽¹⁾		
Kansas		Ottawa	
Ohio	New Albany ⁽¹⁾		
Oklahoma			Tulsa
Texas			Longview
International:			
China	Haining City ⁽¹⁾ Hangzhou ⁽¹⁾		
Germany	Neunkirchen		
India	Baddi ⁽¹⁾ New Delhi ⁽¹⁾		
Italy	Borgo San Giovanni ⁽¹⁾ Forli ⁽¹⁾ Pieve Fissiraga ⁽¹⁾ Povolaro ⁽¹⁾		
Mexico	San Miguel de Allende ⁽¹⁾		
Slovakia	Levice ⁽¹⁾		
United Kingdom	Leicester		
Vietnam	Thu Dau Mot ⁽¹⁾		

⁽¹⁾ Represents a leased facility. All such leases are operating leases.

Item 3. Legal Proceedings

See Note 17, "*Commitments and Contingencies*" included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

Supplementary Item. Information about our Executive Officers

As of December 31, 2020, the following were executive officers of the Company:

Thomas A. Amato. Mr. Amato, age 57, was appointed the Company's president and chief executive officer in July 2016. Previously, he served as chief executive officer and president of Metaldyne, LLC, an international engineered products manufacturing company, from 2009 through 2015, and co-president and chief integration officer of Metaldyne Performance Group, a global manufacturing company formed in mid-2014 and taken public in the same year, from August 2014 through December 2015. Prior to 2009, he served as chairman, chief executive officer, and president of Metaldyne Corporation, a global components manufacturer, and co-chief executive officer of Asahi Tec, a Japanese casting and forging company. Prior to this, Mr. Amato worked at MascoTech in positions of increasing responsibility, and successfully completed several acquisitions and divestitures. During this time, one of his roles was vice president of corporate development for TriMas. From 1987 to 1994, Mr. Amato worked at Imperial Chemical Industries, a large multinational chemical company, as an applications development engineer and, eventually, a group leader.

Robert J. Zalupski. Mr. Zalupski, age 61, was appointed the Company's chief financial officer in January 2015. Previously, he served as vice president, finance and treasurer of the Company since 2003 and assumed responsibility for corporate development in March 2010. He joined the Company as director of finance and treasury in 2002, prior to which he worked in the Detroit office of Arthur Andersen. From 1996 through 2001, Mr. Zalupski was a partner in the audit and business advisory services practice of Arthur Andersen providing audit, business consulting, and risk management services to both public and privately held companies in the manufacturing, defense, and automotive industries. Prior to 1996, Mr. Zalupski held various positions of increasing responsibility within the audit practice of Arthur Andersen serving public and privately held clients in a variety of industries.

Joshua A. Sherbin. Mr. Sherbin, age 57, was appointed the Company's general counsel and corporate secretary in 2005, vice president and chief compliance officer in May 2008, and senior vice president in March 2016. Prior to joining the Company, he was employed as the North American corporate counsel and corporate secretary for Valeo, a diversified Tier 1 international automotive supplier headquartered in Europe. Prior to joining Valeo in 1997, Mr. Sherbin was senior counsel, assistant corporate secretary for Kelly Services, Inc., an employment staffing company, from 1995 to 1997. From 1988 until 1995, he was an associate with the law firm Butzel Long in its general business practice.

PART II

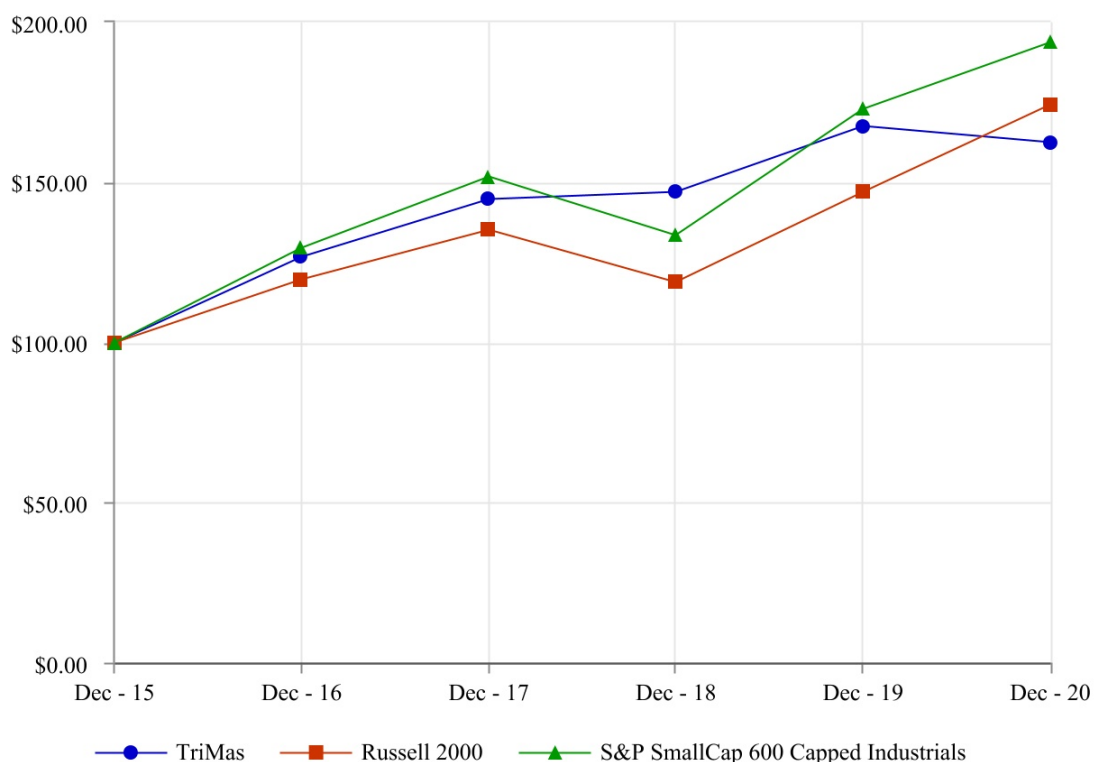
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock, par value \$0.01 per share, is listed for trading on the NASDAQ Global Select Market under the symbol "TRS." As of February 19, 2021, there were 181 holders of record of our common stock.

Our credit agreement and the indenture governing our senior notes restrict the payment of dividends on common stock, as such we did not pay dividends in 2020 or 2019. Our current policy is to retain earnings to repay debt and finance our operations and acquisitions. See the discussion under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" and Note 13 to the Company's financial statements captioned "Long-term Debt," included in Item 8, "Financial Statements and Supplementary Data," within this Form 10-K.

Performance Graph

The following graph compares the cumulative total stockholder return from December 31, 2015 through December 31, 2020 for TriMas common stock, the Russell 2000 Index and the S&P SmallCap 600 Capped Industrials Index. We have assumed that dividends have been reinvested (and taking into account the value of Horizon Global shares distributed in the spin-off) and returns have been weighted-averaged based on market capitalization. The graph assumes that \$100 was invested on December 31, 2015 in each of TriMas common stock, the stocks comprising the Russell 2000 Index and the stocks comprising the S&P SmallCap 600 Capped Industrials Index.



Issuer Purchases of Equity Securities

The following table provides information about purchases made by the Company, or on behalf of the Company by an affiliated purchaser, of shares of the Company's common stock during the three months ended December 31, 2020.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program ⁽¹⁾
October 1, 2020 to October 31, 2020	118,060	\$ 23.84	118,060	\$ 162,248,483
November 1, 2020 to November 30, 2020	22,311	\$ 24.32	22,311	\$ 161,705,818
December 1, 2020 to December 31, 2020	—	\$ —	—	\$ 161,705,818
Total	140,371	\$ 23.92	140,371	\$ 161,705,818

⁽¹⁾ In March 2020, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to \$250 million in the aggregate from its previous authorization of \$150 million. The increased authorization includes the value of shares already purchased under the previous authorization. Pursuant to this share repurchase program, during the three months ended December 31, 2020, the Company repurchased 140,371 shares of its common stock at a cost of approximately \$3.4 million. The share repurchase program is effective and has no expiration date.

Item 6. Selected Financial Data

Reserved.

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

The statements in the discussion and analysis regarding industry outlook, our expectations regarding the performance of our business and the other non-historical statements in the discussion and analysis are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in Item 1A "Risk Factors." Our actual results may differ materially from those contained in or implied by any forward-looking statements. You should read the following discussion together with Item 8, "Financial Statements and Supplementary Data."

Introduction

We are a diversified manufacturer and provider of products for customers primarily in the consumer products, aerospace & defense and industrial markets. Our wide range of innovative products are designed and engineered to solve application-specific challenges that our customers face. We believe our businesses share important and distinguishing characteristics, including: well-recognized and leading brand names in the focused markets we serve; innovative product technologies and features; a high-degree of customer approved processes and qualifications; established distribution networks; relatively low ongoing capital investment requirements; strong cash flow conversion and long-term growth opportunities. While the majority of our revenue is in the United States, we manufacture and supply products globally to a wide range of companies. We report our business activity in three segments: Packaging, Aerospace and Specialty Products.

In December 2019, we completed the sale of our Lamons division ("Lamons"), a manufacturer and distributor of industrial sealing, fastening and specialty products primarily used in the petrochemical and petroleum-refining industries, to two wholly-owned subsidiaries of an investment fund sponsored by First Reserve. The sale of Lamons was an important strategic step for TriMas, in streamlining our portfolio of businesses, as it significantly reduced our exposure to the oil and gas market from over 20% of net sales in 2019 to less than 2% in 2020, and allowed us to further invest in our Packaging and Aerospace segments. We received net after-tax proceeds from the sale of approximately \$112.7 million. The financial results of Lamons were previously reported within our Specialty Products segment. The financial position, results of operations and cash flows of Lamons are reported as discontinued operations for all periods presented through the date of disposition.

Key Factors and Risks Affecting Our Reported Results

Our businesses and results of operations depend upon general economic conditions. We serve customers in industries that are highly competitive, cyclical and that may be significantly impacted by changes in economic or geopolitical conditions.

In March 2020, the President of the United States declared the coronavirus ("COVID-19") outbreak a national emergency, as the World Health Organization determined it was a pandemic. In response to the COVID-19 pandemic, federal, provincial, state, county and local governments and public health organizations or authorities around the world have implemented a variety of measures intended to control the spread of the virus, including quarantines, "shelter-in-place" or "stay-at-home" and similar orders, travel restrictions, business curtailments and closures, social distancing, personal hygiene requirements, and other measures.

We have been, and continue to be, focused on making sure the working environments for our employees are safe so our operations have the ability to deliver the products needed to support efforts to mitigate the COVID-19 pandemic. Nearly all of our manufacturing sites have been deemed essential operations and remained open during the pandemic, at varying levels of capacity and efficiency, experiencing only temporary shutdowns due to country-specific government mandates or for thorough cleaning as a result of suspected COVID-19 cases. The health of our employees, and the ability of our facilities to remain operational in the current regulated environment, is critical to our future results of operations.

Our divisions were impacted in first quarter 2020 at differing levels and times, beginning with our Asian facilities and strategic supply network, both primarily in China, in late January, followed by our European (primarily Italy) and North American facilities in February and March. We implemented new work rules and processes, which promote social distancing and increased hygiene to ensure the safety of our employees, particularly at our production facilities. These measures, while not easily quantifiable, have increased the level of manufacturing inefficiencies due to elevated levels of absenteeism, resulting in less efficient production scheduling and, in certain cases, short-term idling of production. We expect that we will continue to operate with these protocols in place, which have impacted our 2020 results.

Overall, our 2020 net sales increased approximately \$46.4 million compared to 2019, primarily as a result of robust organic sales growth in our Packaging segment, particularly for dispensing and closure products we supply that are used in applications to fight the spread of germs, and as a result of acquisitions. These increases more than offset declines in sales in our Aerospace and Specialty Products segments, primarily related to the effects of the COVID-19 pandemic.

The most significant drivers of change in results of operations in 2020 compared with 2019, other than as directly impacted by demand level changes as a result of the COVID-19 pandemic, were goodwill and intangible asset impairment charges in our Aerospace segment, our election to change our accounting policy for asbestos-related defense costs, realignment actions we undertook, primarily in our Aerospace and Specialty Products segments, in response to reduced end-market demand following the outbreak of COVID-19, the impact of our recent acquisitions and the recognition of income tax benefits related to tax-planning actions with respect to our intercompany debt restructuring.

During 2020, we determined there was a triggering event requiring an interim quantitative impairment assessment for goodwill and indefinite-lived intangible assets within our Aerospace segment. While third quarter operating results were below pre-pandemic projected levels, the larger driver of the triggering event was a significant reduction in the July financial projection update for the remainder of 2020 compared with prior projections, and uncertainty around the duration and magnitude of the impact of the COVID-19 pandemic on future financial results given the dependence of our Aerospace segment reporting units on future levels of air travel and new aircraft builds. We determined the carrying value of both of our Aerospace reporting units, as well as of certain trade names, exceeded the fair value, resulting in non-cash, pre-tax impairment charges of approximately \$126.8 million to goodwill and \$7.8 million to indefinite lived intangible assets.

The techniques used in our interim impairment tests incorporated a number of assumptions that we believe to be reasonable and to reflect the current market conditions. Assumptions in estimating future cash flows and earnings were based on Level 3 inputs under the fair value hierarchy and were primarily related to customer demand and revenue growth, and associated profitability and cash flows, all as part of an aerospace industry recovery post-pandemic. Data from aerospace publications and public companies was used to assess the reasonableness of management's assumptions regarding the timing and extent of the industry recovery. To provide a level of sensitivity analysis, a 1% change in the discount rate would have impacted the total goodwill impairment charge by approximately \$20 million, while a 0.5% change in the terminal growth rate would have impacted the total goodwill impairment charge by approximately \$5 million.

Changes in future results, assumptions, and estimates from those used in the interim impairment test may lead to an outcome where additional impairment charges would be required in future periods. Specifically, actual results may vary from management's forecasts and such variations may be material and unfavorable, thereby triggering the need for future impairment tests where the conclusions may differ in reflection of prevailing market conditions. Further, continued adverse or worsening market conditions could result in the recognition of additional impairment if we determine that the fair value of our Aerospace Fasteners reporting unit has fallen below its carrying value. Certain circumstances that could reasonably be expected to negatively affect the underlying key assumptions and impact the estimated fair value of the Company's Aerospace Fastener reporting unit may include such items as: (i) a decrease in expected future cash flows, due to the pandemic adversely impacting the aerospace industry longer or more deeply than currently estimated, (ii) inability to achieve the sales targeted as part of the Company's strategic growth initiatives, and (iii) inability to efficiently leverage the projected sales growth at expected margin rates.

During 2020, we elected to change our accounting policy for asbestos-related defense costs from accruing for probable and reasonably estimable defense costs associated with known claims expected to settle to accruing for all future defense costs for both known and unknown claims, which we now believe can be reasonably estimated. This accounting change has been reflected as a change in accounting estimate effected by a change in accounting principle. We recorded a non-cash, pre-tax charge in second quarter 2020 for asbestos-related costs of approximately \$23.4 million, which is included in selling, general and administrative expenses.

Following the onset of the COVID-19 pandemic, we undertook certain realignment actions, primarily in our Aerospace and Specialty Products segments, in response to current and expected future reduced end market demand. We recorded non-cash charges of approximately \$13.8 million related to inventory reductions, primarily as a result of a strategic decision in our Arrow Engine division to streamline its product line offering. We also recorded charges of approximately \$2.3 million related to certain production equipment removed from service given reduced demand levels. In addition, we reduced our employment levels given lower customer demand, incurring approximately \$3.8 million in severance charges.

In December 2020, we completed the acquisition of Affaba & Ferrari Srl ("Affaba & Ferrari"), which specializes in the design, development and manufacture of precision caps and closures for food & beverage and industrial product applications, for an aggregate amount of approximately \$98.4 million, net of cash acquired, subject to normal course adjustments, which are expected to be completed by mid-2021. Affaba & Ferrari, which is reported in the Company's Packaging segment, operates out of a highly automated manufacturing facility and support office located in Borgo San Giovanni, Italy. Affaba & Ferrari contributed approximately \$0.7 million of net sales during 2020 within our Packaging segment.

In April 2020, we acquired the Rapak brand, including certain bag-in-box product lines and assets ("Rapak") for an aggregate amount of approximately \$11.4 million. Rapak, which is reported in our Packaging segment, has three manufacturing locations in the United States. Rapak contributed approximately \$13.9 million of net sales during 2020 within our Packaging segment, although it is performing below break-even operating profit as demand for its products, particularly those used in quick service restaurant applications, has significantly declined from pre-acquisition levels in 2019 due to the impact of the COVID-19 pandemic.

In February 2020, we completed the acquisition of RSA Engineered Products ("RSA"), a provider of highly-engineered and proprietary components for air management systems used in critical flight applications, for an aggregate amount of approximately \$83.7 million, net of cash acquired. RSA, located in Simi Valley, California, designs, engineers and manufactures highly-engineered components, including air ducting products, connectors and flexible joints, predominantly used in aerospace and defense engine bleed air, anti-icing and environmental control system applications. RSA contributed approximately \$19.4 million of net sales during 2020 within our Aerospace segment.

During 2020, we also undertook certain tax-planning actions with respect to intercompany debt restructuring, resulting in the recognition of approximately \$6.4 million of income tax benefit.

Additional Key Risks that May Affect Our Reported Results

The COVID-19 pandemic significantly impacted our 2020 results, and we expect it will continue to impact us in the future at varying degrees. We expect the robust customer demand for our Packaging segment's dispensing pumps and closure products used in personal care and home care applications that fight the spread of germs will continue, as we believe there is a new secular trend for higher levels of health and cleanliness. We are actively collaborating with our customers and strategic supply partners to manage production capacity and supply chain availability as efficiently as possible. Industrial demand in North America was lower than 2019 levels, and we are uncertain how and when demand will be impacted as many of the shelter-in-place orders are adjusted or lifted, particularly in North America, where orders for our industrial cylinders, for example, are heavily influenced by the levels of construction and HVAC activity. We expect the aerospace market to continue to experience the most severe dislocation going forward. With the current travel restrictions and significant drop in passenger miles, aircraft manufacturers have now significantly slowed production, and since second quarter we have experienced a significant drop in aerospace-related sales compared to prior year levels. We expect this trend to continue for the foreseeable future.

We have executed realignment actions in 2020, primarily in our Aerospace and Specialty Products segments, and also in certain Packaging product areas where demand has fallen, such as in the quick-serve and restaurant applications, to protect against the uncertain end market demand. We will continue to assess further actions if required. However, as a result of the COVID-19 pandemic's impact on global economic activity, and the continued potential impact to our future results of operations, as well if there is an impact to TriMas' market capitalization, we may record additional cash and non-cash charges related to incremental realignment actions, as well as for uncollectible customer account balances, excess inventory and idle production equipment.

Despite the potential decline in future demand levels and results of operations as a result of the COVID-19 pandemic, at present, we believe our capital structure is in a solid position, and we have ample cash and available liquidity under our revolving credit facility to meet our debt service obligations, capital expenditure requirements and other short-term and long-term obligations for the foreseeable future. Even after deploying nearly \$200 million in our three acquisitions and completing stock purchases totaling \$39.4 million during 2020, our December 31, 2020 net leverage ratio, as defined in our credit agreement, is below our long-term target of 2.0x.

The extent of the COVID-19 pandemic's effect on our operational and financial performance will depend in large part on future developments, which cannot be predicted with confidence at this time. Future developments include the duration, scope and severity of the pandemic, the actions taken to contain or mitigate its impact, timing of widespread vaccine availability, and the resumption of widespread economic activity. Due to the inherent uncertainty of the unprecedented and rapidly evolving situation, we are unable to predict with any confidence the likely impact of the COVID-19 pandemic on our future operations.

Beyond the unique risks presented by the COVID-19 pandemic, other critical factors affecting our ability to succeed include: our ability to create organic growth through product development, cross-selling and extending product-line offerings, and our ability to quickly and cost-effectively introduce and successfully launch new products; our ability to acquire and integrate companies or products that supplement existing product lines, add new distribution channels or customers, expand our geographic coverage or enable better absorption of overhead costs; our ability to manage our cost structure more efficiently via supply base management, internal sourcing and/or purchasing of materials, selective outsourcing and/or purchasing of support functions, working capital management, and greater leverage of our administrative functions.

Our overall business does not experience significant seasonal fluctuation, other than our fourth quarter, which has tended to be the lowest net sales quarter of the year due to holiday shutdowns at certain customers or other customers deferring capital spending to the following year. Given the short-cycle nature of most of our businesses, we do not consider sales order backlog to be a material factor. A growing amount of our sales is derived from international sources, which exposes us to certain risks, including currency risks.

We are sensitive to price movements and availability of our raw materials supply. Our largest raw material purchases are for resins (such as polypropylene and polyethylene), steel, aluminum and other oil and metal-based purchased components. While material cost changes did not have a significant impact in 2020 compared with 2019, there has been some volatility over the past two years as a direct and indirect result of foreign trade policy, where tariffs on certain of our commodity-based products sourced from Asia have been instituted, and certain North American suppliers have opportunistically increased their prices. As needed, we have taken actions, and will continue to take actions, to mitigate such increases, including implementing commercial pricing adjustments, resourcing to alternate suppliers and insourcing of previously sourced products to better leverage our global manufacturing footprint. Although we believe we are generally able to mitigate the impact of higher commodity costs over time, we may experience additional material costs and disruptions in supply in the future and may not be able to pass along higher costs to our customers in the form of price increases or otherwise mitigate the impacts to our operating results.

Although we have escalator/de-escalator clauses in commercial contracts with certain of our customers, or can modify prices based on market conditions to recover higher costs, our price increases generally lags the underlying material cost increase, and we cannot be assured of full cost recovery in the open market.

Our Arrow Engine business in our Specialty Products segment is sensitive to the demand for natural gas and crude oil in North America. For example, demand for engine, pump jack and compressor products are impacted by active oil and gas rig counts and wellhead investment activities. Separately, oil-based commodity costs are a significant driver of raw materials and purchased components used within our Packaging segment.

Each year, as a core tenet of the TBM, our businesses target cost savings from Kaizen and continuous improvement initiatives in an effort to reduce, or otherwise offset, the impact of increased input and conversion costs through increased throughput and yield rates, with a goal of at least covering inflationary and market cost increases. In addition, we continuously review our operating cost structures to ensure alignment with current market demand.

We continue to evaluate alternatives to redeploy the cash generated by our businesses, one of which includes returning capital to our shareholders. In 2020, our Board of Directors increased the authorization of share repurchases to a cumulative amount of \$250 million. During 2020, 2019 and 2018, we purchased 1,582,049, 1,230,050 and 442,632 shares of our outstanding common stock for approximately \$39.4 million, \$36.7 million and \$12.1 million, respectively.

As of December 31, 2020, the Company has approximately \$161.7 million remaining under the repurchase authorization. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock, depending on market conditions and other factors.

Segment Information and Supplemental Analysis

The following table summarizes financial information for our three reportable segments (dollars in thousands):

	Year ended December 31,					
	2020	As a Percentage of Net Sales	2019	As a Percentage of Net Sales	2018	As a Percentage of Net Sales
Net Sales						
Packaging	\$ 488,340	63.4 %	\$ 392,340	54.2 %	\$ 368,200	52.2 %
Aerospace	167,740	21.8 %	194,110	26.8 %	185,920	26.4 %
Specialty Products	113,890	14.8 %	137,080	19.0 %	150,910	21.4 %
Total	<u>\$ 769,970</u>	<u>100.0 %</u>	<u>\$ 723,530</u>	<u>100.0 %</u>	<u>\$ 705,030</u>	<u>100.0 %</u>
Gross Profit						
Packaging	\$ 142,410	29.2 %	\$ 116,180	29.6 %	\$ 119,620	32.5 %
Aerospace	27,020	16.1 %	53,060	27.3 %	49,630	26.7 %
Specialty Products	12,650	11.1 %	24,660	18.0 %	30,860	20.4 %
Total	<u>\$ 182,080</u>	<u>23.6 %</u>	<u>\$ 193,900</u>	<u>26.8 %</u>	<u>\$ 200,110</u>	<u>28.4 %</u>
Selling, General and Administrative						
Packaging	\$ 47,850	9.8 %	\$ 35,340	9.0 %	\$ 35,030	9.5 %
Aerospace	25,550	15.2 %	24,070	12.4 %	22,340	12.0 %
Specialty Products	7,890	6.9 %	8,620	6.3 %	9,780	6.5 %
Corporate expenses	53,190	N/A	34,500	N/A	24,060	N/A
Total	<u>\$ 134,480</u>	<u>17.5 %</u>	<u>\$ 102,530</u>	<u>14.2 %</u>	<u>\$ 91,210</u>	<u>12.9 %</u>
Operating Profit (Loss)						
Packaging	\$ 93,990	19.2 %	\$ 80,770	20.6 %	\$ 84,590	23.0 %
Aerospace	(133,440)	(79.6)%	28,950	14.9 %	27,290	14.7 %
Specialty Products	4,350	3.8 %	16,000	11.7 %	20,990	13.9 %
Corporate	(53,190)	N/A	(34,500)	N/A	(24,060)	N/A
Total	<u>\$ (88,290)</u>	<u>(11.5)%</u>	<u>\$ 91,220</u>	<u>12.6 %</u>	<u>\$ 108,810</u>	<u>15.4 %</u>
Capital Expenditures						
Packaging	\$ 30,730	6.3 %	\$ 16,400	4.2 %	\$ 13,590	3.7 %
Aerospace	5,770	3.4 %	8,110	4.2 %	1,190	0.6 %
Specialty Products	3,890	3.4 %	5,090	3.7 %	3,750	2.5 %
Corporate ^(a)	90	N/A	70	N/A	4,890	N/A
Total	<u>\$ 40,480</u>	<u>5.3 %</u>	<u>\$ 29,670</u>	<u>4.1 %</u>	<u>\$ 23,420</u>	<u>3.3 %</u>
Depreciation						
Packaging	\$ 18,330	3.8 %	\$ 15,070	3.8 %	\$ 12,510	3.4 %
Aerospace	7,110	4.2 %	6,560	3.4 %	6,570	3.5 %
Specialty Products	3,450	3.0 %	2,960	2.2 %	2,870	1.9 %
Corporate	130	N/A	280	N/A	280	N/A
Total	<u>\$ 29,020</u>	<u>3.8 %</u>	<u>\$ 24,870</u>	<u>3.4 %</u>	<u>\$ 22,230</u>	<u>3.2 %</u>
Amortization						
Packaging	\$ 9,270	1.9 %	\$ 9,580	2.4 %	\$ 9,110	2.5 %
Aerospace	11,020	6.6 %	8,530	4.4 %	8,620	4.6 %
Specialty Products	460	0.4 %	520	0.4 %	530	0.4 %
Corporate	—	N/A	—	N/A	—	N/A
Total	<u>\$ 20,750</u>	<u>2.7 %</u>	<u>\$ 18,630</u>	<u>2.6 %</u>	<u>\$ 18,260</u>	<u>2.6 %</u>

^(a) Corporate capital expenditures for the year ended December 31, 2018 are primarily related to purchases of machinery and equipment formerly held under operating leases. These purchased assets were subsequently transferred from Corporate to the segment utilizing the assets.

Results of Operations

Year Ended December 31, 2020 Compared with Year Ended December 31, 2019

The principal factors impacting us during the year ended December 31, 2020, compared with the year ended December 31, 2019 were:

- increases in our Packaging segment's organic sales and related operating profit as a result of significantly higher demand, primarily for our products used in applications to help fight the spread of germs;
- approximately \$134.6 million of non-cash, pre-tax goodwill and indefinite-lived intangible asset impairment charges during 2020 in our Aerospace segment, primarily as a result of lower current and expected future financial results due to uncertainty around the duration and magnitude of the impact of the COVID-19 pandemic;
- reduced sales and related profit within our Aerospace and Specialty Products segments, primarily as a result of the COVID-19 pandemic;
- a change in our accounting policy for asbestos-related defense costs during 2020;
- the impact of our recent acquisitions, primarily RSA in February 2020 and Rapak in April 2020;
- realignment expenses, primarily in our Aerospace and Specialty Products segments, in response to reduced end-market demand following the outbreak of COVID-19; and
- an income tax benefit related to intercompany debt restructuring.

Overall, net sales increased approximately \$46.4 million, or approximately 6.4%, to \$770.0 million in 2020, as compared to \$723.5 million in 2019. Our recent acquisitions contributed approximately \$44.1 million of inorganic sales growth. Organic sales, excluding the impact of currency exchange, increased approximately \$3.4 million, as approximately \$72.4 million of sales increases in our Packaging segment, primarily for products used in applications that help fight the spread of germs, were more than offset by approximately \$45.8 million of lower sales in our Aerospace segment and \$23.2 million lower sales in our Specialty Products segment, both primarily due to lower demand as a result of the COVID-19 pandemic. In addition, net sales were lower by approximately \$1.1 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Gross profit margin (gross profit as a percentage of sales) approximated 23.6% and 26.8% in 2020 and 2019, respectively. Gross profit margin decreased, as the impact of higher sales levels was more than offset by the impact of approximately \$17.1 million of realignment expenses during 2020, approximately \$15.0 million of which were non-cash and approximately \$2.1 million of which were cash expenses, primarily in our Aerospace and Specialty Products segments, where we executed actions to lower our cost structure in response to reduced end market demand following the outbreak of the COVID-19 pandemic. In addition, we recorded approximately \$2.8 million of non-cash purchase accounting charges during 2020 for the step-up of inventory to fair value and subsequent amortization related to our RSA and Rapak acquisitions as compared to approximately \$0.3 million of such charges in 2019. Gross profit margin was also negatively impacted by approximately \$2.0 million for an updated estimate of a pre-acquisition contingent liability within our Aerospace segment during 2020, as well as lower fixed cost absorption, higher production inefficiencies and a less favorable product sales mix, all due primarily to the COVID-19 pandemic.

Operating profit (loss) margin (operating profit as a percentage of sales) approximated (11.5)% and 12.6% in 2020 and 2019, respectively. Operating profit (loss) decreased \$179.5 million, to \$88.3 million of operating loss in 2020, as compared to \$91.2 million operating profit in 2019. This decrease was primarily a result of approximately \$134.6 million of non-cash goodwill and indefinite-lived intangible asset impairment charges within our Aerospace segment and an approximate \$23.4 million non-cash charge due to a change in accounting policy, both recorded during 2020. Operating profit further decreased due to approximately \$19.9 million of realignment expenses recorded during 2020, of which \$16.1 million were non-cash and \$3.8 million were cash expenses, primarily in our Aerospace and Specialty Products segments, where we executed actions to lower our cost structure in response to reduced end market demand. Operating profit (loss) also decreased as a result of increased purchase accounting expenses, a less favorable product sales mix and as a result of unfavorable currency exchange.

Interest expense increased approximately \$0.7 million, to \$14.7 million in 2020, as compared to \$14.0 million in 2019, primarily as a result of increased weighted average borrowings from approximately \$338.0 million in 2019 to \$368.9 million in 2020. We drew \$150 million on our revolving credit facility in first quarter 2020 to ensure availability of cash on hand at the onset of the pandemic, but subsequently repaid this amount in second quarter 2020.

Other income decreased approximately \$0.8 million to \$0.2 million in 2020, from \$1.0 million in 2019, primarily due to lower year-over-year interest income on cash balances and higher defined benefit pension expenses.

The effective income tax rate for 2020 was 22.3%, compared to 20.9% for 2019. We recorded an income tax benefit of approximately \$23.0 million in 2020, as compared to \$16.3 million of income tax expense in 2019. During 2020, we reported a domestic income tax loss of approximately \$134.6 million and foreign pre-tax income of approximately \$31.9 million, compared to 2019 domestic and foreign pre-tax income of approximately \$52.2 million and \$26.1 million, respectively. The effective tax rate for 2020 was impacted by a decrease in profitability in the U.S. resulting from various one-time charges, including impairment of goodwill and indefinite-lived intangible assets and a change in our accounting policy for asbestos-related defense costs. During 2020, we also undertook certain tax-planning actions with respect to restructuring our intercompany debt, resulting in the recognition of a \$6.4 million deferred tax benefit.

Income (loss) from continuing operations decreased approximately \$141.7 million to a loss of approximately \$79.8 million in 2020, compared to income of \$61.9 million in 2019. The decrease was primarily the result of a decrease in operating profit (loss) of approximately \$179.5 million, which was significantly impacted by the goodwill and indefinite-lived intangibles impairment charge, an increase in interest expense of approximately \$0.7 million, and a decrease in other income of approximately \$0.8 million, partially offset by an increase in income tax benefit of approximately \$39.3 million.

See below for a discussion of operating results by segment.

Packaging. Net sales increased approximately \$96.0 million, or 24.5%, to \$488.3 million in 2020, as compared to \$392.3 million in 2019. Acquisition-related growth was approximately \$24.7 million, comprised of approximately \$13.9 million of sales from our April 2020 acquisition of Rapak, approximately \$0.7 million of sales from our December 2020 acquisition of Affaba & Ferrari, and approximately \$10.1 million of January through April 2020 sales for Taplast, which was acquired in late April 2019. Sales of dispensing products used in beauty and personal care and home care applications increased by approximately \$53.5 million, primarily as a result of increased demand for personal hygiene applications due to heightened awareness of reducing the spread of germs following the onset of the COVID-19 pandemic. Sales of products used in food and beverage markets increased by approximately \$15.4 million, primarily due to higher sales of beverage dispensers, including pumps and related products, in North America. Sales of products used in industrial markets increased by approximately \$2.1 million, primarily due to higher demand within North America, some of which we believe is attributable to higher sales of products used in the transportation of bulk sanitizer and industrial cleaning solutions. These increases were partially offset by approximately \$1.1 million of unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Packaging's gross profit increased approximately \$26.2 million to \$142.4 million, or 29.2% of sales, in 2020, as compared to \$116.2 million, or 29.6% of sales, in 2019, primarily due to increased sales levels. These increases were partially offset by approximately \$1.1 million in non-cash realignment costs during 2020 primarily related to the disposal of certain equipment that was taken out of service and approximately \$0.8 million for a purchase accounting non-cash charge related to the step-up of Rapak's inventory to fair value and subsequent amortization. Gross profit margin was lower than 2019 due to a less favorable product sales mix as well as Rapak generating low gross profit at current demand levels, all as a result of the impacts of the COVID-19 pandemic.

Packaging's selling, general and administrative expenses increased approximately \$12.5 million to \$47.9 million, or 9.8% of sales, in 2020, as compared to \$35.3 million, or 9.0% of sales, in 2019, as we incurred approximately \$4.4 million of higher ongoing selling, general and administrative costs associated with our acquisitions, higher incentive costs in 2020 given the higher profit levels and higher employment levels given the higher sales levels. Additionally, we incurred approximately \$1.2 million in charges associated with our realignment actions, primarily for severance in 2020, as well as recognized an approximate \$3.9 million non-cash reversal of a contingent liability for which the underlying obligation expired during 2019, which did not repeat in 2020. These increases were partially offset by an approximate \$0.8 million non-cash charge during 2019 related to the write-off of the trade name acquired in the Plastic Srl acquisition that was not used.

Packaging's operating profit increased approximately \$13.2 million to \$94.0 million, or 19.2% of sales, in 2020, as compared to \$80.8 million, or 20.6% of sales, in 2019, primarily as a result of increased sales, which was partially offset by realignment charges taken during 2020, the recognition of the purchase accounting adjustment related to Rapak's inventory step-up to fair value and subsequent amortization, a less favorable product sales mix and higher selling, general and administrative expenses.

Aerospace. Net sales decreased approximately \$26.4 million, or 13.6%, to \$167.7 million in 2020, as compared to \$194.1 million in 2019. The February 2020 acquisition of RSA contributed approximately \$19.4 million of sales. Sales of our fastener and machined components products declined by approximately \$35.5 million and \$10.3 million, respectively, both due to lower demand resulting from current and expected future reduced air travel due to the COVID-19 pandemic, with fastener sales also lower, as expected, due to the 737 Max grounding.

Gross profit within Aerospace decreased approximately \$26.0 million to \$27.0 million, or 16.1% of sales, in 2020, from \$53.1 million, or 27.3% of sales, in 2019, due primarily to the decrease in sales levels and related lower fixed cost absorption and production inefficiencies due to the impact of the COVID-19 pandemic. In 2020, we also undertook certain realignment actions to protect against uncertain end-market demand related to the COVID-19 pandemic, resulting in charges of approximately \$4.6 million related to inventory reductions, \$2.1 million related to severance as we reduced our manufacturing employment levels and \$0.3 million related to production equipment removed from service given current demand levels. In addition, we recorded charges during 2020 of approximately \$2.0 million related to the non-cash step-up of RSA's inventory to fair value under purchase accounting and subsequent amortization as well as approximately \$2.0 million for an update to a pre-acquisition contingent liability.

Selling, general and administrative expenses increased approximately \$1.5 million to \$25.6 million, or 15.2% of sales, in 2020, as compared to \$24.1 million, or 12.4% of sales, in 2019, primarily due to approximately \$3.8 million of ongoing costs of RSA. This increase was partially offset by cost reduction efforts to mitigate the impact of lower sales levels.

Operating profit (loss) within Aerospace decreased approximately \$162.4 million to an operating loss of \$133.4 million, or (79.6)% of sales, in 2020, as compared to an operating profit of \$29.0 million, or 14.9% of sales, in 2019. Operating profit and related margin decreased primarily due to approximately \$134.6 million of pre-tax, non-cash goodwill and indefinite-lived intangible asset impairment charges in 2020. Operating profit also declined due to realignment charges, as well as the impact of lower sales levels, which resulted in lower fixed cost absorption and higher production inefficiencies as a result of the COVID-19 pandemic, the recognition of the purchase accounting adjustment related to RSA's inventory step-up to fair value and subsequent amortization, the update of a pre-acquisition contingent liability and higher selling, general and administrative expenses.

Specialty Products. Net sales decreased approximately \$23.2 million, or 16.9%, to \$113.9 million in 2020, as compared to \$137.1 million in 2019. Sales of our cylinder products decreased by approximately \$14.6 million, as low demand for steel cylinders used in construction and HVAC activity in North America was partially offset by a modest increase in the sale of cylinders used for oxygen and other medical applications. Sales of engines, compressors and related parts used in upstream oil and gas applications decreased by approximately \$8.6 million, primarily as a result of low oil-field activity in North America given the low price of oil.

Gross profit within Specialty Products decreased approximately \$12.0 million to \$12.7 million, or 11.1% of sales, in 2020, as compared to \$24.7 million, or 18.0% of sales, in 2019. During 2020, we undertook certain realignment actions in response to reduced end market demand, resulting in approximately \$9.0 million of non-cash charges, primarily related to Arrow Engine streamlining its product line offering and liquidating its non-core inventory. The remainder of the decrease is primarily due to the decrease in sales levels, as well as to the related lower fixed cost absorption and production inefficiencies, all as a result of the COVID-19 pandemic.

Selling, general and administrative expenses within Specialty Products decreased approximately \$0.7 million to \$7.9 million, or 6.9% of sales, in 2020, as compared to \$8.6 million, or 6.3% of net sales, in 2019. During 2020, we incurred realignment expenses of approximately \$0.7 million related to severance for sales and administrative employees, which was more than offset by reduced year-over-year spending levels as a result of lower activity and employee levels.

Operating profit within Specialty Products decreased approximately \$11.7 million to \$4.4 million, or 3.8% of sales, in 2020, as compared to \$16.0 million, or 11.7% of sales, in 2019, primarily as a result of the 2020 realignment actions, as well as due to the impact of lower sales and related lower fixed cost absorption and production inefficiencies.

Corporate Expenses. Corporate expenses included in operating profit consist of the following (dollars in millions):

	Year ended December 31,	
	2020	2019
Corporate operating expenses	\$ 20.8	\$ 25.4
Non-cash stock compensation	8.2	5.8
Legacy (income) expenses, net	24.2	3.3
Corporate expenses	<u>\$ 53.2</u>	<u>\$ 34.5</u>

Corporate expenses included in operating profit increased approximately \$18.7 million to \$53.2 million in 2020, from \$34.5 million in 2019, primarily as a result of the \$23.4 million non-cash charge due to the change of our accounting policy for asbestos-related defense costs during 2020 from accruing for probable and reasonably estimable defense costs associated with known claims expected to settle to accrue for all future defense costs for both known and unknown claims, which we now believe can be reasonably estimated. Non-cash stock compensation expense increased due to the timing and nature of equity awards in 2020 compared with 2019. We also incurred lower corporate operating expenses in 2020 and favorably resolved certain legacy matters during 2020.

Discontinued Operations. The results of discontinued operations consist of our former Lamons business, which was sold in December 2019. Income from discontinued operations, net of income tax expenses, was \$36.7 million for the year ended December 31, 2019. See Note 5, “*Discontinued Operations*,” to our consolidated financial statements attached herein.

Year Ended December 31, 2019 Compared with Year Ended December 31, 2018

The principal factors impacting us during the year ended December 31, 2019 compared with the year ended December 31, 2018 were:

- the impact of our two acquisitions, Plastic Srl and Taplast, acquired in January 2019 and April 2019, respectively, which drove the overall sales growth but at lower operating margins;
- a decline in North American industrial end market sales and related operating profit, primarily in our Specialty Products and Packaging segments;
- the termination of a Corporate liability, resulting in an approximate \$8.2 million reduction in selling, general and administrative expenses during 2018 which did not repeat in 2019;
- an approximate \$3.9 million non-cash reversal of a contingent liability in our Packaging segment, for which the underlying obligation expired in 2019; and
- the settlement of defined benefit obligations in 2018, which resulted in an approximate \$2.5 million non-cash settlement charge that did not repeat in 2019.

Overall, net sales increased approximately \$18.5 million, or approximately 2.6%, to \$723.5 million in 2019, as compared to \$705.0 million in 2018. The acquisitions of Taplast, in April 2019, and Plastic Srl, in January 2019, contributed approximately \$35.3 million of sales in our Packaging segment. Organic sales overall, excluding the impact of currency exchange, decreased by approximately \$11.0 million compared to 2018. We experienced approximately \$12.2 million higher sales to the Packaging segment's health, beauty and home care end markets and \$8.2 million higher sales within our Aerospace segment, both due to solid demand levels primarily in North America. These increases were more than offset by an approximate \$19.6 million decline in sales of industrial-related products in our Specialty Products and Packaging segments, primarily as a result of end market conditions in North America, as well as approximately \$11.8 million lower sales of products for food and beverage applications. Additionally, net sales were lower by approximately \$5.8 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Gross profit margin (gross profit as a percentage of sales) approximated 26.8% and 28.4% in 2019 and 2018, respectively. Gross profit margin decreased, as the impact of higher sales levels was more than offset by a less favorable product sales mix, resulting from higher levels of sales growth in product applications and end markets typically with lower margin profiles, and acquisition sales with gross margins below TriMas' overall gross margin rate. Gross profit margin further declined due to higher freight and conversion costs in 2019 and as a result of unfavorable currency exchange.

Operating profit margin (operating profit as a percentage of sales) approximated 12.6% and 15.4% in 2019 and 2018, respectively. Operating profit decreased approximately \$17.6 million, to \$91.2 million in 2019, as compared to an operating profit of \$108.8 million in 2018. Operating profit and margin decreased primarily due to the year-over-year impact of an approximate \$8.2 million non-cash reduction of our recorded liability to Metaldyne in 2018 following the U.S. Bankruptcy Court's final decree to close all remaining cases and terminate the Metaldyne bankruptcy distribution trust that did not repeat in 2019. In addition, during 2019, we also recognized a \$3.9 million non-cash reversal of a contingent liability in our Packaging segment. Operating profit and related margin further declined as the impact of higher sales levels was more than offset by a less favorable product sales mix, increased purchase accounting expenses, increased professional fees primarily in support of corporate development activities, higher freight and conversion costs, and as a result of unfavorable currency exchange.

Interest expense increased approximately \$0.1 million, to \$14.0 million in 2019, as compared to \$13.9 million in 2018, as a result of higher intra-period revolving credit borrowings in 2019 as compared to 2018.

Other income (expense), net increased approximately \$3.5 million to \$1.0 million in 2019, from \$2.5 million in 2018, primarily due to a one-time charge of \$2.5 million related to the settlement of defined benefit obligations in the second quarter of 2018 that did not repeat in 2019.

Income tax expense decreased approximately \$2.3 million, to \$16.3 million in 2019 as compared to \$18.7 million in 2018. The effective income tax rate for 2019 was 20.9%, compared to 20.2% for 2018. During 2019, we reported domestic and foreign pre-tax income of approximately \$52.2 million and \$26.1 million, respectively, and recognized tax benefits of approximately \$1.2 million resulting from research and manufacturing tax incentives. We also incurred tax charges of approximately \$3.6 million directly attributable to increases in valuation allowances on certain deferred tax assets including foreign tax operating loss carryforwards. In 2018, we reported domestic and foreign pre-tax income of approximately \$64.7 million and \$27.7 million, and recognized a net tax benefit of approximately \$2.7 million related to provision to return adjustments for our U.S. Federal tax return, which included an approximate \$1.1 million benefit due to additional regulations that were issued in connection with the Tax Cuts and Jobs Act ("Tax Reform Act").

Income from continuing operations decreased approximately \$11.8 million to \$61.9 million in 2019, from \$73.7 million in 2018. The decrease was primarily the result of a decrease in operating profit of approximately \$17.6 million, partially offset by a decrease in income tax expense of approximately \$2.3 million and an increase of other income (expense) of approximately \$3.5 million.

See below for a discussion of operating results by segment.

Packaging. Net sales increased approximately \$24.1 million, or 6.6%, to \$392.3 million in 2019, as compared to \$368.2 million in 2018. The Taplast and Plastic Srl acquisitions contributed approximately \$35.3 million in 2019. Sales to the health, beauty and home care end market increased approximately \$12.2 million, primarily due to higher demand in North America and Europe as well as sales growth in Asia. These increases were partially offset by a decrease in sales of products to the food and beverage end market by approximately \$11.8 million, primarily due to lower sales of pumps as well as labor and capacity constraints to manufacture caps for certain food applications. Sales of products to the industrial end market declined by approximately \$5.8 million due to lower demand in North America. Additionally, net sales were lower by approximately \$5.8 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies.

Packaging's gross profit decreased approximately \$3.4 million to \$116.2 million, or 29.6% of sales, in 2019, as compared to \$119.6 million, or 32.5% of sales, in 2018. Gross profit decreased by approximately \$3.2 million due to higher freight costs, more than half of which was as a result of expediting shipments to fulfill committed delivery dates, and by approximately \$2.0 million due to unfavorable currency exchange, as our reported results in U.S. dollars were negatively impacted as a result of the stronger U.S. dollar relative to foreign currencies. While the increase in net sales contributed incremental gross profit dollars, we experienced a less favorable product sales mix, primarily due to gross margins of the acquired businesses being below the current overall segment margin, which impacted gross margin by nearly 100 basis points. In addition, sales to the health, beauty and home care end market comprised a larger percentage of net sales in 2019 compared to 2018, and yield a lower gross profit margin.

Packaging's selling, general and administrative expenses increased approximately \$0.3 million to \$35.3 million, or 9% of sales, in 2019, as compared to \$35.0 million, or 9.5% of sales, in 2018, primarily due to higher ongoing selling, general and administrative costs associated with the acquisitions completed in 2019 as well as non-cash purchase accounting-related expenses of approximately \$0.8 million related to the write-off of the trade name acquired in the Plastic Srl acquisition that will not be used. These increases were partially offset by an approximate \$3.9 million non-cash reversal of a contingent liability for which the underlying obligation expired in 2019.

Packaging's operating profit decreased approximately \$3.8 million to \$80.8 million, or 20.6% of sales, in 2019, as compared to \$84.6 million, or 23.0% of sales, in 2018, as the impact of higher freight costs, unfavorable foreign currency exchange, a less favorable product sales mix, and higher selling, general and administrative expenses more than offset the impact of higher sales levels.

Aerospace. Net sales increased approximately \$8.2 million, or 4.4%, to \$194.1 million in 2019, as compared to \$185.9 million in 2018, due to an increase of approximately \$8.5 million due to steady demand levels for fastener products combined with improved production throughput at our manufacturing facilities, partially offset by a decrease of approximately \$0.3 million due to lower sales of machined components products.

Gross profit within Aerospace increased approximately \$3.4 million to \$53.1 million, or 27.3% of sales, in 2019, from \$49.6 million, or 26.7% of sales, in 2018, as the higher sales were more profitable as a result of production efficiencies. In addition, gross profit and related margin increased due to a favorable product sales mix of more highly-engineered fasteners.

Selling, general and administrative expenses increased approximately \$1.7 million to \$24.1 million, or 12.4% of sales, in 2019, as compared to \$22.3 million, or 12.0% of sales, in 2018, primarily due to higher employee costs.

Operating profit within Aerospace increased approximately \$1.7 million to \$29.0 million, or 14.9% of sales, in 2019, as compared to \$27.3 million, or 14.7% of sales, in 2018, primarily due to higher sales levels, improved production efficiencies and a more favorable product sales mix, which were partially offset by higher selling, general and administrative expenses.

Specialty Products. Net sales for 2019 decreased approximately \$13.8 million, or 9.2%, to \$137.1 million, as compared to \$150.9 million in 2018. Sales of engines, compressors and related parts used in upstream oil and gas applications decreased approximately \$7.1 million due to lower oil and gas drilling investment activity in the U.S. and Canada. Sales of our industrial cylinder products decreased approximately \$6.7 million, primarily due to decreased demand for both high pressure and acetylene steel cylinders, we believe, as a result of customer consolidation and related asset cylinder inventory management.

Gross profit within Specialty Products decreased approximately \$6.2 million to \$24.7 million, or 18.0% of sales, in 2019, as compared to \$30.9 million, or 20.4% of sales, in 2018. Gross profit decreased primarily due to lower sales, reduced fixed cost absorption, and higher conversion costs for our cylinder products.

Selling, general and administrative expenses within Specialty Products decreased approximately \$1.2 million to \$8.6 million, or 6.3% of sales, in 2019, as compared to \$9.8 million, or 6.5% of sales, in 2018. Selling, general and administrative expenses decreased as we have continued to manage spending levels consistent with current lower demand levels.

Operating profit within Specialty Products decreased approximately \$5.0 million to \$16.0 million, or 11.7% of sales, in 2019, as compared to \$21.0 million, or 13.9% of sales, in 2018, primarily due to lower sales levels, reduced fixed cost absorption and higher conversion costs.

Corporate Expenses. Corporate expenses included in operating profit consist of the following (dollars in millions):

	Year ended December 31,	
	2019	2018
Corporate operating expenses	\$ 25.4	\$ 22.3
Non-cash stock compensation	5.8	7.2
Legacy expenses	3.3	(5.4)
Corporate expenses	<u>\$ 34.5</u>	<u>\$ 24.1</u>

Corporate expenses included in operating profit increased approximately \$10.4 million to \$34.5 million in 2019, from \$24.1 million in 2018. Legacy (income) expenses, net increased approximately \$8.7 million, primarily due to the termination of the liability to Metaldyne in first quarter 2018, which resulted in an approximate \$8.2 million non-cash reduction in legacy (income) expenses, net, that did not occur in 2019. Corporate operating expenses increased approximately \$3.1 million, primarily due to increased professional fees in support of corporate development activities.

Discontinued Operations. The results of discontinued operations consists of our former Lamons business, which was sold on December 20, 2019. Income from discontinued operations, net of income tax expenses, was \$36.7 million for the year ended December, 31 2019, as compared to a loss from discontinued operations, net of income taxes, of \$9.6 million for the year ended December 31, 2018. See Note 5, "Discontinued Operations," to our consolidated financial statements attached herein.

Liquidity and Capital Resources

Cash Flows

Cash flows provided by operating activities of continuing operations in 2020 were approximately \$127.4 million, as compared to approximately \$95.7 million in 2019. Significant changes in cash flows provided by operating activities of continuing operations and the reasons for such changes are as follows:

- In 2020, the Company generated approximately \$105.0 million in cash flows, based on the reported net loss of approximately \$79.8 million and after considering the effects of non-cash items related to depreciation, amortization, loss on dispositions of assets, changes in deferred income taxes, stock-based compensation, change in legacy liability estimate, impairment of goodwill and indefinite-lived intangible assets and other operating activities. In 2019, the Company generated approximately \$111.4 million in cash flows based on the reported net income from continuing operations of approximately \$61.9 million and after considering the effects of similar non-cash items.
- Decreases in accounts receivable resulted in a source of cash of approximately \$9.6 million and \$3.3 million in 2020 and 2019, respectively, primarily due to timing of cash collections. Days sales outstanding of receivables decreased by approximately four days compared to 2019, as we placed a significant focus on our credit and collections process, particularly in those businesses most impacted by the pandemic where credit risk was heightened.

- We decreased our investment in inventory by approximately \$4.0 million and \$0.7 million in 2020 and 2019, respectively. Our days sales in inventory decreased by approximately eight days in 2020 as compared to 2019, primarily as a result of the strategic decision in our Arrow Engine division to streamline its product line offering during 2020. We continue to moderate inventory levels in line with sales levels.
- Decreases in prepaid expenses and other assets resulted in a source of cash of approximately \$4.4 million in 2020, while increases in prepaid expense and other assets resulted in a use of cash of approximately \$6.9 million in 2019. The changes in both 2020 and 2019 are primarily as a result of the timing of payments made for income taxes and certain operating expenses.
- Increases in accounts payable and accrued liabilities resulted in a source of cash of approximately \$4.5 million in 2020, while decreases in accounts payable and accrued liabilities resulted in a use of cash of approximately \$12.8 million in 2019. Our days accounts payable on hand decreased by approximately 15 days in 2020 as we paid certain key Packaging vendors more quickly in 2020 to ensure our orders remained a top priority for them given our robust demand levels and minimal available capacity in the marketplace. This decrease was more than offset by our increase in accrued liabilities during 2020, primarily as a result of the timing and amount of wage-related accruals. Our days accounts payable on hand increased by approximately seven days in 2019 due to the timing and mix of payment terms with our vendors. The decrease in accounts payable and accrued liabilities was further impacted by net non-cash reductions of obligations of approximately \$3.9 million in 2019.

Net cash used for investing activities of continuing operations was approximately \$232.1 million in 2020, while net cash provided by investing activities of continuing operations was approximately \$31.3 million in 2019. During 2020, we paid approximately \$193.5 million, net of cash acquired, in the aggregate to acquire RSA, Rapak, and Affaba & Ferrari. We invested approximately \$40.5 million in capital expenditures as we have continued our investment in growth, capacity and productivity-related capital projects. Cash received from the disposition of business, property and equipment was approximately \$2.0 million in 2020. During 2019, we invested approximately \$29.7 million in capital expenditures and received cash from the disposition of business, property and equipment of approximately \$128.1 million, primarily related to the sale of Lamons. During 2019, we paid approximately \$67.1 million, net of cash acquired, to acquire Plastic Srl and Taplast.

Net cash provided by financing activities in 2020 was approximately \$6.1 million, while net cash used for financing activities was approximately \$40.4 million in 2019. During 2020, we received proceeds from borrowings, net of repayments, of approximately \$48.2 million on our revolving credit facilities. We also purchased approximately \$39.4 million of outstanding common stock and used a net cash amount of approximately \$2.6 million related to our stock compensation arrangements. During 2019, we made net repayments of approximately \$0.3 million on our revolving credit facilities, purchased approximately \$36.7 million of outstanding common stock and used a net cash amount of approximately \$3.3 million related to our stock compensation arrangements.

Our Debt and Other Commitments

The \$300.0 million aggregate principal amount of our senior notes due 2025 ("Senior Notes") accrues interest at a rate of 4.875% per annum, payable semi-annually in arrears on April 15 and October 15, and mature on October 15, 2025. The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis by certain named subsidiaries of the Company (each a "Guarantor" and collectively the "Guarantors"). The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and subordinated to all existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness. In 2020, our consolidated subsidiaries that do not guarantee the Senior Notes represented approximately 22% of the total of guarantor and non-guarantor net sales, treating each as a consolidated group and excluding intercompany transactions between guarantor and non-guarantor subsidiaries. In addition, our non-guarantor subsidiaries represented approximately 34% and 54% of the total guarantor and non-guarantor assets and liabilities, respectively, as of December 31, 2020, treating the guarantor and non-guarantor subsidiaries each as a consolidated group.

We may redeem all or part of the Senior Notes at a redemption price equal to 102.438% (reducing to 101.219% from October 15, 2021 through October 15, 2022 and 100% thereafter) of the principal amount thereof, plus accrued and unpaid interest, if any, to the redemption date.

We are party to a credit agreement ("Credit Agreement"), consisting of a \$300.0 million senior secured revolving credit facility, which permits borrowings denominated in specific foreign currencies, subject to a \$125.0 million sub limit. The Credit Agreement matures on September 20, 2022 and is subject to interest at London Interbank Offered Rate ("LIBOR") plus 1.50%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date. The Credit Agreement allows issuance of letters of credit, not to exceed \$40.0 million in aggregate, against revolving credit facility commitments.

The Credit Agreement also provides for incremental revolving credit commitments in an amount not to exceed the greater of \$200 million and an amount such that, after giving effect to such incremental commitments and the incurrence of any other indebtedness substantially simultaneously with the making of such commitments, the senior secured net leverage ratio, as defined in the Credit Agreement, is no greater than 3.00 to 1.00. The terms and conditions of any incremental revolving credit facility commitments must be no more favorable than the existing credit facility.

Amounts drawn under our revolving credit facility fluctuate daily based upon our working capital and other ordinary course needs. Availability under our revolving credit facility depends upon, among other things, compliance with our Credit Agreement's financial covenants. Our Credit Agreement contains various negative and affirmative covenants and other requirements affecting us and our subsidiaries, including the ability to, subject to certain exceptions and limitations, incur debt, liens, mergers, investments, loans, advances, guarantee obligations, acquisitions, assets dispositions, sale-leaseback transactions, hedging agreements, dividends and other restricted payments, transactions with affiliates, restrictive agreements and amendments to charters, bylaws, and other material documents. The terms of our Credit Agreement require us and our subsidiaries to meet certain restrictive financial covenants and ratios computed quarterly, including a maximum total net leverage ratio (total consolidated indebtedness plus outstanding amounts under any accounts receivable securitization facility, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined), a maximum senior secured net leverage ratio (total consolidated senior secured indebtedness, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined) and a minimum interest expense coverage ratio (consolidated EBITDA, as defined, over the sum of consolidated cash interest expense, as defined, and preferred dividends, as defined). Our permitted total net leverage ratio under the Credit Agreement is 4.00 to 1.00 as of December 31, 2020. If we were to complete an acquisition which qualifies for a Covenant Holiday Period, as defined in our Credit Agreement, then our permitted total net leverage ratio cannot exceed 4.50 to 1.00 during that period. Our actual total net leverage ratio was 1.83 to 1.00 at December 31, 2020. Our permitted senior secured net leverage ratio under the Credit Agreement is 3.50 to 1.00 as of December 31, 2020. If we were to complete an acquisition which qualifies for a Covenant Holiday Period, as defined in our Credit Agreement, then our permitted senior secured net leverage ratio cannot exceed 4.00 to 1.00 during that period. Our actual senior secured net leverage ratio was 0.08 at December 31, 2020. Our permitted interest expense coverage ratio under the Credit Agreement is 3.00 to 1.00 and, our actual interest expense coverage ratio was 13.26 to 1.00 as of December 31, 2020. At December 31, 2020, we were in compliance with our financial and other covenants contained in the Credit Agreement.

The following is a reconciliation of net income (loss), as reported, which is a GAAP measure of our operating results, to Consolidated Bank EBITDA, as defined in our Credit Agreement, for the year ended December 31, 2020. We present Consolidated Bank EBITDA to show our performance under our financial covenants. Dollars are in thousands in the below tables.

	Year ended December 31, 2020
Net loss	\$ (79,760)
Bank stipulated adjustments:	
Interest expense, net (as defined)	14,660
Income tax benefit	(14,810)
Depreciation and amortization	49,770
Impairment charges and asset write-offs	134,600
Non-cash compensation expense ⁽¹⁾	8,170
Other non-cash expenses or losses	17,420
Non-recurring expenses or costs ⁽²⁾	5,860
Extraordinary, non-recurring or unusual gains or losses	22,340
Effects of purchase accounting adjustments	2,110
Business and asset dispositions	1,010
Permitted acquisitions	9,570
Consolidated Bank EBITDA, as defined	<u>\$ 170,940</u>

	December 31, 2020
Total Indebtedness, as defined	\$ 312,970
Consolidated Bank EBITDA, as defined	170,940
Actual total net leverage ratio	1.83 x
Covenant requirement	4.00 x

	December 31, 2020
Total senior secured indebtedness	\$ 12,970
Consolidated Bank EBITDA, as defined	170,940
Senior secured net leverage ratio	0.08 x
Covenant requirement	3.50 x

	December 31, 2020
Interest expense, as defined	\$ 14,660
Bank stipulated adjustments:	
Interest income	(440)
Non-cash amounts attributable to amortization of financing costs	(1,320)
Total Consolidated Cash Interest Expense, as defined	\$ 12,900

	December 31, 2020
Consolidated Bank EBITDA, as defined	\$ 170,940
Total Consolidated Cash Interest Expense, as defined	12,900
Actual interest expense coverage ratio	13.26 x
Covenant requirement	3.00 x

⁽¹⁾ Non-cash compensation expenses resulting from the grant of equity awards.

⁽²⁾ Non-recurring costs and expenses relating to severance, relocation, restructuring and curtailment expenses.

During 2018, we terminated our \$75.0 million accounts receivable facility, under which we had the ability to sell eligible accounts receivable to a third-party multi-seller receivables funding company.

In 2020, we placed cash on deposit with a financial institution to be held as cash collateral for our outstanding letters of credit; therefore, as of December 31, 2020, we had no letters of credit issued against our revolving credit facility. At December 31, 2020, we had \$50.5 million outstanding under our revolving credit facility and had \$249.5 million potentially available. At December 31, 2019, we had no amounts outstanding under our revolving credit facility and had \$283.9 million potentially available after giving effect to approximately \$16.1 million of letters of credit issued and outstanding. The letters of credit are used for a variety of purposes, including support of certain operating lease agreements, vendor payment terms and other subsidiary operating activities, and to meet various states' requirements to self-insure workers' compensation claims, including incurred but not reported claims. Our borrowing capacity was not reduced by leverage restrictions contained in the Credit Agreement as of December 31, 2020 and December 31, 2019.

We rely upon our cash flow from operations and available liquidity under our revolving credit facility to fund our debt service obligations and other contractual commitments, working capital and capital expenditure requirements, as well as for discretionary spending such as any repurchases of our common stock. At the end of each quarter, we have historically used cash on hand from our domestic and certain foreign subsidiaries to pay down amounts outstanding under our revolving credit facility, as applicable.

Our weighted average borrowings approximated \$368.9 million during 2020, compared to \$338.0 million during 2019, due to our March 2020 proactive \$150 million draw on our revolving credit facility to ensure availability of cash on hand given the potential uncertainty surrounding the financial markets as a result of the COVID-19 pandemic, and as a result of an increase in December 2020 as part of funding the Affaba & Ferrari acquisition. We repaid the \$150 million during second quarter 2020.

Cash management related to our revolving credit facility is centralized. We monitor our cash position and available liquidity on a daily basis and forecast our cash needs on a weekly basis within the current quarter and on a monthly basis outside the current quarter over the remainder of the year. Our business and related cash forecasts are updated monthly.

In considering the economic uncertainty surrounding the potential business impacts from the COVID-19 pandemic with respect to our operations, supply chains, distribution channels, and end-market customers, during 2020, we took certain defensive actions as we monitored our cash position and available liquidity. Those actions included suspending our repurchase of our common stock during second quarter 2020, borrowing on our revolving credit facility, tightening our capital expenditures, advanced monitoring of our accounts receivable balances and flexing cost structures of operations expected to be most impacted by COVID-19. Given strong cash generation and our current liquidity position, we relaxed certain of these actions in the third quarter of 2020, choosing to further invest in capital expenditures and resume purchasing shares of our common stock.

The majority of our cash on hand as of December 31, 2020 is located in jurisdictions outside the United States. We have aggregate available funding under our revolving credit facility of \$249.5 million at December 31, 2020, which is not reduced by leverage restrictions. Based on forecasted cash sources and requirements inherent in our business plans, we believe that our liquidity and capital resources, including anticipated cash flows from operations, will be sufficient to meet our debt service, capital expenditure and other short-term and long-term obligation needs for the foreseeable future. In addition, we may evaluate opportunities to refinance our Senior Notes and/or the Credit Agreement ahead of their maturity dates. There can be no assurance, however, that we will be able to refinance our Senior Notes or the Credit Agreement on more favorable terms.

We are subject to variable interest rates on our revolving credit facility. At December 31, 2020, 1-Month LIBOR approximated 0.14%. Based on our variable rate-based borrowings outstanding at December 31, 2020, a 1% increase in the per annum interest rate would increase our interest expense by approximately \$0.5 million annually.

In addition to our long-term debt, we have other cash commitments related to leases. We account for these lease transactions primarily as operating leases, and incurred expense from continuing operations related thereto of approximately \$9.4 million in 2020. We continue to be party to non-cancelable leases for certain facilities we have exited as part of restructuring activities, and have entered into sublease agreements to minimize our net lease payments. We expect leasing will continue to be an available financing option to fund future capital expenditure requirements.

In March 2020, we announced our Board of Directors had authorized us to increase the purchase of our common stock up to \$250 million in the aggregate, an increase of \$100 million from the previous authorization. During 2020, 2019 and 2018, we purchased 1,582,049, 1,230,050 and 442,632 shares of our outstanding common stock for approximately \$39.4 million, \$36.7 million and \$12.1 million, respectively. Since the initial authorization through December 31, 2020, we have purchased 3,254,731 shares of our outstanding common stock for an aggregate purchase price of approximately \$88.3 million. We will continue to evaluate opportunities to return capital to shareholders through the purchase of our common stock, depending on market conditions, including the potential impact of the COVID-19 pandemic, and other factors.

Under various agreements, we are obligated to make future cash payments in fixed amounts. These include payments under our long-term debt agreements, rent payments required under operating lease agreements, certain benefit obligations and interest obligations on our long-term debt. The following table summarizes our significant contractual cash obligations as of December 31, 2020 (dollars in thousands).

	Payments Due by Periods				
	Total	Less than One Year	1 - 3 Years	3 - 5 Years	More than 5 Years
Contractual cash obligations:					
Long-term debt	\$ 350,450	\$ —	\$ 50,450	\$ 300,000	\$ —
Operating lease obligations	43,880	8,070	13,590	9,520	12,700
Benefit obligations	13,980	1,160	2,450	2,660	7,710
Interest obligations ^(a)	73,130	14,630	29,250	29,250	—
Total contractual obligations	<u>\$ 481,440</u>	<u>\$ 23,860</u>	<u>\$ 95,740</u>	<u>\$ 341,430</u>	<u>\$ 20,410</u>

^(a) Our Senior Notes bear interest at 4.875%. The future interest obligations calculation excludes the impact of our cross-currency swap agreements. See Note 14, "Derivative Instruments," included in Item 8, "Financial Statements and Supplementary Data," within this Form 10-K for additional information.

The liability related to unrecognized tax benefits has been excluded from the contractual obligations table because a reasonable estimate of the timing and amount of cash flows from future tax settlements cannot be determined. For additional information, refer to Note 23, "Income Taxes," included in Item 8, "Financial Statements and Supplementary Data," within this Form 10-K.

Market Risk

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies. The functional currencies of our foreign subsidiaries are primarily the local currency in the country of domicile. We manage these operating activities at the local level and revenues and costs are generally denominated in local currencies; however, results of operations and assets and liabilities reported in U.S. dollars will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar.

We have historically used derivative financial instruments to manage currency risks, as we seek to to mitigate the risk associated with fluctuations in currency rates impacting cash flows related to certain receivables, payables and intercompany transactions denominated in foreign currencies. We also use cross-currency swap agreements to mitigate currency risks associated with the net investment in certain of our foreign subsidiaries. See Note 14, "Derivative Instruments," included in Item 8, "Financial Statements and Supplementary Data," within this Form 10-K for additional information.

We are also subject to interest risk as it relates to our long-term debt. We have historically used interest rate swap agreements to fix the variable portion of our debt to manage this risk. See Note 14, "Derivative Instruments," included in Item 8, "Financial Statements and Supplementary Data," within this Form 10-K for additional information.

Common Stock

TriMas is listed in the NASDAQ Global Select MarketSM. Our stock trades under the symbol "TRS."

Credit Rating

We and certain of our outstanding debt obligations are rated by Standard & Poor's and Moody's. On June 12, 2020, Moody's affirmed a Ba3 rating to our Senior Notes, as presented in Note 13, "Long-term Debt" included in Item 8, "Financial Statements and Supplementary Data" within this Form 10-K. Moody's also affirmed a Ba2 Corporate Family Rating and maintained its outlook as stable. On February 12, 2020, Standard & Poor's affirmed a BB- rating to our senior unsecured debt, affirmed a BB corporate credit rating and maintained its outlook as stable. If our credit ratings were to decline, our ability to access certain financial markets may become limited, our cost of borrowings may increase, the perception of us in the view of our customers, suppliers and security holders may worsen and as a result, we may be adversely affected.

Outlook

On the whole, 2020 was an unprecedented and particularly challenging year following the onset of the COVID-19 pandemic, which significantly affected each of our businesses and how we operate, albeit in different ways and magnitudes. We believe our financial results demonstrate our ability to effectively leverage our TriMas Business Model, working across our businesses with a high degree of connectivity to respond to changing market conditions. We capitalized on opportunities where market demand was high, while also taking swift actions where market demand was sharply reduced. In 2020, we experienced year-over-year overall growth in sales, driven by robust organic growth in our Packaging segment and from acquisitions, which were partially offset by significant sales decreases in our Aerospace and Specialty Products segments, where we took proactive realignment actions to mitigate the effects of lower demand from the pandemic as much as practical.

Looking forward, we believe there will be a continued period of uncertainty related to demand levels for our products, whether it be when new aircraft builds will ramp-up that require our fasteners or engineered products, if industrial production will increase over the lower 2020 levels that may require our cylinder or closure products, and how long and at what rate the recent high demand will continue for our dispenser and closure product applications that help fight the spread of germs. We expect to continue to mitigate, as much as practical, the impact of lower volumes in the most challenged end markets, executing realignment actions as necessary so we are positioned to gain operating leverage when these end markets begin to recover. We believe we remain well positioned to capitalize on the recovery of the aerospace and industrial markets, as well as available market growth opportunities. We believe the availability and effectiveness of vaccines, as well as continued measures intended to control the spread of the virus, are among the most significant factors that could impact demand for our products.

As a result of continued uncertainties resulting from the COVID-19 pandemic, and their potential impact to our future results of operations, as well as to TriMas' market capitalization, we may record additional cash and non-cash charges related to further realignment actions, as well for uncollectible customer account balances, excess inventory and idle production equipment. At this time, we are not able to practically estimate the extent or amount of any such potential cash and non-cash charges.

At present, we believe our capital structure is strong and that we have sufficient headroom under our financial covenants, and ample cash and available liquidity under our revolving credit facility, to meet our debt service, capital expenditure and other short-term and long-term obligations for the foreseeable future.

We expect to continue to leverage the tenets of our TriMas Business Model to manage our multi-industry businesses and address the ongoing challenges presented by the COVID-19 pandemic, and on a longer-term basis, achieve our growth plans, execute continuous improvement initiatives to offset inflationary pressures, and seek lower-cost sources for input costs, all while continuously assessing the appropriateness of our manufacturing footprint and fixed-cost structure.

Impact of New Accounting Standards

See Note 2, "*New Accounting Pronouncements*," included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K.

Critical Accounting Policies

The following discussion of accounting policies is intended to supplement the accounting policies presented in Note 3, "*Summary of Significant Accounting Policies*" included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K. Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. These judgments are based on our historical experience, our evaluation of business and macroeconomic trends, and information from other outside sources, as appropriate.

Receivables. Receivables are presented net of allowances for doubtful accounts of approximately \$2.1 million at December 31, 2020 and 2019. We monitor our exposure for credit losses and maintain adequate allowances for doubtful accounts. We determine these allowances based on our historical write-off experience and/or specific customer circumstances and provide such allowances when amounts are reasonably estimable and it is probable a loss has been incurred. Although we have been growing business with certain of our larger customers, and there has been some industry consolidation where certain of our customers are merging, we do not believe that significant credit risk exists or that we have a significant concentration of accounts receivable with a single customer or group of customers due to our diverse customer base. See Item 1A, "*Risk Factors*," for additional information regarding risks associated with a concentrated customer base.

Depreciation and Amortization. Depreciation is computed principally using the straight-line method over the estimated useful lives of the assets. Annual depreciation rates are as follows: building and land/building improvements three to 40 years, and machinery and equipment, three to 15 years. Capitalized debt issuance costs are amortized over the underlying terms of the related debt securities. Customer relationship intangibles are amortized over periods ranging from five to 25 years, while technology and other intangibles are amortized over periods ranging from one to 30 years.

Impairment of Long-Lived Assets and Definite-Lived Intangible Assets. We review, on at least a quarterly basis, the financial performance of each business unit for indicators of impairment. In reviewing for impairment indicators, we also consider events or changes in circumstances such as business prospects, customer retention, market trends, potential product obsolescence, competitive activities and other economic factors. An impairment loss is recognized when the carrying value of an asset group exceeds the future net undiscounted cash flows expected to be generated by that asset group. The impairment loss recognized is the amount by which the carrying value of the asset group exceeds its fair value.

Goodwill and Indefinite-Lived Intangibles. We assess goodwill and indefinite-lived intangible assets for impairment at the reporting unit level on an annual basis as of October 1, by reviewing relevant qualitative and quantitative factors. More frequent evaluations may be required if we experience changes in our business climate or as a result of other triggering events that take place. An impairment loss is recognized when the carrying value of the asset exceeds its fair value.

We determine our reporting units at the individual operating segment level, or one level below, when there is discrete financial information available that is regularly reviewed by segment management for evaluating operating results. For purposes of our 2020 goodwill impairment test, we had six reporting units, three of which had goodwill, within our three reportable segments.

We first perform a qualitative assessment for our annual goodwill impairment test and for our indefinite-lived intangible asset impairment test, which involves significant use of management's judgment and assumptions to determine whether it is more likely than not that the fair value of a reporting unit or indefinite-lived intangible asset is less than its carrying amount. In conducting the qualitative assessment, we consider macroeconomic conditions, industry and market considerations, overall financial performance, entity and reporting unit specific events, capital markets pricing, recent fair value estimates and carrying amounts, as well as legal, regulatory, and contractual factors. These factors are all considered in reaching a conclusion about whether it is more likely than not that the fair values of the intangible assets are less than the carrying values. If we conclude that further testing is required, we would perform a quantitative valuation to estimate the fair value of our intangible assets.

For purposes of the 2020 annual impairment tests, based on the qualitative assessments, we determined there were no indications that the fair value of a reporting unit or indefinite-lived intangible asset was less than its carrying amount; therefore, we determined that quantitative assessments were not required.

During the third quarter of 2020, as a result of a decline in our aerospace-related business' financial results, a significant reduction in financial projections for the remainder of 2020 compared with prior projections, and uncertainty around the duration and magnitude of the impact of the COVID-19 pandemic on future financial results given their dependence on future levels of air travel and new aircraft builds, we determined there was a triggering event requiring an interim quantitative goodwill impairment assessment of each of our two aerospace-related reporting units: Aerospace Fasteners and Aerospace Engineered Products. In conducting the quantitative analysis, we determined the estimated fair value of the Aerospace reporting units utilizing both income and market-based approaches. The income approach relies on the present value of estimated future cash flows of the business, discounted using a rate appropriately reflecting the risks inherent in the cash flows. The market approach relies on market data of other public companies that we deem comparable in operations to our reporting units. Upon completion of the goodwill impairment test, we determined that the carrying values of the Aerospace Fasteners and Aerospace Engineered Products reporting units exceeded their fair values, resulting goodwill impairment charges of approximately \$70.8 million in its Aerospace Fasteners reporting unit and approximately \$56.0 million in its Aerospace Engineered Products reporting unit. We note that a 1% change in the discount rate would have impacted the total goodwill impairment charge by approximately \$20 million, while a 0.5% change in the terminal growth rate would have impacted the total goodwill impairment charge by approximately \$5 million.

Additionally, because of the factors previously mentioned, we also performed a quantitative assessment for all of our indefinite-lived intangible assets included within the Aerospace segment, using a relief-from-royalty method. The relief-from-royalty method involves the estimation of appropriate market royalty rates for our indefinite-lived intangible assets and the application of these royalty rates to forecasted net sales attributable to the intangible assets. The resulting cash flows are then discounted to present value, using a rate appropriately reflecting the risks inherent in the cash flows, which is compared to the carrying value of the assets. Upon completion of the quantitative impairment test, we determined that certain of our aerospace-related trade names had carrying values that exceeded their fair values, and therefore recorded impairment charges of approximately \$7.8 million during 2020.

Future declines in sales and/or operating profit, declines in our stock price, or other changes in our business or the markets for our products could result in further impairments of our goodwill and indefinite-lived intangible assets.

Pension Benefits. We engage independent actuaries to compute the amounts of liabilities and expenses under defined benefit pension plans, subject to the assumptions that we determine are appropriate based on historical trends, current market rates and future projections as of the measurement date. Annually, we review the actual experience compared to the most significant assumptions used and makes adjustments to the assumptions, if warranted. Discount rates are based upon an expected benefit payments duration analysis and the equivalent average yield rate for high-quality fixed-income investments. Pension benefits are funded through deposits with trustees and the expected long-term rate of return on plan assets is based upon actual historical returns modified for known changes in the market and any expected change in investment policy. Certain accounting guidance, including the guidance applicable to pensions, does not require immediate recognition of the effects of a deviation between actual and assumed experience or the revision of an estimate. This approach allows the favorable and unfavorable effects that fall within an acceptable range to be netted.

Income Taxes. We compute income taxes using the asset and liability method, whereby deferred income taxes using current enacted tax rates are provided for the temporary differences between the financial reporting basis and the tax basis of assets and liabilities and for operating loss and tax credit carryforwards. We determine valuation allowances based on an assessment of positive and negative evidence on a jurisdiction-by-jurisdiction basis and record a valuation allowance to reduce deferred tax assets to the amount more likely than not to be realized. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. We record interest and penalties related to unrecognized tax benefits in income tax expense.

Asbestos-related Matters. We accrue loss reserves for asbestos-related matters based upon an estimate of the ultimate liability for claims incurred, whether reported or not, including an estimate of future settlement costs and costs to defend. We utilize known facts and historical trends for Company-specific and general market asbestos-related activity, as well as an actuarial valuation in determining estimated required reserves which we believe are probable and reasonably estimable. Asbestos-related accruals are assessed at each balance sheet date to determine if the liability remains reasonably stated. Accruals for asbestos-related matters are included in the consolidated balance sheet in “Accrued liabilities” and “Other long-term liabilities.”

Other Loss Reserves. We have other loss exposures related to insurance, litigation and environmental claims. Establishing loss reserves for these matters requires the use of estimates and judgment in regard to risk exposure and ultimate liability. We are generally party to high deductible insurance programs for losses and liabilities related principally to workers' compensation, health and welfare claims and comprehensive general, product and vehicle liability. Generally, we are responsible for up to \$0.8 million per occurrence under our retention program for workers' compensation, between \$0.3 million and \$1.5 million per occurrence under our retention programs for comprehensive general, product and vehicle liability, and have a \$0.4 million per occurrence stop-loss limit with respect to our self-insured group medical plan. We accrue loss reserves up to our retention amounts based upon our estimates of the ultimate liability for claims incurred, including an estimate of related litigation defense costs, and an estimate of claims incurred but not reported using actuarial assumptions about future events. We accrue for such items when such amounts are reasonably estimable and probable. We utilize known facts and historical trends, as well as actuarial valuations in determining estimated required reserves. Changes in assumptions for factors such as medical costs and actual experience could cause these estimates to change significantly.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of business, we are exposed to market risk associated with fluctuations in commodity prices, insurable risks due to property damage, employee and liability claims, and other uncertainties in the financial and credit markets, which may impact demand for our products.

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies. The functional currencies of our foreign subsidiaries are primarily the local currency in the country of domicile. We manage these operating activities at the local level and revenues and costs are generally denominated in local currencies; however, results of operations and assets and liabilities reported in U.S. dollars will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar. We use derivative financial instruments to manage currency risks associated with our procurement activities denominated in currencies other than the functional currency of our subsidiaries and the impact of currency rate volatility on our earnings.

We may also be subject to interest risk as it relates to long-term debt, for which we have historically and may prospectively employ derivative instruments such as interest rate swaps to mitigate the risk of variable interest rates. See Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" for details about our primary market risks, and the objectives and strategies used to manage these risks. Also see Note 13, "*Long-term Debt*," and Note 14, "*Derivative Instruments*," included in Item 8, "*Financial Statements and Supplementary Data*," within this Form 10-K for additional information.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of TriMas Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TriMas Corporation and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income, cash flows, and shareholders' equity, for each of the three years in the period ended December 31, 2020, and the related notes and the schedule listed in the Index at Item 15 (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, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, 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, 2020, 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 February 25, 2021, 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 Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Asbestos— Refer to Notes 3 and 17 to the financial statements

Critical Audit Matter Description

During the second quarter of 2020, the Company elected to change its method of accounting for asbestos-related defense costs from accruing for probable and reasonably estimable defense costs associated with known claims expected to settle to accrue for all future defense costs for both known and unknown claims. The Company believes this change is preferable, and this accounting change has been reflected as a change in accounting estimate effected by a change in accounting principle. Following the change in accounting estimate, the Company's liability for asbestos-related claims will be based on a study from the Company's third-party actuary, the Company's review of the study, as well as the Company's own review of asbestos claims and claim resolution activity. The study from the Company's actuary, based on data as of December 31, 2019, provided for a range of possible future liability from \$31.5 million to \$43.3 million. During the second quarter 2020, the Company recorded a \$23.4 million charge to increase the liability estimate to the \$31.5 million noted as the low end of the range. As of December 31, 2020, the Company's total asbestos-related liability is \$28.7 million and is included in accrued liabilities and other long-term liabilities, respectively, in the accompanying consolidated balance sheet.

We identified the initial gross asbestos liability recorded as a result of the change in accounting estimate as a critical audit matter because estimating projected indemnity and defense costs of pending and future asbestos-related claims involves significant estimation by management due to variables that are difficult to predict and the range of possible outcomes. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve our actuarial specialists, when performing audit procedures to evaluate whether the asbestos related reserves were appropriately recorded as of December 31, 2020.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the asbestos-related reserves included the following, among others:

- We tested the effectiveness of controls over the valuation of the liability, including controls over the inputs to the model (claims data sets, indemnity settlement payments and legal payments), and over the accounting and disclosures related to the change in accounting policy resulting in a change in estimate. This included inquires with management and inspection of documentation related to the change in accounting policy for asbestos and whether it is preferable and properly accounted for prospectively as a change in accounting estimate.
- With the assistance of our actuarial specialists that have experience in the area of asbestos-related reserves, we assessed the reasonableness of the valuation methodology, significant assumptions, and the range of probable outcomes estimated by management. Additionally, the specialists developed a range of independent estimates and compared those to management's estimate.
- We assessed the qualifications, experience, and objectivity of management's third-party actuary.
- We tested the underlying data that served as the basis for the actuarial analysis, including claims data sets, indemnity settlement payments, and legal payments, to test the inputs to the actuarial estimate for completeness and accuracy.

Goodwill - Aerospace Reporting Units - Refer to Notes 3 and 9 to the financial statements.

Critical Audit Matter Description

The Company assesses goodwill for impairment on an annual basis as of October 1, and more frequently if there are changes in the business climate or as a result of a triggering event taking place. The Company's evaluation of goodwill for impairment involved the comparison of the fair value of each reporting unit to its carrying value.

If the Company concludes that conducting a quantitative assessment is required, it determines the fair value of its reporting units utilizing a discounted cash flow (income approach) and a market comparable method (market approach). The determination of the fair value using the income approach requires management to make significant estimates and assumptions, which include forward-looking projections and discount rates. The determination of the fair value using the market approach requires management to make significant estimates and assumptions, which include multiples of potentially comparable companies that are applied to management's financial projections.

During the third quarter of 2020, as a result of a decline in its aerospace-related business' financial results, a significant reduction in its financial projections for the remainder of 2020 compared with prior projections, and uncertainty around the duration and magnitude of the impact of the COVID-19 pandemic on future financial results given their dependence on future levels of air travel and new aircraft builds, the Company determined there was a triggering event requiring an interim goodwill impairment assessment for its Aerospace Fasteners and Aerospace Engineered Products reporting units. The Company determined that the carrying values of the Aerospace Fasteners and Aerospace Engineered Products reporting units exceeded their fair values, resulting in goodwill impairment charges of \$70.8 million and \$56.0 million, respectively. The total Company goodwill balance was \$304.0 million as of December 31, 2020, of which the Aerospace Fasteners reporting unit has \$62.9 million, while the Aerospace Engineered Products reporting unit had no remaining goodwill.

Given the nature of the Aerospace Fasteners and Aerospace Engineered Products operations, sensitivity of the reporting unit's business to changes in the economy, the reporting unit's historical performance as compared to financial projections, and the difference between its fair value and the carrying value, auditing management's judgments regarding financial projections, as well as selection of the discount rate and selection of multiples applied to management's financial projections for the Aerospace Fasteners and Aerospace Engineered Products reporting units, required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the financial projections, the selection of the discount rate, and the selection of multiples applied to management's historical financial results and financial projections ("market multiples") for the Aerospace Fasteners and Aerospace Engineered Products reporting units included the following, among others:

- We tested the effectiveness of controls over management's goodwill impairment evaluation including the determination of fair value, such as controls related to management's financial projections and the selection of the discount rate and market multiples used.
- We evaluated management's ability to accurately project by comparing actual financial results to management's historical financial projections.
- We evaluated the reasonableness of management's financial projections by comparing the financial projections to historical financial results and projected information included in industry reports for the various industries the reporting units operate within.
- With the assistance of our fair value specialists, we evaluated the discount rate, including testing the underlying source information and the mathematical accuracy of the calculations, and developing a range of independent estimates and comparing those to the discount rate selected by management.
- With the assistance of our fair value specialists, we evaluated the market multiples by evaluating the selected potentially comparable publicly traded companies and the adjustments made for differences in growth prospects and risk profiles between the reporting units and the potentially comparable publicly traded companies. We tested the underlying source information and mathematical accuracy of the calculations.

/s/ Deloitte & Touche LLP

Detroit, Michigan
February 25, 2021

We have served as the Company's auditor since 2013.

TriMas Corporation
Consolidated Balance Sheet
(Dollars in thousands)

	December 31,	
	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 73,950	\$ 172,470
Receivables, net	113,410	108,860
Inventories	149,380	132,660
Prepaid expenses and other current assets	15,090	20,050
Total current assets	351,830	434,040
Property and equipment, net	253,060	214,330
Operating lease right-of-use assets	37,820	27,850
Goodwill	303,970	334,640
Other intangibles, net	206,200	161,390
Deferred income taxes	19,580	500
Other assets	21,420	19,950
Total assets	\$ 1,193,880	\$ 1,192,700
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 69,910	\$ 72,670
Accrued liabilities	60,540	42,020
Operating lease liabilities, current portion	6,740	5,100
Total current liabilities	137,190	119,790
Long-term debt, net	346,290	294,690
Operating lease liabilities	31,610	23,100
Deferred income taxes	24,850	16,830
Other long-term liabilities	69,690	40,810
Total liabilities	609,630	495,220
Preferred stock \$0.01 par: Authorized 100,000,000 shares; Issued and outstanding: None	—	—
Common stock, \$0.01 par: Authorized 400,000,000 shares; Issued and outstanding: 43,178,165 shares at December 31, 2020 and 44,562,679 shares at December 31, 2019	430	450
Paid-in capital	749,050	782,880
Accumulated deficit	(159,610)	(79,850)
Accumulated other comprehensive loss	(5,620)	(6,000)
Total shareholders' equity	584,250	697,480
Total liabilities and shareholders' equity	\$ 1,193,880	\$ 1,192,700

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

TriMas Corporation
Consolidated Statement of Operations
(Dollars in thousands, except per share amounts)

	Year ended December 31,		
	2020	2019	2018
Net sales	\$ 769,970	\$ 723,530	\$ 705,030
Cost of sales	(587,890)	(529,630)	(504,920)
Gross profit	182,080	193,900	200,110
Selling, general and administrative expenses	(134,480)	(102,530)	(91,210)
Net loss on dispositions of assets	(1,290)	(150)	(90)
Impairment of goodwill and indefinite-lived intangible assets	(134,600)	—	—
Operating profit (loss)	(88,290)	91,220	108,810
Other expense, net:			
Interest expense	(14,660)	(13,950)	(13,910)
Other income (expense), net	240	990	(2,540)
Other expense, net	(14,420)	(12,960)	(16,450)
Income (loss) before income taxes	(102,710)	78,260	92,360
Income tax benefit (expense)	22,950	(16,320)	(18,650)
Income (loss) from continuing operations	(79,760)	61,940	73,710
Income from discontinued operations, net of income taxes	—	36,680	9,590
Net income (loss)	\$ (79,760)	\$ 98,620	\$ 83,300
Basic earnings (loss) per share:			
Continuing operations	\$ (1.83)	\$ 1.37	\$ 1.61
Discontinued operations	—	0.81	0.21
Net income (loss) per share	\$ (1.83)	\$ 2.18	\$ 1.82
Weighted average common shares - basic	43,581,232	45,303,659	45,824,555
Diluted earnings (loss) per share:			
Continuing operations	\$ (1.83)	\$ 1.36	\$ 1.60
Discontinued operations	—	0.80	0.20
Net income (loss) per share	\$ (1.83)	\$ 2.16	\$ 1.80
Weighted average common shares - diluted	43,581,232	45,595,154	46,170,464

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

TriMas Corporation
Consolidated Statement of Comprehensive Income
(Dollars in thousands)

	Year ended December 31,		
	2020	2019	2018
Net income (loss)	\$ (79,760)	\$ 98,620	\$ 83,300
Other comprehensive income (loss):			
Defined benefit plans (Note 18)	1,310	(1,470)	3,250
Foreign currency translation	6,880	10,290	(6,880)
Derivative instruments (Note 14)	(7,810)	3,300	4,110
Total other comprehensive income	380	12,120	480
Total comprehensive income (loss)	\$ (79,380)	\$ 110,740	\$ 83,780

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

TriMas Corporation
Consolidated Statement of Cash Flows
(Dollars in thousands)

	Year ended December 31,		
	2020	2019	2018
Cash Flows from Operating Activities:			
Net income (loss)	\$ (79,760)	\$ 98,620	\$ 83,300
Income from discontinued operations	—	36,680	9,590
Income (loss) from continuing operations	(79,760)	61,940	73,710
Adjustments to reconcile income from continuing operations to net cash provided by operating activities, net of acquisition impact:			
Impairment of goodwill and indefinite-lived intangible assets	134,600	—	—
Loss on dispositions of assets	1,290	150	90
Depreciation	29,020	24,870	22,230
Amortization of intangible assets	20,750	18,630	18,260
Amortization of debt issue costs	1,150	1,130	1,290
Deferred income taxes	(33,710)	2,100	5,810
Non-cash compensation expense	8,170	6,450	7,170
Non-cash change in legacy liability estimate	23,400	—	—
(Increase) decrease in receivables	9,580	3,280	(9,570)
(Increase) decrease in inventories	3,980	740	(14,680)
(Increase) decrease in prepaid expenses and other assets	4,400	(6,930)	8,790
Increase (decrease) in accounts payable and accrued liabilities	4,490	(12,780)	(2,330)
Other operating activities	50	(3,870)	10
Net cash provided by operating activities of continuing operations	127,410	95,710	110,780
Net cash provided by (used for) operating activities of discontinued operations	—	(20,110)	18,540
Net cash provided by operating activities	127,410	75,600	129,320
Cash Flows from Investing Activities:			
Capital expenditures	(40,480)	(29,670)	(23,420)
Acquisition of businesses, net of cash acquired	(193,540)	(67,090)	—
Net proceeds from dispositions of businesses, property and equipment	1,950	128,080	60
Net cash provided by (used for) investing activities of continuing operations	(232,070)	31,320	(23,360)
Net cash used for investing activities of discontinued operations	—	(2,240)	(1,440)
Net cash provided by (used for) investing activities	(232,070)	29,080	(24,800)
Cash Flows from Financing Activities:			
Proceeds from borrowings on revolving credit facilities	367,280	189,060	59,060
Repayments of borrowings on revolving credit facilities	(319,120)	(189,340)	(68,490)
Payments to purchase common stock	(39,420)	(36,740)	(12,140)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	(2,600)	(3,340)	(2,380)
Other financing activities	—	—	—
Net cash provided by (used for) financing activities of continuing operations	6,140	(40,360)	(23,950)
Net cash provided by financing activities of discontinued operations	—	—	—
Net cash provided by (used for) financing activities	6,140	(40,360)	(23,950)
Cash and Cash Equivalents:			
Increase (decrease) for the year	(98,520)	64,320	80,570
At beginning of year	172,470	108,150	27,580
At end of year	\$ 73,950	\$ 172,470	\$ 108,150
Supplemental disclosure of cash flow information:			
Cash paid for interest	\$ 13,210	\$ 12,430	\$ 13,800
Cash paid for income taxes	\$ 9,060	\$ 44,020	\$ 7,380

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

TriMas Corporation
Consolidated Statement of Shareholders' Equity
Years Ended December 31, 2020, 2019 and 2018
(Dollars in thousands)

	Common Stock	Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balances at December 31, 2017	\$ 460	\$ 823,850	\$ (262,960)	\$ (17,330)	\$ 544,020
Net income	—	—	83,300	—	83,300
Other comprehensive income	—	—	—	480	480
Purchase of common stock	—	(12,140)	—	—	(12,140)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(2,380)	—	—	(2,380)
Non-cash compensation expense	—	7,170	—	—	7,170
Balances at December 31, 2018	\$ 460	\$ 816,500	\$ (179,660)	\$ (16,850)	\$ 620,450
Net income	—	—	98,620	—	98,620
Other comprehensive income	—	—	—	12,120	12,120
Purchase of common stock	(10)	(36,730)	—	—	(36,740)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(3,340)	—	—	(3,340)
Non-cash compensation expense	—	6,450	—	—	6,450
Impact of accounting standards adoption	—	—	1,190	(1,270)	(80)
Balances at December 31, 2019	\$ 450	\$ 782,880	\$ (79,850)	\$ (6,000)	\$ 697,480
Net loss	—	—	(79,760)	—	(79,760)
Other comprehensive income	—	—	—	380	380
Purchase of common stock	(30)	(39,390)	—	—	(39,420)
Shares surrendered upon exercise and vesting of equity awards to cover taxes	—	(2,600)	—	—	(2,600)
Non-cash compensation expense	10	8,160	—	—	8,170
Balances at December 31, 2020	\$ 430	\$ 749,050	\$ (159,610)	\$ (5,620)	\$ 584,250

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

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

TriMas Corporation ("TriMas" or the "Company"), and its consolidated subsidiaries, designs, engineers and manufactures innovative products under leading brand names for customers primarily in the consumer products, aerospace & defense, and industrial markets.

In the second quarter of 2020, the Company elected to change its method of accounting for asbestos-related defense costs from accruing for probable and reasonably estimable defense costs associated with known claims expected to settle to accrue for all future defense costs for both known and unknown claims, which the Company now believes are reasonably estimable. The Company believes this change is preferable, as asbestos-related defense costs represent expenditures related to legacy activities that do not contribute to current or future revenue generating activities, and recording an estimate of the full liability for asbestos-related costs, where estimable with reasonable precision, provides a more complete assessment of the liability associated with resolving asbestos-related claims. This accounting change has been reflected as a change in accounting estimate effected by a change in accounting principle. See Note 17, "*Commitments and Contingencies*," for further information on this change.

In the first quarter of 2020, TriMas began reporting its machined components operations, located in Stanton, California and Tolleson, Arizona, as part of its Aerospace segment. The operations were previously reported in the Specialty Products segment. The move of these operations into TriMas Aerospace facilitates achieving anticipated synergies from the February 2020 RSA Engineered Products ("RSA") acquisition, allowing the Company to better leverage the machining competencies and resources across its aerospace businesses. See Note 22, "*Segment Information*," for further information on each of the Company's reportable segments.

In the fourth quarter of 2019, the Company completed the sale of its Lamons division ("Lamons"), a transaction entered into with an investment fund sponsored by First Reserve. Lamons was sold for approximately \$136.8 million in cash, of which approximately \$135.0 million was received in 2019 and the remaining \$1.8 million was received in the first quarter of 2020. The financial results of Lamons were previously reported within the Company's Specialty Products segment, and are presented as discontinued operations for all periods presented in the financial statements attached hereto. See Note 5, "*Discontinued Operations*," for further information on the sale of Lamons and its historical financial results.

The preparation of financial statements also requires management of the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities. Actual results may differ from such estimates and assumptions due to risks and uncertainties, including uncertainty in the current economic environment due to the ongoing outbreak of a new strain of the coronavirus ("COVID-19"). While the full impact of COVID-19 on the Company's operations is unknown and cannot be reasonably estimated at this time, the Company has made appropriate accounting estimates based on the facts and circumstances available as of the reporting date. To the extent there are differences between these estimates and actual results, the Company's consolidated financial statements may be materially affected.

Certain prior year amounts have been reclassified to conform with current year presentation.

2. New Accounting Pronouncements*Recently Issued Accounting Pronouncements*

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes" ("ASU 2019-12"), which removes specific exceptions to the general principles in Topic 740, simplifies the accounting for income taxes and provides clarification of certain aspects of current guidance. ASU 2019-12 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2020, with early adoption permitted. The Company is in the process of assessing the impact of adoption on its consolidated financial statements.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Recently Adopted Accounting Pronouncements

In August 2018, the FASB issued ASU 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20)" ("ASU 2018-14"), which modifies the disclosure requirements for employers who sponsor defined benefit pension or other postretirement plans. The Company adopted ASU 2018-14 in the fourth quarter of 2020. The standard relates to financial statement disclosure only and did not have an impact on the Company's consolidated balance sheet, statement of operations or cash flows. See Note 18, "Employee Benefit Plans," for disclosure of the Company's defined benefit plans.

In January 2017, the FASB issued ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04"), which simplifies the test for goodwill impairment by eliminating the requirement to perform a hypothetical purchase price allocation to measure the amount of goodwill impairment. Instead, under ASU 2017-04, the goodwill impairment is the amount by which a reporting unit's carrying value exceeds its fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to the reporting unit. The Company adopted ASU 2017-04 in the first quarter of 2020. See Note 3, "Summary of Significant Accounting Policies," for further information on the Company's policies regarding assessing potential goodwill impairments.

3. Summary of Significant Accounting Policies

Principles of Consolidation. The accompanying consolidated financial statements include the accounts and transactions of TriMas and its subsidiaries. Intercompany transactions have been eliminated.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management of the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. Such estimates and assumptions also affect the reported amounts of revenues and expenses during the reporting periods. Significant items subject to such estimates and assumptions include the carrying amount of property and equipment, goodwill and other intangibles, valuation allowances for receivables, inventories and deferred income tax assets, valuation of derivatives, estimated future unrecoverable lease costs, reserves for asbestos and ordinary course litigation, assets and obligations related to employee benefits and estimated unrecognized tax benefits. Actual results may differ from such estimates and assumptions.

Cash and Cash Equivalents. The Company considers cash on hand and on deposit and investments in all highly liquid debt instruments with initial maturities of three months or less to be cash and cash equivalents. Cash and cash equivalents also includes restricted cash held on deposit with a financial institution as cash collateral for the Company's outstanding letters of credit. See Note 8, "Cash and Cash Equivalents," for further details regarding the Company's cash and cash equivalents.

Receivables. Receivables are presented net of allowances for doubtful accounts of approximately \$2.1 million at each of December 31, 2020 and 2019. The Company monitors its exposure for credit losses and maintains allowances for doubtful accounts based upon the Company's best estimate of probable losses inherent in the accounts receivable balances. The Company does not believe that significant credit risk exists due to its diverse customer base.

Inventories. Inventories are stated at the lower of cost or net realizable value, with cost determined using the first-in, first-out method. Direct materials, direct labor and allocations of variable and fixed manufacturing-related overhead are included in inventory cost.

Property and Equipment. Property and equipment additions, including significant improvements, are recorded at cost. Upon retirement or disposal of property and equipment, the cost and accumulated depreciation are removed from the accounts, and any gain or loss is included in the accompanying statement of operations. Repair and maintenance costs are charged to expense as incurred.

Depreciation and Amortization. Depreciation is computed principally using the straight-line method over the estimated useful lives of the assets. Annual depreciation rates are as follows: building and land/building improvements three to 40 years, and machinery and equipment, three to 15 years. Capitalized debt issuance costs are amortized over the underlying terms of the related debt securities. Customer relationship intangibles are amortized over periods ranging from five to 25 years, while technology and other intangibles are amortized over periods ranging from one to 30 years.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Impairment of Long-Lived Assets and Definite-Lived Intangible Assets. The Company reviews, on at least a quarterly basis, the financial performance of its businesses for indicators of impairment. In reviewing for impairment indicators, the Company also considers events or changes in circumstances such as business prospects, customer retention, market trends, potential product obsolescence, competitive activities and other economic factors. An impairment loss is recognized when the carrying value of an asset group exceeds the future net undiscounted cash flows expected to be generated by that asset group. The impairment loss recognized is the amount by which the carrying value of the asset group exceeds its fair value.

Goodwill. The Company assesses goodwill for impairment on an annual basis (October 1 test date) by reviewing relevant qualitative and quantitative factors. More frequent evaluations may be required if the Company experiences changes in its business climate or as a result of other triggering events that take place. An impairment loss is recognized when the carrying value of a reporting unit's goodwill exceeds its fair value.

The Company determines its reporting units at the individual operating segment level, or one level below, when there is discrete financial information available that is regularly reviewed by segment management to evaluate operating results. For purposes of the Company's 2020 goodwill impairment test, the Company had six reporting units, three of which had goodwill, within its three reportable segments.

The Company begins its goodwill reviews by conducting a qualitative assessment, considering relevant events and circumstances that affect the fair value or carrying amount of a reporting unit. Such events and circumstances can include macroeconomic conditions, industry and market considerations, overall financial performance, entity and reporting unit specific events, and capital markets pricing. The Company considers the extent to which any identified adverse events and circumstances affect the comparison of a reporting unit's fair value with its carrying amount. The Company places more weight on the events and circumstances that most affect a reporting unit's fair value or the carrying amount of its net assets. The Company considers positive and mitigating events and circumstances that may affect its determination of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The Company also considers recent valuations of its reporting units, including the difference between the most recent fair value estimate and the carrying amount. Each of these factors is considered by management in reaching its conclusion about whether a quantitative goodwill impairment test is necessary to estimate the fair value of its reporting units.

If the Company concludes that conducting a quantitative assessment is required, it performs a quantitative goodwill impairment test. When conducting a quantitative goodwill impairment test, the Company determines the fair value of the reporting unit being evaluated utilizing a combination of three valuation techniques: discounted cash flow (income approach), market comparable method (market approach) and market capitalization (direct market data method). The income approach is based on management's operating plan and internal five-year forecast and utilizes forward-looking assumptions and projections, on a discounted basis, but considers factors unique to each reporting unit and related long-range plans that may not be comparable to other companies and that are not yet public. The market approach considers potentially comparable companies and transactions within the industries where the Company's reporting units participate, and applies their trading multiples to the financial projections of the Company's reporting units. This approach utilizes data from actual marketplace transactions, but reliance on its results is limited by difficulty in identifying companies that are specifically comparable to the Company's reporting units, considering the diversity of the Company's businesses, the relative sizes and levels of complexity. The Company also uses the direct market data method by comparing its book value and the estimates of fair value of the reporting units to the Company's market capitalization. Management uses this comparison as additional evidence of the fair value of the Company, as its market capitalization may be suppressed by other factors such as the control premium associated with a controlling shareholder, the Company's degree of leverage and the float of the Company's common stock. Management evaluates and weights the results based on a combination of the income and market approaches, and, in situations where the income approach results differ significantly from the market and direct data approaches, management re-evaluates and adjusts, if necessary, its assumptions.

Based on the quantitative test, if it is determined that the carrying value of the reporting unit is higher than its fair value, goodwill is impaired and is written down to the fair value amount; however, the loss recognized will not exceed the total amount of goodwill allocated to the reporting unit. See Note 9, "*Goodwill and Other Intangible Assets*," for further details regarding the Company's goodwill impairment testing.

Indefinite-Lived Intangibles. The Company assesses indefinite-lived intangible assets (primarily trademark/trade names) for impairment on an annual basis (October 1 test date) by reviewing relevant qualitative and quantitative factors. More frequent evaluations may be required if the Company experiences changes in its business climate or as a result of other triggering events that take place. An impairment loss is recognized when the carrying value of the asset exceeds its fair value.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In conducting a qualitative assessment, the Company considers relevant events and circumstances to determine whether it is more likely than not that the fair values of the indefinite-lived intangible assets are less than the carrying values. In addition to the events and circumstances that the Company considers above in its qualitative analysis for potential goodwill impairment, the Company also considers legal, regulatory and contractual factors that could affect the fair value or carrying amount of the Company's indefinite-lived intangible assets. The Company also considers recent valuations of its indefinite-lived intangible assets, including the difference between the most recent fair value estimates and the carrying amounts. These factors are all considered by management in reaching its conclusion about whether it is more likely than not that the fair values of the indefinite-lived intangible assets are less than the carrying values. If management concludes that further testing is required, the Company performs a quantitative valuation to estimate the fair value of its indefinite-lived intangible assets. In conducting the quantitative impairment analysis, the Company determines the fair value of its indefinite-lived intangible assets using the relief-from-royalty method. The relief-from-royalty method involves the estimation of appropriate market royalty rates for the indefinite-lived intangible assets and the application of these royalty rates to forecasted net sales attributable to the intangible assets. The resulting cash flows are then discounted to present value, using a rate appropriately reflecting the risks inherent in the cash flows, which then is compared to the carrying value of the assets. If the carrying value exceeds fair value, an impairment is recorded. See Note 9, "Goodwill and Other Intangible Assets," for further details regarding the Company's indefinite-lived intangible asset impairment testing.

High Deductible Insurance. The Company generally has high deductible insurance programs for losses and liabilities related to workers' compensation, health and welfare claims and comprehensive general, product and vehicle liability. The Company is generally responsible for up to \$0.8 million per occurrence under its retention program for workers' compensation, between \$0.3 million and \$1.5 million per occurrence under its retention programs for comprehensive general, product and vehicle liability, and has a \$0.4 million per occurrence stop-loss limit with respect to its group medical plan. Total insurance limits under these retention programs vary by year for comprehensive general, product and vehicle liability and extend to the applicable statutory limits for workers' compensation. Reserves for claims losses, including an estimate of related litigation defense costs, are recorded based upon the Company's estimates of the aggregate liability for claims incurred using actuarial assumptions about future events. Changes in assumptions for factors such as medical costs and actual experience could cause these estimates to change.

Pension Plans. The Company engages independent actuaries to compute the amounts of liabilities and expenses under defined benefit pension plans, subject to the assumptions that the Company determines are appropriate based on historical trends, current market rates and future projections. Assumptions used in the actuarial calculations could have a significant impact on plan obligations, and a lesser impact on current period expense. Annually, the Company reviews the actual experience compared to the significant assumptions used and makes adjustments to the assumptions, if warranted. Discount rates are based on an expected benefit payments duration analysis and the equivalent average yield rate for high-quality fixed-income investments. Pension benefits are funded through deposits with trustees and the expected long-term rate of return on fund assets is based on actual historical returns and a review of other public company pension asset return data, modified for known changes in the market and any expected change in investment policy. See Note 18, "Employee Benefit Plans," for further information.

Asbestos-related Matters. The Company accrues loss reserves for asbestos-related matters based upon an estimate of the ultimate liability for claims incurred, whether reported or not, including an estimate of future settlement costs and costs to defend. The Company utilizes known facts and historical trends for Company-specific and general market asbestos-related activity, as well as an actuarial valuation in determining estimated required reserves which it believes are probable and reasonably estimable. Asbestos-related accruals are assessed at each balance sheet date to determine if the liability remains reasonably stated. Accruals for asbestos-related matters are included in the consolidated balance sheet in "Accrued liabilities" and "Other long-term liabilities." See Note 17, "Commitments and Contingencies," for further information.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Revenue Recognition. Revenue is recognized when control of promised goods is transferred to customers, which generally occurs when products are shipped from the Company's facilities to its customers. The amount of revenue recorded reflects the consideration the Company expects to be entitled to receive in exchange for transferring those goods. Net sales are comprised of gross revenues, based on observed stand-alone selling prices, less estimates of expected returns, trade discounts and customer allowances, which include incentives such as volume and other discounts in connection with various supply programs. Such deductions are estimated and recorded during the period the related revenue is recognized. The Company may adjust these estimates when the expected amount of consideration changes based on sales volumes or other contractual terms. Sales and other consumption taxes the Company collects from customers and remits to government agencies are excluded from revenue. The Company accounts for freight and shipping costs that occur after control of the related goods transfer to the customer as a fulfillment cost within cost of sales. The nature and timing of the Company's revenue transactions are similar, as substantially all revenue is based on point-in-time transactions with customers under industry-standard payment terms. The Company may require shortened payment terms, including cash-in-advance, on an individual customer basis depending on its assessment of the customer's credit worthiness.

Cost of Sales. Cost of sales includes material, labor and overhead costs incurred in the manufacture of products sold in the period. Material costs include raw material, purchased components, outside processing and freight costs. Overhead costs consist of variable and fixed manufacturing costs, wages and fringe benefits, and purchasing, receiving and inspection costs.

Selling, General and Administrative Expenses. Selling, general and administrative expenses include the following: costs related to the advertising, sale, marketing and distribution of the Company's products, amortization of customer intangible assets, costs of finance, human resources, legal functions, executive management costs and other administrative expenses.

Income Taxes. The Company computes income taxes using the asset and liability method, whereby deferred income taxes using current enacted tax rates are provided for the temporary differences between the financial reporting basis and the tax basis of assets and liabilities and for operating loss and tax credit carryforwards. The Company determines valuation allowances based on an assessment of positive and negative evidence on a jurisdiction-by-jurisdiction basis and records a valuation allowance to reduce deferred tax assets to the amount more likely than not to be realized. The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. See Note 23, "Income Taxes," for further information.

Foreign Currency Translation. The financial statements of subsidiaries located outside of the United States are measured using the currency of the primary economic environment in which they operate as the functional currency. When translating into U.S. dollars, income and expense items are translated at average monthly exchange rates and assets and liabilities are translated at exchange rates in effect at the balance sheet date. Adjustments resulting from translating the functional currency into U.S. dollars are deferred as a component of accumulated other comprehensive income (loss) ("AOCI") in the consolidated statement of shareholders' equity. Net foreign currency transaction gains were approximately \$0.6 million, \$0.3 million and \$1.0 million for the years ended December 31, 2020, 2019 and 2018, respectively, and are included in other expense, net in the accompanying consolidated statement of operations.

Derivative Financial Instruments. The Company records derivative financial instruments at fair value on the balance sheet as either assets or liabilities, and changes in their fair values are immediately recognized in earnings if the derivatives do not qualify as effective hedges. If a derivative is designated as a fair value hedge, then changes in the fair value of the derivative are offset against the changes in the fair value of the underlying hedged item. If a derivative is designated as a cash flow hedge, then the effective portion of the changes in the fair value of the derivative is recognized as a component of other comprehensive income until the underlying hedged item is recognized in earnings or the forecasted transaction is no longer probable of occurring. If a derivative is designated as a net investment hedge, then the effective portion of the changes in the fair value of the derivative is recognized in other comprehensive income and will be subsequently reclassified to earnings when the hedged net investment is either sold or substantially liquidated. The Company formally documents hedging relationships for its derivative transactions and the underlying hedged items, as well as its risk management objectives and strategies for undertaking the hedge transactions. See Note 14, "Derivative Instruments," for further information.

TRIMAS CORPORATION**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Fair Value of Financial Instruments. In accounting for and disclosing the fair value of financial instruments, the Company uses the following hierarchy:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date;
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Valuation of the Company's interest rate swaps and cross-currency swaps are based on the income approach, which uses observable inputs such as interest rate yield curves and forward currency exchange rates, as applicable.

The carrying value of financial instruments reported in the balance sheet for current assets and current liabilities approximates fair value due to the short maturity of these instruments.

Business Combinations. The Company records assets acquired and liabilities assumed from acquisitions at fair value. The fair value of working capital accounts generally approximates book value. The valuation of inventory, property, plant and equipment, and intangible assets requires significant assumptions. Inventory is recorded at fair value based on the estimated selling price less costs to sell, including completion, disposal and holding period costs with a reasonable profit margin. Property and equipment is recorded at fair value using a combination of both the cost and market approaches for both the real and personal property acquired. Under the cost approach, consideration is given to the amount required to construct or purchase a new asset of equal value at current prices, with adjustments in value for physical deterioration, as well as functional and economic obsolescence. Under the market approach, recent transactions for similar types of assets are used as the basis for estimating fair value. For trademark/trade names and technology and other intangible assets, the estimated fair value is based on projected discounted future net cash flows using the relief-from-royalty method. For customer relationship intangible assets, the estimated fair value is based on projected discounted future cash flows using the excess earnings method. The relief-from-royalty and excess earnings method are both income approaches that utilize key assumptions such as forecasts of revenue and expenses over an extended period of time, royalty rate percentages, tax rates, and estimated costs of debt and equity capital to discount the projected cash flows.

Stock-based Compensation. The Company recognizes compensation expense related to equity awards based on their fair values as of the grant date. For awards with only a service condition, expense is recognized ratably over the vesting period. Performance based equity awards may have targets tied to performance and/or market-based conditions. Market-based conditions are taken into consideration in determining the grant date fair value, and the related compensation expense is recognized regardless of whether the market condition is satisfied, provided the requisite service has been provided. For performance condition components, the Company periodically updates the probability that the performance conditions will be achieved and adjusts expense accordingly, reflecting the change from prior estimate, if any, in current period non-cash stock compensation expense. The disclosed number of awards granted considers only the targeted number of units until such time that the performance condition has been satisfied. If the performance conditions are not achieved, no award is earned. See Note 19, "Equity Awards," for further information.

Other Comprehensive Income (Loss). The Company refers to other comprehensive income (loss) as revenues, expenses, gains and losses that under accounting principles generally accepted in the United States of America are included in comprehensive income (loss) but are excluded from net earnings as these amounts are recorded directly as an adjustment to stockholders' equity. Other comprehensive income (loss) is comprised of foreign currency translation adjustments, amortization of prior service costs and unrecognized gains and losses in actuarial assumptions for pension and postretirement plans and changes in unrealized gains and losses on derivative instruments.

TRIMAS CORPORATION**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****4. Acquisitions***2020 Acquisitions*

On December 15, 2020, the Company acquired Affaba & Ferrari Srl ("Affaba & Ferrari"), which specializes in the design, development and manufacture of precision caps and closures for food & beverage and industrial product applications, for an aggregate amount of approximately \$98.4 million, net of cash acquired, subject to normal course adjustments, which are expected to be completed by mid-2021. The fair value of assets acquired and liabilities assumed included approximately \$49.1 million of goodwill, \$35.1 million of intangible assets, \$9.4 million of net working capital, \$17.4 million of property and equipment, and \$12.6 million of net deferred tax liabilities. Affaba & Ferrari, which is reported in the Company's Packaging segment, operates out of a highly automated manufacturing facility and support office located in Borgo San Giovanni, Italy and historically generated approximately \$34 million in annual revenue.

On April 17, 2020, the Company acquired the Rapak® brand, including certain bag-in-box product lines and assets ("Rapak") for an aggregate amount of approximately \$11.4 million. Rapak, which is reported in the Company's Packaging segment, has manufacturing locations in Indiana, California and Illinois, and historically generated approximately \$30 million in annual revenue.

On February 27, 2020, the Company acquired RSA Engineered Products ("RSA"), a manufacturer of complex, highly-engineered and proprietary ducting, connectors and related products for air management systems used in aerospace and defense applications, for an aggregate amount of approximately \$83.7 million, net of cash acquired. The fair value of assets acquired and liabilities assumed included approximately \$43.3 million of goodwill, \$36.9 million of intangible assets, \$10.1 million of net working capital, \$2.1 million of property and equipment, and \$8.7 million of net deferred tax liabilities. RSA, which is reported in the Company's Aerospace segment, is located in Simi Valley, California and historically generated approximately \$30 million in annual revenue.

2019 Acquisitions

In April 2019, the Company acquired Taplast S.p.A. ("Taplast"), a designer and manufacturer of dispensers, closures and containers for the beauty and personal care, household, and food and beverage packaging end markets, for an aggregate amount of approximately \$44.7 million, net of cash acquired. With manufacturing locations in both Italy and Slovakia, Taplast serves end markets in Europe and North America and historically generated approximately \$32 million in annual revenue. Taplast is reported in the Company's Packaging segment.

In January 2019, the Company acquired Plastic Srl, a manufacturer of single-bodied and assembled polymeric caps and closures for use in home care products, for an aggregate amount of approximately \$22.4 million, net of cash acquired. Located in Italy, Plastic Srl serves the home care market throughout Italy and other European countries and historically generated approximately \$12 million in annual revenue. Plastic Srl is reported in the Company's Packaging segment.

5. Discontinued Operations

On December 20, 2019, the Company completed the sale of Lamons to two wholly-owned subsidiaries of an investment fund sponsored by First Reserve, pursuant to an Asset and Stock Purchase Agreement dated as of November 1, 2019 (the "Purchase Agreement"), for a purchase price of \$136.8 million.

The Company recognized net cash proceeds of approximately \$112.7 million, which represented the purchase price, less estimated tax payments of approximately \$20.9 million, transaction costs of approximately \$3.2 million. The Company recorded a pre-tax gain on sale of approximately \$38.9 million, which includes the recognition of previously deferred non-cash foreign currency translation losses of approximately \$12.4 million.

The Company determined that Lamons met the criteria to be classified as a discontinued operation. As a result, the historical results for Lamons are reported in the accompanying consolidated statement of operations as a discontinued operation.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Results of discontinued operations are summarized as follows (dollars in thousands):

	Year ended December 31,	
	2019	2018
Net sales	\$ 182,590	\$ 172,110
Cost of sales	(138,100)	(128,100)
Gross profit	44,490	44,010
Selling, general and administrative expenses	(32,920)	(30,590)
Net gain (loss) on dispositions of assets	38,900	(160)
Operating profit	50,470	13,260
Other income (expense), net	(30)	360
Other income (expense), net	(30)	360
Income from discontinued operations, before income taxes	50,440	13,620
Income tax expense	(13,760)	(4,030)
Income from discontinued operations, net of tax	\$ 36,680	\$ 9,590

6. Realignment Actions

During 2020, the Company executed certain realignment actions, primarily in its Aerospace and Specialty Products segments, in response to reductions in current and expected future end-market demand. The Company recorded non-cash charges of approximately \$13.8 million related to inventory reductions, primarily as a result of a strategic decision in its Arrow Engine division to narrow its product line focus. The Company also recorded non-cash charges of approximately \$2.3 million related to certain production equipment removed from service given reduced demand levels. In addition, the Company reduced its employment levels given lower customer demand, incurring approximately \$3.8 million in severance charges, of which approximately \$3.7 million was paid by December 31, 2020. During 2020, approximately \$17.1 million of these charges were included in cost of sales and approximately \$2.8 million were included in selling, general and administrative expenses in the accompanying consolidated statement of operations.

7. Revenue

The following table presents the Company's disaggregated net sales by primary market served (dollars in thousands):

Customer End Markets	Year ended December 31,		
	2020	2019	2018
Consumer Products	\$ 402,080	\$ 307,640	\$ 276,740
Aerospace & Defense	167,740	194,110	185,920
Industrial	200,150	221,780	242,370
Total net sales	\$ 769,970	\$ 723,530	\$ 705,030

The Company's Packaging segment earns revenues from the consumer products (comprised of the beauty and personal care, home care, food and beverage, pharmaceutical and nutraceutical submarkets) and industrial markets. The Aerospace segment earns revenues from the aerospace & defense market (comprised of commercial, regional and business jet and military submarkets). The Specialty Products segment earns revenues from a variety of submarkets within the industrial market.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Cash and Cash Equivalents

Cash and cash equivalents consists of the following components (dollars in thousands):

	December 31, 2020	December 31, 2019
Cash and cash equivalents - unrestricted	\$ 62,790	\$ 172,470
Cash - restricted	11,160	—
Total cash and cash equivalents	<u>\$ 73,950</u>	<u>\$ 172,470</u>

During 2020, the Company placed cash on deposit with a financial institution to be held as cash collateral for the Company's outstanding letters of credit. In prior years, the Company used a portion of its credit agreement as collateral for letters of credit, which decreased availability under its revolving credit facility. See Note 13, "*Long-term Debt*," for further information on the Company's credit agreement.

9. Goodwill and Other Intangible Assets*Goodwill*

The Company performed a qualitative assessment as part of its 2020, 2019 and 2018 annual impairment tests (October 1 annual test date) for all reporting units, which included a review of the Company's market capitalization. Based on results of the qualitative assessments for the 2020, 2019 and 2018 annual impairment tests, the Company determined there were no indications that the fair value of a reporting unit was less than its carrying amount; therefore, the Company determined that quantitative goodwill impairment tests were not required.

During the third quarter of 2020, as a result of a decline in its aerospace-related business' financial results, a significant reduction in its financial projections for the remainder of 2020 compared with prior projections, and uncertainty around the duration and magnitude of the impact of the COVID-19 pandemic on future financial results given their dependence on future levels of air travel and new aircraft builds, the Company determined there was a triggering event requiring an interim quantitative goodwill impairment assessment of each of its two aerospace-related reporting units: Aerospace Fasteners and Aerospace Engineered Products.

In preparing the quantitative analysis, the Company utilized both income and market-based approaches. The income-based approach was conducted using the discounted cash flow method, for which management updated its internal five-year forecast, and reflected its current best estimates of when, and at what level, a recovery of air travel, new aircraft builds, and resulting customer orders would occur and the related impact on each reporting unit's future sales, earnings and cash flows. Assumptions in estimating the future cash flows were based on Level 3 inputs under the fair value hierarchy. The Company also selected appropriate terminal growth rates as well as discount rates, which considered various factors including the level of inherent risk in achieving the forecast based on prior history and current market conditions. The market-based approach considered potentially comparable publicly traded companies and transactions within the aerospace industry and applied their trading multiples to management's forecast estimates.

Upon completion of the quantitative goodwill impairment tests, the Company determined that the carrying values of the Aerospace Fasteners and Aerospace Engineered Products reporting units exceeded their fair values, resulting in goodwill impairment charges of approximately \$70.8 million in its Aerospace Fasteners reporting unit and approximately \$56.0 million in its Aerospace Engineered Products reporting unit. Following the impairment charges, the Aerospace Fasteners reporting unit has \$62.9 million of remaining goodwill, while the Aerospace Engineered Products reporting unit has no remaining goodwill. The Company notes that a 1% change in the discount rate would have impacted the total goodwill impairment charge by approximately \$20 million, while a 0.5% change in the terminal growth rate would have impacted the total goodwill impairment charge by approximately \$5 million. If the future financial results of the aerospace-related businesses significantly differ from the assumptions inherent in this analysis, the Company may be subject to further impairment charges.

In the first quarter of 2020, the Company began reporting its machined components operations within the Aerospace segment. These operations were previously reported in the Company's Specialty Products segment. As a result of the reporting structure change, goodwill of approximately \$12.7 million was reassigned from the Specialty Products segment to the Aerospace segment.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Changes in the carrying amount of goodwill for the years ended December 31, 2020 and 2019 are as follows (dollars in thousands):

	Packaging	Aerospace	Specialty Products	Total
Balance, December 31, 2018	\$ 163,660	\$ 146,430	\$ 6,560	\$ 316,650
Goodwill from acquisitions	18,400	—	—	18,400
Goodwill reassigned in segment realignment	—	(12,740)	12,740	—
Foreign currency translation and other	(410)	—	—	(410)
Balance, December 31, 2019	\$ 181,650	\$ 133,690	\$ 19,300	\$ 334,640
Goodwill from acquisitions	49,130	43,260	—	92,390
Impairment charge	—	(126,840)	—	(126,840)
Goodwill reassigned in segment realignment	—	12,740	(12,740)	—
Foreign currency translation and other	3,780	—	—	3,780
Balance, December 31, 2020	\$ 234,560	\$ 62,850	\$ 6,560	\$ 303,970

Other Intangible Assets

For the purposes of the Company's 2020, 2019 and 2018 annual indefinite-lived intangible asset impairment tests (as of October 1), the Company performed a qualitative assessment to determine whether it was more likely than not that the fair values of the indefinite-lived intangible assets were less than the carrying values. Based on the qualitative assessment performed, the Company did not believe that it is more likely than not that the fair values of each of its indefinite-lived intangible assets were less than the carrying values; therefore, a fair value calculation of the indefinite-lived intangible assets was not required for the 2020, 2019 and 2018 annual indefinite-lived intangible asset impairment tests.

During the third quarter of 2020, as a result of the significant forecast reduction in the Company's aerospace-related businesses, the Company also performed an interim quantitative assessment for the indefinite-lived intangible assets within the Aerospace segment, using the relief-from-royalty method. Significant management assumptions used under the relief-from-royalty method reflected the Company's current assessment of the risks and uncertainties associated with the aerospace industry. Upon completion of the quantitative impairment test, the Company determined that certain of the Company's aerospace-related trade names had carrying values that exceeded their fair values, and therefore recorded impairment charges of approximately \$7.8 million.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The gross carrying amounts and accumulated amortization of the Company's other intangibles as of December 31, 2020 and 2019 are summarized below (dollars in thousands):

Intangible Category by Useful Life	As of December 31, 2020		As of December 31, 2019	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived intangible assets:				
Customer relationships, 5 - 12 years	\$ 122,970	\$ (59,470)	\$ 73,860	\$ (49,910)
Customer relationships, 15 - 25 years	122,280	(62,450)	122,280	(56,010)
Total customer relationships	245,250	(121,920)	196,140	(105,920)
Technology and other, 1 - 15 years	57,180	(32,800)	52,430	(29,790)
Technology and other, 17 - 30 years	43,300	(39,450)	43,300	(37,620)
Total technology and other	100,480	(72,250)	95,730	(67,410)
Indefinite-lived intangible assets:				
Trademark/Trade names	54,640	—	42,850	—
Total other intangible assets	\$ 400,370	\$ (194,170)	\$ 334,720	\$ (173,330)

Amortization expense related to intangible assets as included in the accompanying consolidated statement of operations is summarized as follows (dollars in thousands):

	Year ended December 31,		
	2020	2019	2018
Technology and other, included in cost of sales	\$ 4,930	\$ 4,780	\$ 4,890
Customer relationships, included in selling, general and administrative expenses	15,820	13,850	13,370
Total amortization expense	\$ 20,750	\$ 18,630	\$ 18,260

Estimated amortization expense for the next five fiscal years beginning after December 31, 2020 is as follows (dollars in thousands):

	Year ended December 31,	Estimated Amortization Expense
2021	\$	21,790
2022	\$	18,230
2023	\$	16,330
2024	\$	14,830
2025	\$	14,480

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Inventories

Inventories consist of the following components (dollars in thousands):

	December 31, 2020	December 31, 2019
Finished goods	\$ 78,010	\$ 68,350
Work in process	29,680	30,560
Raw materials	41,690	33,750
Total inventories	<u>\$ 149,380</u>	<u>\$ 132,660</u>

11. Property and Equipment, Net

Property and equipment consists of the following components (dollars in thousands):

	December 31, 2020	December 31, 2019
Land and land improvements	\$ 20,040	\$ 19,110
Building and building improvements	91,970	84,880
Machinery and equipment	384,010	326,990
	496,020	430,980
Less: Accumulated depreciation	242,960	216,650
Property and equipment, net	<u>\$ 253,060</u>	<u>\$ 214,330</u>

Depreciation expense as included in the accompanying consolidated statement of operations is as follows (dollars in thousands):

	Year ended December 31,		
	2020	2019	2018
Depreciation expense, included in cost of sales	\$ 27,920	\$ 23,700	\$ 20,890
Depreciation expense, included in selling, general and administrative expense	1,100	1,170	1,340
Total depreciation expense	<u>\$ 29,020</u>	<u>\$ 24,870</u>	<u>\$ 22,230</u>

12. Accrued Liabilities

Accrued liabilities consist of the following components (dollars in thousands):

	December 31, 2020	December 31, 2019
Accrued payroll	\$ 23,140	\$ 16,390
High deductible insurance	4,980	5,720
Other	32,420	19,910
Total accrued liabilities	<u>\$ 60,540</u>	<u>\$ 42,020</u>

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Long-term Debt

The Company's long-term debt consists of the following (dollars in thousands):

	December 31, 2020	December 31, 2019
4.875% Senior Notes due October 2025	\$ 300,000	\$ 300,000
Credit Agreement	50,450	—
Debt issuance costs	(4,160)	(5,310)
Long-term debt, net	<u>\$ 346,290</u>	<u>\$ 294,690</u>

Senior Notes

The Company has \$300.0 million aggregate principal amount of 4.875% senior notes outstanding due October 15, 2025 ("Senior Notes"). The Senior Notes accrue interest at a rate of 4.875% per annum, payable semi-annually in arrears on April 15 and October 15. The payment of principal and interest is jointly and severally guaranteed, on a senior unsecured basis, by certain subsidiaries of the Company (each a "Guarantor" and collectively the "Guarantors"). The Senior Notes are *pari passu* in right of payment with all existing and future senior indebtedness and subordinated to all existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness.

The Company may redeem all or part of the Senior Notes at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, if redeemed during the twelve-month period beginning on October 15 of the years indicated below:

Year	Percentage
2020	102.438 %
2021	101.219 %
2022 and thereafter	100.000 %

Credit Agreement

The Company is party to a credit agreement ("Credit Agreement") consisting of a \$300.0 million senior secured revolving credit facility, which permits borrowings denominated in specific foreign currencies, subject to a \$125.0 million sub limit, maturing on September 20, 2022 and is subject to interest at London Interbank Offered Rate ("LIBOR") plus 1.50%. The interest rate spread is based upon the leverage ratio, as defined, as of the most recent determination date.

The Credit Agreement also provides incremental revolving credit facility commitments in an amount not to exceed the greater of \$200.0 million and an amount such that, after giving effect to such incremental commitments and the incurrence of any other indebtedness substantially simultaneously with the making of such commitments, the senior secured net leverage ratio, as defined, is no greater than 3.00 to 1.00. The terms and conditions of any incremental revolving credit facility commitments must be no more favorable than the existing credit facility.

The Company's revolving credit facility allows for the issuance of letters of credit, not to exceed \$40.0 million in aggregate. During 2020, the Company placed cash on deposit with a financial institution to be held as cash collateral for the Company's outstanding letters of credit; therefore, as of December 31, 2020, the Company had no letters of credit issued against its revolving credit facility. See Note 8, "*Cash and Cash Equivalents*," for further information on its cash deposits. At December 31, 2020, the Company had \$50.5 million outstanding under its revolving credit facility and had \$249.5 million potentially available. At December 31, 2019, the Company had no amounts outstanding under its revolving credit facility and had \$283.9 million potentially available after giving effect to approximately \$16.1 million of letters of credit issued and outstanding. The Company's borrowing capacity was not reduced by leverage restrictions contained in the Credit Agreement as of December 31, 2020 and December 31, 2019.

The Company previously drew \$150 million on its revolving credit facility in March 2020 to defend against potential uncertainty or liquidity issues in the financial markets as a result of the COVID-19 pandemic, but repaid this amount during second quarter 2020.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The debt under the Credit Agreement is an obligation of the Company and certain of its domestic subsidiaries and is secured by substantially all of the assets of such parties. Borrowings under the \$125.0 million (equivalent) foreign currency sub limit of the \$300.0 million senior secured revolving credit facility are secured by a cross-guarantee amongst, and a pledge of the assets of, the foreign subsidiary borrowers that are a party to the agreement. The Credit Agreement also contains various negative and affirmative covenants and other requirements affecting the Company and its subsidiaries, including the ability to, subject to certain exceptions and limitations, incur debt, liens, mergers, investments, loans, advances, guarantee obligations, acquisitions, assets dispositions, sale-leaseback transactions, hedging agreements, dividends and other restricted payments, transactions with affiliates, restrictive agreements and amendments to charters, bylaws, and other material documents. The terms of the Credit Agreement also require the Company and its restricted subsidiaries to meet certain restrictive financial covenants and ratios computed quarterly, including a maximum total net leverage ratio (total consolidated indebtedness plus outstanding amounts under any accounts receivable securitization facility, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined), a maximum senior secured net leverage ratio (total consolidated senior secured indebtedness, less the aggregate amount of certain unrestricted cash and unrestricted permitted investments, as defined, over consolidated EBITDA, as defined) and a minimum interest expense coverage ratio (consolidated EBITDA, as defined, over the sum of consolidated cash interest expense, as defined, and preferred dividends, as defined). At December 31, 2020, the Company was in compliance with the financial covenants contained in the Credit Agreement.

Long-term Debt Maturities

Future maturities of the face value of long-term debt at December 31, 2020 are as follows (dollars in thousands):

Year Ending December 31:	Future Maturities
2021	\$ —
2022	50,450
2023	—
2024	—
2025	300,000
Thereafter	—
Total	\$ 350,450

Fair Value of Debt

The valuations of the Senior Notes and revolving credit facility were determined based on Level 2 inputs under the fair value hierarchy, as defined. The carrying amounts and fair values were as follows (dollars in thousands):

	December 31, 2020		December 31, 2019	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Senior Notes	\$ 300,000	\$ 305,630	\$ 300,000	\$ 309,000
Revolving credit facility	50,450	50,450	—	—

Debt Issuance Costs

The Company's unamortized debt issuance costs approximated \$4.2 million and \$5.3 million at December 31, 2020 and 2019, respectively, and are included as a direct reduction from the related debt liability in the accompanying consolidated balance sheet. These amounts consisted primarily of legal, accounting and other transaction advisory fees as well as facility fees paid to the lenders. Amortization expense for these items was approximately \$1.2 million, \$1.1 million and \$1.3 million in 2020, 2019 and 2018, respectively, and is included in interest expense in the accompanying consolidated statement of operations.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)
14. Derivative Instruments
Derivatives Designated as Hedging Instruments

The Company uses cross-currency swap contracts to hedge its net investment in Euro-denominated assets against future volatility in the exchange rate between the U.S. dollar and the Euro. By doing so, the Company synthetically converts a portion of its U.S. dollar-based long-term debt into Euro-denominated long-term debt. At inception, the cross-currency swaps were designated as net investment hedges.

In November 2020, the Company entered into additional cross-currency swap agreements at notional amounts declining from \$50.0 million to \$25.0 million over the contract period ending April 15, 2025. Under the terms of the swap agreements, the Company is to receive net interest payments at a fixed rate of approximately 0.8% of the notional amount. As of December 31, 2020, the notional amount of these cross-currency swaps was \$50.0 million.

In October 2018, the Company entered into cross-currency swap agreements at notional amounts declining from \$125.0 million to \$75.0 million over the contract period ending October 15, 2023. Under the terms of the swap agreements, the Company is to receive net interest payments at a fixed rate of approximately 2.9% of the notional amount. As of December 31, 2020, the notional amount of these cross-currency swaps was \$100.0 million.

In October 2018, immediately prior to entering into the new cross-currency swap agreements, the Company terminated its existing cross-currency swap agreements, de-designating the swaps as net investment hedges and receiving approximately \$1.1 million of cash.

As of December 31, 2020 and 2019, the fair value carrying amount of the Company's derivatives designated as hedging instruments are recorded as follows (dollars in thousands):

Derivatives designated as hedging instruments	Balance Sheet Caption	Asset / (Liability) Derivatives	
		December 31, 2020	December 31, 2019
Net Investment Hedges			
Cross-currency swaps	Other assets	\$ —	\$ 4,460
Cross-currency swaps	Other long-term liabilities	(5,000)	—

The following table summarizes the income recognized in AOCI on derivative contracts designated as hedging instruments as of December 31, 2020 and 2019, and the amounts reclassified from AOCI into earnings for the years ended December 31, 2020, 2019 and 2018 (dollars in thousands):

	Amount of Income (Loss) Recognized in AOCI on Derivative (Effective Portion, net of tax)		Location of Loss Reclassified from AOCI into Earnings (Effective Portion)	Amount of Loss Reclassified from AOCI into Earnings		
	As of December 31,			Year ended December 31,		
	2020	2019		2020	2019	2018
Net Investment Hedges						
Cross-currency swaps	\$ (3,580)	\$ 4,230	Other expense, net	\$ —	\$ —	\$ —

Over the next 12 months, the Company does not expect to reclassify any pre-tax deferred amounts from AOCI into earnings.

Derivatives Not Designated as Hedging Instruments

As of December 31, 2020, the Company was party to foreign currency exchange forward contracts to economically hedge changes in foreign currency rates with notional amounts of approximately \$96.3 million. The Company uses foreign exchange contracts to mitigate the risk associated with fluctuations in currency rates impacting cash flows related to certain of its receivables, payables and intercompany transactions denominated in foreign currencies. The foreign exchange contracts primarily mitigate currency exposures between the U.S. dollar and the Euro, British pound, Mexican peso and the Chinese yuan, and have various settlement dates through April 2021. These contracts are not designated as hedging instruments; therefore, gains and losses on these contracts are recognized each period directly into the consolidated statement of operations.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the effects of derivatives not designated as hedging instruments on the Company's consolidated statement of operations (dollars in thousands):

	Location of Loss Recognized in Earnings on Derivatives	Amount of Loss Recognized in Earnings on Derivatives		
		Year ended December 31,		
		2020	2019	2018
Derivatives not designated as hedging instruments				
Foreign exchange contracts	Other income (expense), net	\$ (470)	\$ (600)	\$ —

Fair Value of Derivatives

The fair value of the Company's derivative instruments are estimated using an income approach based on valuation techniques to convert future amounts to a single, discounted amount. Estimates of the fair value of the Company's cross-currency swaps use observable inputs such as interest rate yield curves and forward currency exchange rates. Fair value measurements and the fair value hierarchy level for the Company's assets and liabilities measured at fair value on a recurring basis as of December 31, 2020 and 2019 are as follows (dollars in thousands):

Description	Frequency	Asset / (Liability)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2020					
Cross-currency swaps	Recurring	\$ (5,000)	\$ —	\$ (5,000)	\$ —
Foreign exchange contracts	Recurring	\$ 140	\$ —	\$ 140	\$ —
December 31, 2019					
Cross-currency swaps	Recurring	\$ 4,460	\$ —	\$ 4,460	\$ —
Foreign exchange contracts	Recurring	\$ (770)	\$ —	\$ (770)	\$ —

15. Leases

The Company leases certain equipment and facilities under non-cancelable operating leases. Leases with an initial term of 12 months or less are not recorded on the balance sheet; expense related to these leases is recognized on a straight-line basis over the lease term.

The components of lease expense are as follows (dollars in thousands):

	Year ended December 31, 2020	Year ended December 31, 2019
Operating lease cost	\$ 7,870	6,380
Short-term, variable and other lease costs	1,540	1,140
Total lease cost	\$ 9,410	\$ 7,520

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Maturities of lease liabilities are as follows (dollars in thousands):

Year ended December 31,	Operating Leases ^(a)
2021	\$ 8,070
2022	7,250
2023	6,340
2024	5,120
2025	4,400
Thereafter	12,700
Total lease payments	43,880
Less: Imputed interest	(5,530)
Present value of lease liabilities	\$ 38,350

^(a) The maturity table excludes cash flows associated with exited lease facilities. Liabilities for exited lease facilities are included in accrued liabilities and other long-term liabilities in the accompanying consolidated balance sheet.

The weighted-average remaining term of the Company's operating leases as of December 31, 2020 is approximately 6.8 years. The weighted-average discount rate as of December 31, 2020 is approximately 4.4%.

Cash paid for amounts included in the measurement of operating lease liabilities was approximately \$7.9 million and \$6.4 million during 2020 and 2019, respectively, and is included in cash flows provided by operating activities in the consolidated statement of cash flows.

Right-of-use assets obtained in exchange for lease liabilities were approximately \$14.0 million and \$1.4 million during 2020 and 2019, respectively, primarily due to acquisitions.

Rental expense for operating leases as classified under prior authoritative lease guidance for the Company was approximately \$5.8 million in 2018.

16. Other Long-term Liabilities

Other long-term liabilities consist of the following components (dollars in thousands):

	December 31, 2020	December 31, 2019
Non-current asbestos-related liabilities	\$ 26,170	\$ 6,200
Other long-term liabilities	43,520	34,610
Total other long-term liabilities	\$ 69,690	\$ 40,810

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Commitments and Contingencies*Environmental*

The Company is subject to increasingly stringent environmental laws and regulations, including those relating to air emissions, wastewater discharges and chemical and hazardous waste management and disposal. Some of these environmental laws hold owners or operators of land or businesses liable for their own and for previous owners' or operators' releases of hazardous or toxic substances or wastes. Other environmental laws and regulations require the obtainment and compliance with environmental permits. To date, costs of complying with environmental, health and safety requirements have not been material. However, the nature of the Company's operations and the long history of industrial activities at certain of the Company's current or former facilities, as well as those acquired, could potentially result in material environmental liabilities.

While the Company must comply with existing and pending climate change legislation, regulation and international treaties or accords, current laws and regulations have not had a material impact on the Company's business, capital expenditures or financial position. Future events, including those relating to climate change or greenhouse gas regulation, could require the Company to incur expenses related to the modification or curtailment of operations, installation of pollution control equipment or investigation and cleanup of contaminated sites.

Asbestos

As of December 31, 2020, the Company was a party to 337 pending cases involving an aggregate of 4,655 claimants primarily alleging personal injury from exposure to asbestos containing materials formerly used in gaskets (both encapsulated and otherwise) manufactured or distributed by Lamons and certain other related subsidiaries for use primarily in the petrochemical refining and exploration industries. The following chart summarizes the number of claims, number of claims filed, number of claims dismissed, number of claims settled, the average settlement amount per claim and the total defense costs, at the applicable date and for the applicable periods:

	Claims pending at beginning of period	Claims filed during period	Claims dismissed during period	Claims settled during period	Claims pending at end of period	Average settlement amount per claim during period	Total defense costs during period
Fiscal year ended December 31, 2020	4,759	219	287	36	4,655	\$ 18,314	\$ 2,130,000
Fiscal year ended December 31, 2019	4,820	143	172	32	4,759	\$ 16,616	\$ 2,250,000
Fiscal year ended December 31, 2018	5,256	171	564	43	4,820	\$ 7,191	\$ 2,260,000

In addition, the Company acquired various companies to distribute its products that had distributed gaskets of other manufacturers prior to acquisition. The Company believes that many of the pending cases relate to locations at which none of its gaskets were distributed or used.

The Company may be subjected to significant additional asbestos-related claims in the future, and will aggressively defend or reasonably resolve, as appropriate. The cost of settling cases in which product identification can be made may increase, and the Company may be subjected to further claims in respect of the former activities of its acquired gasket distributors. The cost of claims varies as claims may be initially made in some jurisdictions without specifying the amount sought or by simply stating the requisite or maximum permissible monetary relief, and may be amended to alter the amount sought. The large majority of claims do not specify the amount sought. Of the 4,655 claims pending at December 31, 2020, 40 set forth specific amounts of damages (other than those stating the statutory minimum or maximum). At December 31, 2020, of the 40 claims that set forth specific amounts, there were no claims seeking specific amounts for punitive damages. Below is a breakdown of the compensatory damages sought for those claims seeking specific amounts:

Range of damages sought (in millions)	Compensatory		
	\$0.0 to \$0.6	\$0.6 to \$5.0	\$5.0+
Number of claims	—	6	34

TRIMAS CORPORATION**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Relatively few claims have reached the discovery stage and even fewer claims have gone past the discovery stage. Total settlement costs (exclusive of defense costs) for all such cases, some of which were filed over 25 years ago, have been approximately \$10.0 million. All relief sought in the asbestos cases is monetary in nature. Based on the settlements made to date and the number of claims dismissed or withdrawn for lack of product identification, the Company believes that the relief sought (when specified) does not bear a reasonable relationship to its potential liability.

There has been significant volatility in the historical number of claim filings and costs to defend, with previous claim counts and spend levels much higher than current levels. Management believes this volatility was associated more with tort reform, plaintiff practices and state-specific legal dockets than the Company's underlying asbestos-related exposures. In the past three years, however, the number of new claim filings, and costs to defend, have become much more consistent, ranging between 143 to 173 new claims per year and total defense costs ranging between \$2.2 million and \$2.3 million.

The higher degree of consistency in census data and spend levels, as well as lower claim activity levels and an evolving defense strategy, has allowed the Company to more effectively and efficiently manage claims, making process or local counsel arrangement improvements where possible. Given the consistency of activity over a multi-year period, the Company believed a trend may have formed where it could be possible to reasonably estimate its future cash exposure for all asbestos-related activity with an adequate level of precision. As such, the Company commissioned an actuary to help evaluate the nature and predictability of its asbestos-related costs, and provide an actuarial range of estimates of future exposures. Based upon its review of the actuarial study, which was completed in June 2020 using data as of December 31, 2019 and which projected spend levels through a terminal year of 2064, the Company affirmed its belief that it now has the ability to reasonably estimate its future asbestos-related exposures for pending as well as unknown future claims.

During the second quarter of 2020, the Company elected to change its method of accounting for asbestos-related defense costs from accruing for probable and reasonably estimable defense costs associated with known claims expected to settle to accrue for all future defense costs for both known and unknown claims, which the Company now believes are reasonably estimable. The Company believes this change is preferable, as asbestos-related defense costs represent expenditures related to legacy activities that do not contribute to current or future revenue generating activities, and recording an estimate of the full liability for asbestos-related costs, where estimable with reasonable precision, provides a more complete assessment of the liability associated with resolving asbestos-related claims.

This accounting change has been reflected as a change in accounting estimate effected by a change in accounting principle. In connection with this second quarter 2020 change, the Company recorded a non-cash, pre-tax charge for asbestos-related costs of approximately \$23.4 million which is included in selling, general and administrative expenses in the accompanying consolidated statement of operations.

Following the change in accounting estimate, the Company's liability for asbestos-related claims will be based on a study from the Company's third-party actuary, the Company's review of the study, as well as the Company's own review of asbestos claims and claim resolution activity. The study from the Company's actuary, based on data as of December 31, 2019, provided for a range of possible future liability from \$31.5 million to \$43.3 million. The Company did not believe any amount within the range of potential outcomes represented a better estimate than another given the many factors and assumptions inherent in the projections, and therefore recorded the \$23.4 million charge to increase the liability estimate to \$31.5 million, at the low-end of the range. As of December 31, 2020, the Company's total asbestos-related liability is \$28.7 million, and is included in accrued liabilities and other long-term liabilities, respectively, in the accompanying consolidated balance sheet.

The Company's primary insurance, which covered approximately 40% of historical costs related to settlement and defense of asbestos litigation, expired in November 2018, upon which the Company became solely responsible for defense costs and indemnity payments. The Company is party to a coverage-in-place agreement (entered into in 2006) with its first level excess carriers regarding the coverage to be provided to the Company for asbestos-related claims. The coverage-in-place agreement makes asbestos defense costs and indemnity insurance coverage available to the Company that might otherwise be disputed by the carriers and provides a methodology for the administration of such expenses. The Company will continue to be solely responsible for defense costs and indemnity payments prior to the commencement of coverage under this agreement, the duration of which would be subject to the scope of damage awards and settlements paid. Based upon the Company's review of the actuarial study, the Company does not believe it is probable that it will reach the threshold of qualified future settlements required to commence excess carrier insurance coverage under the coverage-in-place agreement.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

While the Company recorded a significant non-cash charge in the six months ended June 30, 2020 in connection with its change in accounting policy, based upon the Company's experience to date, including the trend in annual defense and settlement costs incurred to date, and other available information (including the availability of excess insurance), the Company does not believe these cases will have a material adverse effect on its financial position or cash flows.

Claims and Litigation

The Company is subject to other claims and litigation in the ordinary course of business, but does not believe that any such claim or litigation will have a material adverse effect on its financial position and results of operations or cash flows.

18. Employee Benefit Plans*Pension and Profit-Sharing Benefits*

The Company provides a defined contribution profit sharing plan for the benefit of substantially all the Company's domestic salaried and non-union hourly employees. The plan contains both contributory and noncontributory profit sharing arrangements, as defined. Aggregate charges included in the accompanying consolidated statement of operations under this plan for both continuing and discontinued operations were approximately \$3.4 million, \$4.6 million and \$4.2 million in 2020, 2019 and 2018, respectively. Certain of the Company's non-U.S. and union hourly employees participate in defined benefit pension plans.

Plan Assets, Expenses and Obligations

Net periodic pension benefit expense recorded in the Company's consolidated statement of operations for defined benefit pension plans include the following components (dollars in thousands):

	Pension Benefit		
	2020	2019	2018
Service cost	\$ 1,230	\$ 1,050	\$ 1,120
Interest cost	930	1,070	1,100
Expected return on plan assets	(1,450)	(1,400)	(1,520)
Settlements and curtailments	—	—	2,620
Amortization of net loss	890	580	860
Net periodic benefit expense	<u>\$ 1,600</u>	<u>\$ 1,300</u>	<u>\$ 4,180</u>

The service cost component of net periodic benefit expense is recorded in cost of goods sold and selling, general and administrative expenses, while non-service cost components are recorded in other expense, net in the accompanying consolidated statement of operations.

During 2018, the Company recognized one-time settlement and curtailment charges of approximately \$2.6 million, of which approximately \$2.5 million was due to the purchase of an annuity contract to transfer certain U.S. retiree defined benefit obligations to an insurance company. The annuity contract was funded by plan assets.

Actuarial valuations of the Company's defined benefit pension plans were prepared as of December 31, 2020, 2019 and 2018. Weighted average assumptions used in accounting for the U.S. defined benefit pension plans are as follows:

	Pension Benefit		
	2020	2019	2018
Discount rate for obligations	2.79 %	3.41 %	4.50 %
Discount rate for benefit costs	3.41 %	4.50 %	4.37 %
Rate of increase in compensation levels	N/A	N/A	N/A
Expected long-term rate of return on plan assets	6.13 %	7.13 %	7.13 %

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company utilizes a high-quality (Aa or greater) corporate bond yield curve as the basis for its domestic discount rate for its pension benefit plans. Management believes this yield curve removes the impact of including additional required corporate bond yields (potentially considered in the above-median curve) resulting from the uncertain economic climate that does not necessarily reflect the general trend in high-quality interest rates.

Weighted average assumptions used in accounting for the non-U.S. defined benefit pension plans are as follows:

	Pension Benefit		
	2020	2019	2018
Discount rate for obligations	1.50 %	2.10 %	3.00 %
Discount rate for benefit costs	2.10 %	3.00 %	2.60 %
Rate of increase in compensation levels	2.80 %	3.00 %	3.30 %
Expected long-term rate of return on plan assets	4.10 %	4.60 %	4.60 %

The following provides a reconciliation of the changes in the Company's defined benefit pension plans' projected benefit obligations and fair value of assets for each of the years ended December 31, 2020 and 2019 and the funded status as of December 31, 2020 and 2019 (dollars in thousands):

	Pension Benefit	
	2020	2019
Changes in Projected Benefit Obligations		
Benefit obligations at January 1	\$ (36,580)	\$ (30,300)
Service cost	(1,230)	(1,050)
Interest cost	(930)	(1,070)
Participant contributions	(60)	(60)
Actuarial loss ^(a)	(2,420)	(4,190)
Benefit payments	1,140	900
Change in foreign currency	(750)	(810)
Projected benefit obligations at December 31	<u>\$ (40,830)</u>	<u>\$ (36,580)</u>
Changes in Plan Assets		
Fair value of plan assets at January 1	\$ 30,260	\$ 24,650
Actual return on plan assets	4,780	3,630
Employer contributions	1,140	1,930
Participant contributions	60	60
Benefit payments	(1,140)	(900)
Change in foreign currency	960	890
Fair value of plan assets at December 31	<u>\$ 36,060</u>	<u>\$ 30,260</u>
Funded status at December 31	<u>\$ (4,770)</u>	<u>\$ (6,320)</u>

^(a) The actuarial losses for the year ended December 31, 2020 and 2019 were primarily due to a decrease in the discount rate utilized in measuring the projected benefit obligations, partially offset by other assumptions and experience gains.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	Pension Benefit	
	2020	2019
Amounts Recognized in Balance Sheet		
Other assets	\$ 4,470	\$ 1,690
Current liabilities	(340)	(330)
Noncurrent liabilities	(8,900)	(7,680)
Net liability recognized at December 31	<u>\$ (4,770)</u>	<u>\$ (6,320)</u>

	Pension Benefit	
	2020	2019
Amounts Recognized in Accumulated Other Comprehensive Loss		
Unrecognized prior service cost	\$ 170	\$ 190
Unrecognized net loss	11,470	13,240
Total accumulated other comprehensive loss recognized at December 31	<u>\$ 11,640</u>	<u>\$ 13,430</u>

	Accumulated Benefit Obligations		Projected Benefit Obligations	
	2020	2019	2020	2019
Benefit Obligations at December 31,				
Total benefit obligations	\$ (38,410)	\$ (34,460)	\$ (40,830)	\$ (36,580)
Plans with benefit obligations exceeding plan assets				
Benefit obligations	\$ (16,820)	\$ (14,840)	\$ (16,940)	\$ (14,910)
Plan assets	\$ 7,700	\$ 6,890	\$ 7,700	\$ 6,890

The assumptions regarding discount rates and expected return on plan assets can have a significant impact on amounts reported for benefit plans. A 25 basis point change in benefit obligation discount rates or 50 basis point change in expected return on plan assets would have the following effect (dollars in thousands):

	Pension Benefit	
	December 31, 2020 Benefit Obligation	2020 Expense
Discount rate		
25 basis point increase	\$ (1,580)	\$ (110)
25 basis point decrease	\$ 1,760	\$ 110
Expected return on assets		
50 basis point increase	N/A	\$ (170)
50 basis point decrease	N/A	\$ 170

The Company expects to make contributions of approximately \$3.6 million to fund its pension plans during 2021.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Plan Assets

The Company's overall investment goal is to provide for capital growth with a moderate level of volatility by investing assets in targeted allocation ranges. Specific long term investment goals include total investment return, diversity to reduce volatility and risk, and to achieve an asset allocation profile that reflects the general nature and sensitivity of the plans' liabilities. Investment goals are established after a comprehensive review of current and projected financial statement requirements, plan assets and liability structure, market returns and risks as well as special requirements of the plans. The Company reviews investment goals and actual results annually to determine whether stated objectives are still relevant and the continued feasibility of achieving the objectives.

The actual weighted average asset allocation of the Company's domestic and foreign pension plans' assets at December 31, 2020 and 2019 and target allocations by class, were as follows:

	Domestic Pension			Foreign Pension		
	Target	Actual		Target	Actual	
		2020	2019		2020	2019
Equity securities	60 %	67 %	62 %	33 %	33 %	30 %
Fixed income	36 %	32 %	34 %	45 %	44 %	46 %
Diversified growth ^(a)	— %	— %	— %	22 %	22 %	23 %
Cash and other	4 %	1 %	4 %	—	1 %	1 %
Total	100 %	100 %	100 %	100 %	100 %	100 %

^(a) Diversified growth funds invest in a broad range of asset classes including equities, investment grade and high yield bonds, commodities, property, private equity, infrastructure and currencies.

Actual allocations to each asset vary from target allocations due to periodic investment strategy changes, market value fluctuations and the timing of benefit payments and contributions. The expected long-term rate of return for both the domestic and foreign plans' total assets is based on the expected return of each of the above categories, weighted based on the target allocation for each class. Actual allocation is reviewed regularly and investments are rebalanced to their targeted allocation range when deemed appropriate.

In managing the plan assets, the Company reviews and manages risk associated with the funded status risk, interest rate risk, market risk, liquidity risk and operational risk. Investment policies reflect the unique circumstances of the respective plans and include requirements designed to mitigate these risks by including quality and diversification standards.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the level under the fair value hierarchy (see Note 3, "Summary of Significant Accounting Policies") that the Company's pension plan assets are measured, on a recurring basis as of December 31, 2020 (dollars in thousands):

	Total	Level 1	Level 2	Level 3
Plan assets subject to leveling				
Investment funds				
Equity securities	\$ 5,160	\$ 5,160	\$ —	\$ —
Fixed income	2,500	2,500	—	—
Cash and cash equivalents	310	310	—	—
Plan assets measured at net asset value^(a)				
Investment funds				
Equity securities	9,180			
Fixed income	12,880			
Diversified growth	5,870			
Cash and cash equivalents	160			
Total	<u>\$ 36,060</u>	<u>\$ 7,970</u>	<u>\$ —</u>	<u>\$ —</u>

^(a) Certain investments that are measured at fair value using the net asset value per share as a practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amount presented in the fair value of plan assets.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid during the following years (dollars in thousands):

	Pension Benefit
2021	\$ 1,160
2022	1,210
2023	1,240
2024	1,310
2025	1,350
Years 2026-2030	7,710

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Equity Awards

The Company maintains the following long-term equity incentive plans (collectively, the "Plans"):

Plan Names	Shares Approved for Issuance
TriMas Corporation 2017 Equity and Incentive Compensation Plan	2,000,000
TriMas Corporation Director Retainer Share Election Program	100,000

The Company previously maintained the 2011 Omnibus Incentive Compensation Plan, which was replaced by the TriMas Corporation 2017 Equity and Incentive Compensation Plan in 2017, such that, while existing grants remain outstanding until exercised, vested or canceled, no new shares may be issued under the plan.

Stock Options

The Company did not grant any stock options during 2020, 2019 and 2018. Information related to stock options as of and for the year ended December 31, 2020 is as follows:

	Number of Stock Options	Weighted Average Option Price	Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2020	150,000	\$ 17.87		
Granted	—	—		
Exercised	—	—		
Cancelled	—	—		
Expired	—	—		
Outstanding at December 31, 2020	<u>150,000</u>	<u>\$ 17.87</u>	<u>5.6</u>	<u>\$ 2,070,000</u>

As of December 31, 2020, the 150,000 stock options outstanding were exercisable under the Company's long-term equity incentive plans and there was no unrecognized compensation cost related to stock options. No stock options vested during 2020 and 50,000 stock options vested during each of 2019 and 2018.

The Company recognized no stock-based compensation expense related to stock options during 2020 and approximately \$0.1 million and \$0.2 million of stock-based compensation expense related to stock options during 2019 and 2018, respectively. The stock-based compensation expense is included in selling, general and administrative expenses in the accompanying consolidated statement of operations.

Restricted Stock Units

The Company awarded the following restricted stock units ("RSUs") during 2020, 2019, and 2018:

- granted 190,650, 139,575, and 141,203 RSUs, respectively, to certain employees, which are subject only to a service condition and vest ratably over three years so long as the employee remains with the Company;
- granted 30,590, 25,872 and 25,830 RSUs, respectively, to its non-employee independent directors, which vest one year from date of grant so long as the director and/or Company does not terminate their service prior to the vesting date; and
- issued 3,673, 4,494 and 7,263 RSUs, respectively, related to director fee deferrals as certain of the Company's directors elected to defer all or a portion of their directors fees and to receive the amount in Company common stock at a future date.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company awarded the following RSUs during 2020:

- granted 31,816 RSUs to certain employees, which are subject only to a service condition and fully vest at the end of three years so long as the employee remains with the Company; and
- granted 2,558 RSUs to certain employees, which are subject only to a service condition and vest one year from the date of grant so long as the employee remains with the Company.

During 2020, the Company awarded 113,146 performance-based RSUs to certain key employees which vest three years from the grant date as long as the employee remains with the Company. These awards are earned 50% based upon the Company's achievement of an earnings per share compound annual growth rate ("EPS CAGR") metric over a period beginning January 1, 2020 and ending December 31, 2022. The remaining 50% of the awards are earned based on the Company's total shareholder return ("TSR") relative to the TSR of the common stock of a pre-defined industry peer-group, measured over the performance period. TSR is calculated as the Company's average closing stock price for the 20 trading days at the end of the performance period plus Company dividends, divided by the Company's average closing stock price for the 20 trading days prior to the start of the performance period. The Company estimates the grant-date fair value subject to a market condition using a Monte Carlo simulation model, using the following weighted average assumptions: risk-free rate of 0.56% and annualized volatility of 26.2%. Depending on the performance achieved for these two metrics, the amount of shares earned, if any, can vary for each metric from 0% of the target award to a maximum of 200% of the target award. The Company awarded 95,882 and 104,532 of similar performance-based RSUs in 2019 and 2018, respectively. For similar performance-based RSUs awarded in 2017, the Company attained 127.4% of the target on a weighted average basis, resulting in an increase of 27,567 shares during 2020.

In addition, the Company awarded 87,034 performance-based RSUs to certain key divisional employees which vest three years from the grant date as long as the employee remains with the Company. These awards are earned based upon the Company's stock price performance over the period from January 1, 2020 and ending December 31, 2022. The stock price achievement is calculated based on the Company's average closing stock price for each quarter end for the 20 trading days up to and including March 31, June 30, September 30, and December 31, 2022, respectively. The Company estimates the grant-date fair value subject to a market condition using a Monte Carlo simulation model, using the following weighted average assumptions: risk free rate of 0.85% and annualized volatility of 25.2%. Depending on the performance achieved for this metric, the amount of shares earned, if any, can vary from 0% of the target award to a maximum of 160% of the target award, although it automatically is earned at the target award level if the Company's stock price is equal to or greater than a specified stock price for either five consecutive trading days or 20 total trading days during the performance period.

Information related to restricted shares as of and for the year ended December 31, 2020 is as follows:

	Number of Unvested Restricted Shares	Weighted Average Grant Date Fair Value	Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2020	622,528	\$ 30.77		
Granted	487,034	21.43		
Vested	(302,924)	27.88		
Cancelled	(21,670)	27.53		
Outstanding at December 31, 2020	784,968	\$ 26.46	1.2	\$ 24,859,937

As of December 31, 2020, there was approximately \$8.2 million of unrecognized compensation cost related to unvested restricted shares that is expected to be recorded over a weighted average period of 1.9 years.

The Company recognized stock-based compensation expense related to restricted shares of approximately \$8.2 million, \$5.7 million and \$6.9 million in 2020, 2019 and 2018, respectively. The stock-based compensation expense is included in selling, general and administrative expenses in the accompanying statement of operations.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Earnings per Share

Net income is divided by the weighted average number of common shares outstanding during the year to calculate basic earnings per share. For the year ended December 31, 2020, no restricted shares or stock options were included in the computation of net income (loss) per share because to do so would be anti-dilutive. The following table summarizes the dilutive effect of RSUs and options to purchase common stock:

	Year ended December 31,		
	2020	2019	2018
Weighted average common shares—basic	43,581,232	45,303,659	45,824,555
Dilutive effect of restricted stock units	—	224,946	242,204
Dilutive effect of stock options	—	66,549	103,705
Weighted average common shares—diluted	43,581,232	45,595,154	46,170,464

In March 2020, the Company announced its Board of Directors had authorized the Company to increase the purchase of its common stock up to \$250 million in the aggregate. The initial authorization, approved in November 2015, authorized up to \$50 million of purchases in the aggregate of its common stock. During 2020, 2019 and 2018, the Company purchased 1,582,049, 1,230,050 and 442,632 shares of its outstanding common stock for approximately \$39.4 million, \$36.7 million and \$12.1 million, respectively. As of December 31, 2020, the Company has approximately \$161.7 million remaining under the repurchase authorization.

21. Other Comprehensive Income

Changes in AOCI by component for the year ended December 31, 2020 are summarized as follows, net of tax (dollars in thousands):

	Defined Benefit Plans	Derivative Instruments	Foreign Currency Translation	Total
Balance, December 31, 2019	\$ (9,930)	\$ 4,230	\$ (300)	\$ (6,000)
Net unrealized gains (losses) arising during the period ^(a)	670	(7,810)	6,880	(260)
Less: Net realized losses reclassified to net income ^(b)	(640)	—	—	(640)
Net current-period other comprehensive income (loss)	1,310	(7,810)	6,880	380
Balance, December 31, 2020	\$ (8,620)	\$ (3,580)	\$ 6,580	\$ (5,620)

^(a) Defined benefit plans, net of income tax of \$0.4 million. See Note 18, "Employee Benefit Plans," for additional details. Derivative instruments, net of income tax of \$2.5 million. See Note 14, "Derivative Instruments," for further details.

^(b) Defined benefit plans, net of income tax of \$0.2 million. See Note 18, "Employee Benefit Plans," for additional details.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Changes in AOCI by component for the year ended December 31, 2019 are summarized as follows, net of tax (dollars in thousands):

	Defined Benefit Plans	Derivative Instruments	Foreign Currency Translation	Total
Balance, December 31, 2018	\$ (7,200)	\$ 940	\$ (10,590)	\$ (16,850)
Net unrealized gains (losses) arising during the period ^(a)	(1,870)	3,300	(2,060)	(630)
Less: Net realized losses reclassified to net income ^(b)	(400)	—	(12,350)	(12,750)
Net current-period other comprehensive income (loss)	(1,470)	3,300	10,290	12,120
Reclassification of stranded tax effects	(1,260)	(10)	—	(1,270)
Balance, December 31, 2019	<u>\$ (9,930)</u>	<u>\$ 4,230</u>	<u>\$ (300)</u>	<u>\$ (6,000)</u>

^(a) Defined benefit plans, net of income tax of \$0.5 million. See Note 18, "Employee Benefit Plans," for additional details. Derivative instruments, net of income tax expense of \$1.0 million. See Note 14, "Derivative Instruments," for further details.

^(b) Defined benefit plans, net of income tax of \$0.1 million. See Note 18, "Employee Benefit Plans," for additional details.

22. Segment Information

TriMas reports its operations in three segments: Packaging, Aerospace and Specialty Products. Each of these segments has discrete financial information that is regularly evaluated by TriMas' president and chief executive officer (chief operating decision maker) in determining resource, personnel and capital allocation, as well as assessing strategy and performance. The Company utilizes its proprietary TriMas Business Model as its platform which is based upon a standardized set of processes to manage and drive results and strategy across its multi-industry businesses.

Within the Company's reportable segments, there are no individual products or product families for which reported net sales accounted for more than 10% of the Company's consolidated net sales. See below for more information regarding the types of products and services provided within each reportable segment:

Packaging – The Packaging segment, which consists primarily of the Rieke[®], Taplast, Affaba & Ferrari, Stolz, and Rapak[®] brands, develops and manufactures a broad array of dispensing products (such as foaming pumps, lotion and hand soap pumps, sanitizer pumps, beverage dispensers, perfume sprayers, nasal sprayers and trigger sprayers), polymeric and steel caps and closures (such as food lids, flip-top closures, child resistance caps, beverage closures, drum and pail closures, flexible spouts, and agricultural closures), polymeric jar products, and fully integrated dispensers for fill-ready bag-in-box applications, all for a variety of consumer products submarkets including, but not limited to, beauty and personal care, food and beverage, home care, and pharmaceutical and nutraceutical, as well as the industrial market.

Aerospace – The Aerospace segment, which includes the Monogram Aerospace Fasteners[™], Allfast Fastening Systems[®], Mac Fasteners[™], RSA Engineered Products and Martinic Engineering[™] brands, develops, qualifies and manufactures highly-engineered, precision fasteners, tubular products and assemblies for fluid conveyance, and machined products and assemblies to serve the aerospace and defense market.

Specialty Products – The Specialty Products segment, which includes the Norris Cylinder[™] and Arrow[®] Engine brands, designs, manufactures and distributes highly-engineered steel cylinders, wellhead engines and compression systems for use within industrial markets.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Segment activity is as follows (dollars in thousands):

	Year ended December 31,		
	2020	2019	2018
Net Sales			
Packaging	\$ 488,340	\$ 392,340	\$ 368,200
Aerospace	167,740	194,110	185,920
Specialty Products	113,890	137,080	150,910
Total	<u>\$ 769,970</u>	<u>\$ 723,530</u>	<u>\$ 705,030</u>
Operating Profit (Loss)			
Packaging	\$ 93,990	\$ 80,770	\$ 84,590
Aerospace	(133,440)	28,950	27,290
Specialty Products	4,350	16,000	20,990
Corporate	(53,190)	(34,500)	(24,060)
Total	<u>\$ (88,290)</u>	<u>\$ 91,220</u>	<u>\$ 108,810</u>
Capital Expenditures			
Packaging	\$ 30,730	\$ 16,400	\$ 13,590
Aerospace	5,770	8,110	1,190
Specialty Products	3,890	5,090	3,750
Corporate ^(a)	90	70	4,890
Total	<u>\$ 40,480</u>	<u>\$ 29,670</u>	<u>\$ 23,420</u>
Depreciation and Amortization			
Packaging	\$ 27,600	\$ 24,650	\$ 21,620
Aerospace	18,130	15,090	15,190
Specialty Products	3,910	3,480	3,400
Corporate	130	280	280
Total	<u>\$ 49,770</u>	<u>\$ 43,500</u>	<u>\$ 40,490</u>
Total Assets			
Packaging	\$ 721,440	\$ 546,950	\$ 435,140
Aerospace	348,190	393,260	392,140
Specialty Products	65,520	77,250	82,610
Corporate	58,730	175,240	95,260
Subtotal from continuing operations	<u>1,193,880</u>	<u>1,192,700</u>	<u>1,005,150</u>
Discontinued operations	—	—	95,370
Total	<u>\$ 1,193,880</u>	<u>\$ 1,192,700</u>	<u>\$ 1,100,520</u>

^(a) Corporate capital expenditures for the year ended December 31, 2018 are primarily related to purchases of machinery and equipment formerly held under operating leases. These purchased assets were subsequently transferred from Corporate to the segment utilizing the assets.

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table presents the Company's net sales for each of the years ended December 31 and long-lived assets at each year ended December 31, attributed to each subsidiary's continent of domicile (dollars in thousands).

	As of December 31,					
	2020		2019		2018	
	Net Sales	Long-lived Assets	Net Sales	Long-lived Assets	Net Sales	Long-lived Assets
Non-U.S.						
Europe	\$ 116,350	\$ 225,120	\$ 87,420	\$ 110,530	\$ 54,920	\$ 53,770
Asia Pacific	46,350	41,140	37,920	40,720	38,920	44,230
Other Americas	11,740	19,510	6,290	18,430	6,170	7,500
Total non-U.S.	174,440	285,770	131,630	169,680	100,010	105,500
Total U.S.	595,530	477,460	591,900	540,680	605,020	550,990
Total	\$ 769,970	\$ 763,230	\$ 723,530	\$ 710,360	\$ 705,030	\$ 656,490

The Company's export sales from the U.S. approximated \$70.0 million, \$74.1 million and \$69.9 million in 2020, 2019 and 2018, respectively.

23. Income Taxes

The Company's income (loss) before income taxes and income tax expense (benefit), each by tax jurisdiction, consists of the following (dollars in thousands):

	Year ended December 31,		
	2020	2019	2018
Income (loss) before income taxes:			
Domestic	\$ (134,630)	\$ 52,190	\$ 64,670
Foreign	31,920	26,070	27,690
Total income (loss) before income taxes	<u>\$ (102,710)</u>	<u>\$ 78,260</u>	<u>\$ 92,360</u>
Current income tax expense:			
Federal	\$ 200	\$ 3,530	\$ 4,410
State and local	810	1,280	2,060
Foreign	7,750	7,070	6,200
Total current income tax expense	<u>8,760</u>	<u>11,880</u>	<u>12,670</u>
Deferred income tax expense (benefit):			
Federal	(16,900)	4,890	4,570
State and local	(4,430)	500	1,310
Foreign	(10,380)	(950)	100
Total deferred income tax expense (benefit)	<u>(31,710)</u>	<u>4,440</u>	<u>5,980</u>
Income tax expense (benefit)	<u>\$ (22,950)</u>	<u>\$ 16,320</u>	<u>\$ 18,650</u>

TRIMAS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The components of deferred taxes are as follows (dollars in thousands):

	December 31, 2020	December 31, 2019
Deferred tax assets:		
Accounts receivable	\$ 260	\$ 480
Inventories	5,080	4,390
Accrued liabilities and other long-term liabilities	19,190	12,210
Operating lease liability	8,950	6,790
Tax loss and credit carryforwards	20,760	9,200
Other	340	340
Gross deferred tax asset	54,580	33,410
Valuation allowances	(10,180)	(8,310)
Net deferred tax asset	44,400	25,100
Deferred tax liabilities:		
Property and equipment	(24,140)	(20,650)
Right of use asset	(8,930)	(6,700)
Goodwill and other intangible assets	(16,230)	(13,250)
Investment in foreign affiliates, including withholding tax	(370)	(830)
Gross deferred tax liability	(49,670)	(41,430)
Net deferred tax liability	\$ (5,270)	\$ (16,330)

The following is a reconciliation of income tax expense (benefit) computed at the U.S. federal statutory rate to income tax expense (benefit) allocated to income (loss) before income taxes (dollars in thousands):

	Year ended December 31,		
	2020	2019	2018
U.S. federal statutory rate	21 %	21 %	21 %
Tax at U.S. federal statutory rate	\$ (21,570)	\$ 16,440	\$ 19,390
State and local taxes, net of federal tax benefit	(2,850)	970	2,730
Differences in statutory foreign tax rates	(1,500)	(870)	490
Change in recognized tax benefits	(920)	(920)	(560)
Goodwill and other intangible assets impairment	13,430	—	—
Nontaxable income	—	(570)	(940)
Research and manufacturing incentives	(2,130)	(1,160)	(1,740)
Net change in valuation allowance	(6,390)	3,580	280
Tax Reform Act	—	—	(400)
Other, net	(1,020)	(1,150)	(600)
Income tax expense (benefit)	\$ (22,950)	\$ 16,320	\$ 18,650

During 2020, the Company undertook certain tax-planning actions with respect to intercompany debt restructuring within the group. These actions resulted in the recognition of an approximate \$6.4 million deferred tax benefit related to an interest limitation carryforward.

The Company has recorded deferred tax assets on \$43.4 million of various state operating loss carryforwards and \$61.6 million of various foreign operating loss carryforwards. The majority of the state tax loss carryforwards expire between 2026 and 2032 and the majority of the foreign losses have indefinite carryforward periods.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company has not made a provision for U.S. or additional foreign withholding taxes related to investments in foreign subsidiaries that are indefinitely reinvested since any excess of the amount for financial reporting over the tax basis in these investments is not significant as of December 31, 2020.

Tax Reform

In December 2017, the Tax Cuts and Jobs Act ("Tax Reform Act") was signed into law, and, among the provisions, reduced the Federal statutory corporate income tax rate from 35% to 21% effective January 1, 2018, and implemented a territorial tax system, imposing a one-time tax on the deemed repatriation of undistributed earnings of non-U.S. subsidiaries ("Transition Tax"). The Transition Tax is payable over eight years beginning in 2019.

The Company recorded provisional expenses in 2017 related to the Transition Tax and finalized the measurement of the provisional expenses in 2018. In 2018, the Company recognized an approximate \$1.1 million income tax benefit in connection with finalizing the revaluation of its net deferred tax assets following the filing of the Company's 2017 corporate income tax return, and recognized an approximate \$0.7 million income tax expense related to finalizing the Transition Tax, resulting in a \$0.4 million net reduction in 2018 to the \$12.7 million provisional tax expense recorded in 2017.

Unrecognized Tax Benefits

The Company had approximately \$1.6 million and \$2.3 million of unrecognized tax benefits ("UTBs") as of December 31, 2020 and 2019, respectively. If the UTBs were recognized, the impact to the Company's effective tax rate would be to reduce reported income tax expense for the years ended December 31, 2020 and 2019 by approximately \$1.4 million and \$1.9 million, respectively.

A reconciliation of the change in the UTBs for the years ended December 31, 2020 and 2019 is as follows (dollars in thousands):

	Unrecognized Tax Benefits
Balance at December 31, 2018	\$ 3,020
Tax positions related to current year:	
Additions	110
Tax positions related to prior years:	
Additions	—
Reductions	—
Settlements	—
Lapses in the statutes of limitations	(880)
Balance at December 31, 2019	\$ 2,250
Tax positions related to current year:	
Additions	150
Tax positions related to prior years:	
Additions	—
Reductions	—
Settlements	—
Lapses in the statutes of limitations	(760)
Balance at December 31, 2020	<u>\$ 1,640</u>

In addition to the UTBs summarized above, the Company has recorded approximately \$0.8 million and \$1.4 million in potential interest and penalties associated with uncertain tax positions as of December 31, 2020 and 2019, respectively.

TRIMAS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company is subject to U.S. federal, state and local, and certain non-U.S. income tax examinations for tax years 2013 through 2020. In addition, there are currently several state and foreign income tax examinations in process. The Company does not believe that the results of these examinations will have a significant impact on the Company's tax position or its effective tax rate.

Management monitors changes in tax statutes and regulations and the issuance of judicial decisions to determine the potential impact to UTBs and is not aware of, nor does it anticipate, any subsequent events that could have a significant impact on the Company's financial position during the next twelve months.

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

Not applicable.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures

As of December 31, 2020, an evaluation was carried out by management, with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the "Exchange Act")), pursuant to Rule 13a-15 of the Exchange Act. Our disclosure controls and procedures are designed only to provide reasonable assurance that they will meet their objectives. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of December 31, 2020, the Company's disclosure controls and procedures were effective to provide reasonable assurance that they would meet their objectives.

We completed the acquisition of Affaba & Ferrari Srl ("Affaba & Ferrari") in December 2020 and have not yet included Affaba & Ferrari in our assessment of the effectiveness of our internal control over financial reporting. Accordingly, pursuant to the SEC's general guidance that an assessment of a recently acquired business may be omitted from the scope of an assessment in the year of acquisition, the scope of our assessment of the effectiveness of our disclosure controls and procedures does not include Affaba & Ferrari. For fiscal 2020, Affaba & Ferrari accounted for approximately \$0.7 million of our total net sales and as of December 31, 2020 had total assets of approximately \$141 million.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for the preparation and fair presentation of the consolidated financial statements included in this annual report. The consolidated financial statements have been prepared in conformity with United States generally accepted accounting principles and reflect management's judgments and estimates concerning events and transactions that are accounted for or disclosed.

Management is also responsible for establishing and maintaining effective internal control over financial reporting. The Company's internal control over financial reporting includes those policies and procedures that pertain to the Company's ability to record, process, summarize, and report reliable financial data. Management recognizes that there are inherent limitations in the effectiveness of any internal control and effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Additionally, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

In order to ensure that the Company's internal control over financial reporting is effective, management regularly assesses such controls and did so most recently for its financial reporting as of December 31, 2020. Management's assessment of internal control over financial reporting as of December 31, 2020 excludes internal control over financial reporting related to Affaba & Ferrari (acquired in December 2020), which accounted for approximately \$0.7 million of our total net sales and as of December 31, 2020 had total assets of approximately \$141 million. Management's assessment was based on criteria for effective internal control over financial reporting described in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management asserts that the Company has maintained effective internal control over financial reporting as of December 31, 2020.

Deloitte & Touche LLP, an independent registered public accounting firm, who audited the Company's consolidated financial statements, has also audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, as stated in their report below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of TriMas Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of TriMas Corporation and subsidiaries (the "Company") as of December 31, 2020, 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, 2020, 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 and financial statement schedule as of and for the year ended December 31, 2020, of the Company and our report dated February 25, 2021, expressed an unqualified opinion on those financial statements and financial statement schedule.

As described in Management's Annual Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Affaba & Ferrari Srl ("Affaba & Ferrari"), which was acquired in December 2020, whose financial statements accounted for approximately \$141 million of total assets and \$0.7 million of total net sales of the consolidated financial statements amounts as of and for the year ended December 31, 2020. Accordingly, our audit did not include the internal control over financial reporting at Affaba & Ferrari.

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 Annual 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

Detroit, Michigan
February 25, 2021

Changes in disclosure controls and procedures

There have been no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

TriMas has proactively taken steps to focus its business portfolio, and as such has also undertaken initiatives to streamline its overall infrastructure approach. In connection with actions taken over the past year, the Company is re-aligning its legal department. On February 24, 2021, the Company and Joshua A. Sherbin, the Company's Senior Vice President, General Counsel and Chief Compliance Officer, agreed that Mr. Sherbin will cease acting in his officer capacities effective March 5, 2021. Mr. Sherbin will remain employed with the Company through May 11, 2021, the scheduled day of TriMas' Annual Shareholders meeting, to offer transitional support to TriMas and its legal department as necessary.

Mr. Sherbin is a participant under the Company's Executive Severance/Change of Control Policy, effective as of March 4, 2019 (the "Severance Policy"). The Company and Mr. Sherbin are expected to enter into a separation agreement (the "Agreement") to document the terms of the compensation and benefits Mr. Sherbin will be entitled to receive under the Severance Policy and otherwise in connection with the termination of his employment. Upon Mr. Sherbin's termination of employment on May 11, 2021, he will be entitled to receive the following existing benefits under the Severance Policy: cash severance equal to one year of his base salary plus target annual cash incentive; one year of health care premium reimbursement; \$25,000 in lieu of outplacement services; and payment for his annual vacation allotment. In addition, under the Agreement, Mr. Sherbin will receive \$260,260 in lieu of continued pro-rata participation in the 2021 annual incentive program and his \$25,000 annual flexible cash allowance less amounts previously paid during 2021. Under the Agreement, Mr. Sherbin will also receive, instead of just pro-rated vesting in his outstanding time-based restricted stock units ("RSUs") and performance stock units ("PSUs"), accelerated vesting at target in 19,011 PSUs and accelerated vesting in 9,979 RSUs. All benefits under the Agreement will be subject to applicable tax withholding, and Mr. Sherbin will adhere to certain customary non-competition and customer and employee non-solicitation obligations set forth in the Severance Policy for a period of 12 months. Further, the payments and benefits described in the Agreement are generally contingent upon Mr. Sherbin executing a customary release of claims in connection with his termination of employment on May 11, 2021.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding our executive officers is included in Part I of this Form 10-K under the heading “*Information about our Executive Officers.*”

The Company's Code of Ethics and Business Conduct is applicable to its directors, officers and employees. The Code of Ethics and Business Conduct is available on the "Investors" portion of the Company's website under the "Corporate Governance" link. The Company's website address is www.trimascorp.com.

The information required by this item is incorporated by reference from our definitive proxy statement for the 2021 Annual Meeting of Shareholders.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from our definitive proxy statement for the 2021 Annual Meeting of Shareholders.

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

The information required by this item is incorporated by reference from our definitive proxy statement for the 2021 Annual Meeting of Shareholders.

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

The information required by this item is incorporated by reference from our definitive proxy statement for the 2021 Annual Meeting of Shareholders.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference from our definitive proxy statement for the 2021 Annual Meeting of Shareholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Listing of Documents

(1) Financial Statements

The Company's Financial Statements included in Item 8 hereof, as required at December 31, 2020 and December 31, 2019, and for the periods ended December 31, 2020, December 31, 2019 and December 31, 2018, consist of the following:

Balance Sheet
Statement of Operations
Statement of Comprehensive Income
Statement of Cash Flows
Statement of Shareholders' Equity
Notes to Financial Statements

(2) Financial Statement Schedules

Financial Statement Schedule of the Company appended hereto, as required for the periods ended December 31, 2020, December 31, 2019 and December 31, 2018, consists of the following:

Valuation and Qualifying Accounts

All other schedules are omitted because they are not applicable, not required, or the information is otherwise included in the financial statements or the notes thereto.

(3) Exhibits

- 2.2(w) [Asset and Stock Purchase Agreement, dated as of November 1, 2019, by and between TriMas Company LLC and LGC US Holdings, LLC and LGC US Finco, LLC.**](#)
- 3.1(d) [Fourth Amended and Restated Certificate of Incorporation of TriMas Corporation.](#)
- 3.2(i) [Third Amended and Restated By-laws of TriMas Corporation.](#)
- 4.1(u) [Indenture, dated as of September 20, 2017, among TriMas Corporation, the Guarantors named therein and Wells Fargo Bank, National Association, as Trustee \(including the Form of Note\).](#)
- 4.2(y) [Description of Securities of TriMas Corporation.](#)
- 10.5(m) [Credit Agreement, dated October 16, 2013, by and among TriMas Corporation, TriMas Company LLC and JPMorgan Chase bank, N.A., as Administrative Agent and Collateral Agent, and the various lenders from time to time thereto.](#)
- 10.6(o) [Incremental Facility Agreement and Amendment dated as of October 17, 2014, among TriMas Company LLC, the other Loan Parties party thereto, JPMorgan Chase Bank, N.A., as administrative agent, the Incremental Tranche A Term Lenders and the other Lenders party thereto.](#)
- 10.7(p) [Replacement Facility Amendment, dated as of June 30, 2015, among TriMas Company LLC, the other Loan Parties party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and the Lenders party thereto.](#)
- 10.8(s) [Foreign Subsidiary Borrowing Agreement and Amendment dated as of January 10, 2017, among TriMas Company LLC, TriMas Corporation, TriMas Corporation Limited, JPMorgan Chase Bank, N.A., as administrative agent for the Lenders \(as defined therein\) and as Fronting Lender, JPMorgan Chase Bank, N.A., Bank of America, N.A. and Wells Fargo Bank, National Association, J.P. Morgan Europe Limited, in its capacity as Foreign Currency Agent, and the Revolving Lenders party hereto.](#)
- 10.9(s) [Amendment, dated as of March 8, 2017 to the Credit Agreement, dated as of October 16, 2013 \(as amended, amended and restated, supplemented or otherwise modified from time to time\), among TriMas Corporation, TriMas Company LLC, the subsidiary borrowers from time to time parties thereto, the Lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and the other agents party thereto.](#)
- 10.10(u) [Replacement Facility Amendment, dated as September 20, 2017, among TriMas Company LLC, the other Loan Parties party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and the Lenders party thereto.**](#)
- 10.12(f) [TriMas Corporation Long Term Equity Incentive Plan Non-Qualified Stock Option Agreement.*](#)
- 10.13(g) [Flexible Cash Allowance Policy.*](#)
- 10.14(j) [2011 TriMas Corporation Omnibus Incentive Compensation Plan.*](#)

10.15(k)	Amendment No. 1 to the TriMas Corporation 2011 Omnibus Incentive Compensation Plan.*
10.16(t)	TriMas Corporation 2017 Equity and Incentive Compensation Plan.*
10.17(l)	Executive Severance / Change of Control Policy.*
10.24(r)	Form of Non-Qualified Stock Option Agreement under the 2011 Omnibus Incentive Compensation Plan.*
10.27(v)	Form of Performance Stock Units Agreement (Three-Year-Vest) - 2018 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.28(v)	Form of Restricted Stock Units Agreement (Three-Year Vest) - 2018 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.29(v)	Form of Restricted Stock Units Agreement (Board Of Directors) (One-Year Vest) - 2018 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.30(n)	2013 Form of Indemnification Agreement.*
10.33(r)	Offer Letter between TriMas Corporation and Thomas A. Amato dated July 23, 2016.
10.34(x)	Form of Restricted Stock Units Agreement (Board of Directors) (One-Year Vest) - 2019 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.35(x)	Form of Performance Stock Units Agreement - 2019 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.36(x)	Form of Restricted Stock Units Agreement (Three-Year Vest) - 2019 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.37(y)	Form of Special Performance Stock Units Agreement - 2019 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.38(z)	Form of Performance Stock Units Agreement - 2020 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.39(z)	Form of Restricted Stock Units Agreement - (Three Year Vest) - 2020 LTI - under the 2017 Equity and Incentive Compensation Plan.*
10.40(z)	Form of Restricted Stock Units Agreement - (Board of Directors) - 2020 LTI - under the 2017 Equity and Incentive Compensation Plan.*
21.1	TriMas Corporation Subsidiary List.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from TriMas Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, formatted in Inline XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheet, (ii) the Consolidated Statement of Operations, (iii) the Consolidated Statement of Comprehensive Income, (iv) the Consolidated Statement of Cash Flows, (v) the Consolidated Statement of Shareholders' Equity, (vi) Notes to Consolidated Financial Statements, and (vii) document and entity information.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

*Management contracts and compensatory plans or arrangements required to be filed as an exhibit pursuant to Item 15(b) of Form 10-K.

** Certain exhibits and schedules have been omitted and the Company agrees to furnish supplementally to the Securities and Exchange Commission a copy of any omitted exhibits and schedules upon request.

(d) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on August 3, 2007 (File No. 001-10716).

(f) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on March 6, 2009 (File No. 001-10716).

- (g) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on December 10, 2009 (File No. 001-10716).
- (i) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on December 18, 2015 (File No. 001-10716).
- (j) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on April 4, 2011 (File No. 001-10716).
- (k) Incorporated by reference to Appendix A filed with our Definitive Proxy Statement on Schedule 14A filed on April 5, 2013 (File No. 001-10716).
- (l) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on March 7, 2019 (File No. 001-10716).
- (m) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on October 21, 2013 (File No. 001-10716).
- (n) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on November 13, 2013 (File No. 001-10716).
- (o) Incorporated by reference to the Exhibits filed with our Current Report on Form 8-K filed on October 20, 2014 (File No. 001-10716).
- (p) Incorporated by reference to the Exhibits filed with our Current Report on Form 8-K filed on July 6, 2015 (File No. 001-10716).
- (r) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on October 27, 2016 (File No. 001-10716).
- (s) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on April 27, 2017 (File No. 001-10716).
- (t) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on July 27, 2017 (File No. 001-10716).
- (u) Incorporated by reference to the Exhibits filed with our Current Report on Form 8-K filed on September 20, 2017 (File No. 001-10716).
- (v) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on August 7, 2018 (File No. 001-10716).
- (w) Incorporated by reference to the Exhibits filed with our Report on Form 8-K filed on December 20, 2019 (File No. 001-10716).
- (x) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on July 30, 2019 (File No. 001-10716).
- (y) Incorporated by reference to the Exhibits filed with our Annual Report on Form 10-K filed on February 27, 2020 (File No. 001-10716).
- (z) Incorporated by reference to the Exhibits filed with our Quarterly Report on Form 10-Q filed on April 30, 2020 (File No. 001-10716).

Item 16. Form 10-K Summary

None.

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.

TRIMAS CORPORATION
(Registrant)

DATE: February 25, 2021

BY: /s/ THOMAS A. AMATO
Name: Thomas A. Amato
Title: *President and Chief Executive Officer*

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ THOMAS A. AMATO</u> Thomas A. Amato	President and Chief Executive Officer (Principal Executive Officer) and Director	February 25, 2021
<u>/s/ ROBERT J. ZALUPSKI</u> Robert J. Zalupski	Chief Financial Officer (Principal Financial Officer)	February 25, 2021
<u>/s/ PAUL A. SWART</u> Paul A. Swart	Vice President Business Planning, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 25, 2021
<u>/s/ SAMUEL VALENTI III</u> Samuel Valenti III	Chairman of the Board of Directors	February 25, 2021
<u>/s/ HOLLY M. BOEHNE</u> Holly M. Boehne	Director	February 25, 2021
<u>/s/ TERESA M. FINLEY</u> Teresa M. Finley	Director	February 25, 2021
<u>/s/ JEFFREY M. GREENE</u> Jeffrey M. Greene	Director	February 25, 2021
<u>/s/ HERBERT K. PARKER</u> Herbert K. Parker	Director	February 25, 2021
<u>/s/ NICK L. STANAGE</u> Nick L. Stanage	Director	February 25, 2021
<u>/s/ DANIEL P. TREDWELL</u> Daniel P. Tredwell	Director	February 25, 2021

SCHEDULE II
PURSUANT TO ITEM 15(a)(2)
OF FORM 10-K VALUATION AND QUALIFYING ACCOUNTS FOR THE YEARS ENDED
December 31, 2020, 2019 AND 2018

DESCRIPTION	BALANCE AT BEGINNING OF PERIOD	ADDITIONS		DEDUCTIONS ^(A)	BALANCE AT END OF PERIOD
		CHARGED TO COSTS AND EXPENSES	CHARGED (CREDITED) TO OTHER ACCOUNTS		
Allowance for doubtful accounts deducted from accounts receivable in the balance sheet					
Year ended December 31, 2020	\$ 2,060,000	\$ 2,080,000	\$ 100,000	\$ 2,120,000	\$ 2,120,000
Year ended December 31, 2019	\$ 2,790,000	\$ 810,000	\$ 490,000	\$ 2,030,000	\$ 2,060,000
Year ended December 31, 2018	\$ 3,370,000	\$ 1,440,000	\$ 240,000	\$ 2,260,000	\$ 2,790,000

^(A) Deductions, representing uncollectible accounts written-off, less recoveries of amounts reserved in prior years.

TriMas Corporation Significant⁽¹⁾ Subsidiary List

Allfast Fastening Systems, LLC (California limited liability company)

Monogram Aerospace Fasteners, Inc. (Delaware corporation)

Norris Cylinder Company (Delaware corporation)

Rieke Corporation (Indiana corporation)

Certain companies may also use trade names or other assumed names in the conduct of their business.

⁽¹⁾ As defined in Rule 1-02(w) of Regulation S-X, and other more significant operating companies as determined by management

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-179761, 333-190665, 333-190666, and 333-218867 on Form S-8 of our reports dated February 25, 2021, relating to the consolidated financial statements and financial statement schedule of TriMas Corporation and subsidiaries, and the effectiveness of TriMas Corporation's internal control over financial reporting, appearing in the Annual Report on Form 10-K of TriMas Corporation for the year ended December 31, 2020.

/s/ Deloitte & Touche LLP

Detroit, Michigan
February 25, 2021

Certification
Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002
(Chapter 63, Title 18 U.S.C. Section 1350(A) and (B))

I, Thomas A. Amato, certify that:

1. I have reviewed this annual report on Form 10-K of TriMas Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2021

/s/ THOMAS A. AMATO

Thomas A. Amato
Chief Executive Officer

Certification
Pursuant to Section 302 of The Sarbanes-Oxley Act of 2002
(Chapter 63, Title 18 U.S.C. Section 1350(A) and (B))

I, Robert J. Zalupski, certify that:

1. I have reviewed this annual report on Form 10-K of TriMas Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2021

/s/ ROBERT J. ZALUPSKI

Robert J. Zalupski
Chief Financial Officer

**Certification Pursuant to
18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of TriMas Corporation (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas A. Amato, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 25, 2021

/s/ THOMAS A. AMATO

Thomas A. Amato
Chief Executive Officer

**Certification Pursuant to
18 U.S.C. Section 1350,
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of TriMas Corporation (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert J. Zalupski, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 25, 2021

/s/ ROBERT J. ZALUPSKI

Robert J. Zalupski
Chief Financial Officer