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, 2017

or

☐ **Transition report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934**

for the transition period from __________ to __________.

Commission file number 0-21810

GENTHERM INCORPORATED
(Exact name of registrant as specified in its charter)

Michigan **(State or other jurisdiction of incorporation or organization)**	**95-4318554** **(I.R.S. Employer Identification No.)**
21680 Haggerty Road, Northville, MI **(Address of principal executive offices)**	**48167** **(Zip Code)**

Registrant's telephone number, including area code: (248) 504-0500

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

Title of each class	Name of each exchange on which registered
Common Stock	**The NASDAQ Global Select Stock Market**

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

Indicate by check mark whether 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant, computed by reference to the average bid and asked prices of such Common Stock as of the last business day of the registrant's most recently completed second fiscal quarter, June 30, 2017, was $1,047,947,000. For purposes of this computation, the registrant has excluded the market value of all shares of its Common Stock reported as being beneficially owned by executive officers and directors and holders of more than 10% of the Common Stock on a fully diluted basis of the registrant; such exclusion shall not, however, be deemed to constitute an admission that any such person is an "affiliate" of the registrant.

As of February 22, 2018, there were 36,762,710 issued and outstanding shares of Common Stock of the registrant.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2018 annual meeting of shareholders are incorporated by reference into Part III of this Report to the extent described herein.

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PART I

ITEM 1. BUSINESS

Unless otherwise indicated, references to "Gentherm", "the Company", "we", "our" and "us" in this Annual Report on Form 10-K refer to Gentherm Incorporated and its consolidated subsidiaries.

Except to the extent expressly noted herein, the content of our website or the websites of other third parties noted herein are not incorporated by reference in this Report.

Forward-Looking Statements

This Report contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements represent our goals, beliefs, plans and expectations about our prospects for the future and other future events, such as our ability to finance sufficient working capital, the amount of availability under our credit facility, our ability to continue to maintain or increase sales and profits of our operations, and the sufficiency of our cash balances and cash generated from operating, investing and financing activities for our future liquidity and capital resource needs. Reference is made in particular to forward-looking statements included in "Item 1. Business,", "Item 1A. Risk Factors" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations." Such statements may be identified by the use of forward-looking terminology such as "may", "will", "expect", "believe", "estimate", "anticipate", "intend", "continue", or similar terms, variations of such terms or the negative of such terms. The forward-looking statements included in this Report are made as of the date hereof or as of the date specified and are based on management's current expectations and beliefs. Such statements are subject to a number of assumptions, risks, uncertainties and other factors, which are set forth in "Item 1A. Risk Factors" and elsewhere in this Report, and subsequent reports filed with or furnished to the Securities and Exchange Commission, and which could cause actual results to differ materially from that described in the forward looking statements. Except as required by law, we expressly disclaim any obligation or undertaking to update any forward-looking statements to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

General

Gentherm Incorporated is a global technology and industry leader in the design, development, and manufacturing of innovative thermal management technologies. Our products provide solutions for automotive passenger comfort and convenience, battery thermal management, remote power generation, patient temperature management, environmental product testing and other consumer and industrial temperature control needs. Our automotive products can be found on the vehicles of nearly all major automotive manufacturers operating in North America, Europe and Asia. We operate in locations aligned with our major customers' product strategies in order to provide locally enhanced design, integration and production capabilities and to identify future thermal technology product opportunities in both automotive and other markets. We concentrate our research on the development of new technologies and new applications from existing technologies to create product and market opportunities for a wide array of thermal management solutions.

The Company has two reportable segments for financial reporting purposes: Automotive and Industrial.

Automotive

The Automotive reporting segment is comprised of the results from our global automotive businesses and individual convenience products. Operating results from our automotive seat comfort systems, specialized automotive cable systems and other automotive and non-automotive thermal convenience products are all reported in the Automotive segment because of their complementary focus on automotive content and/or individual comfort and convenience. All of our activities with respect to electronics are also included in our Automotive segment because a majority of these activities relate to the manufacture of electronic components for our automotive products or the automotive products of third parties. Etratech's operating results are included within Gentherm's Automotive segment due to the concentration of product applications within the automotive, RV and marine industries.

Automotive seat comfort systems include seat heaters, variable temperature Climate Control Seats ("CCS") designed to provide individualized thermal comfort to automobile passengers, and integrated electronic components, such as blowers and electronic control units, that utilize our proprietary electronics technology. Specialized automotive cable system products include ready-made wire harnesses and related wiring products. Other automotive products include the automotive steering wheel heater, heated door and armrests, heated and cooled cup holders and thermal storage bins.

Industrial

The Industrial reporting segment represents the combined results from our remote power generation systems business, our patient temperature management systems business, our environmental testing equipment business and our advanced research and product development division. Our remote power generation systems business is managed by our subsidiary Gentherm Global Power Technologies ("GPT") and our patient temperature management and environment test equipment businesses are managed by our subsidiary Cincinnati Sub-Zero ("CSZ"). The advanced research and product development division is engaged in projects to improve the efficiency of thermal management technologies and to develop, market, and distribute products based on these new technologies. The operating results from these businesses and division are presented together as one reporting segment because of their joint concentration on identifying new, non-automotive markets and product applications based on thermal management technologies. See "Research and Development" below for a description of our internal and external research and development initiatives.

See Note 11 of the consolidated financial statements for information regarding the Company's segment revenues from external customers, including geographic composition, operating income, depreciation and amortization, and goodwill. With the exception of goodwill, asset information by segment is not reported since the Company does not manage assets at the segment level.

Corporate Information

We are incorporated under the laws of the State of Michigan. We were originally incorporated in California in 1991 and we reincorporated in Michigan in 2005. Our internet website is www.gentherm.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are made available free of charge through our website, www.gentherm.com, as soon as reasonably practicable after we electronically file them with or furnish them to the Securities and Exchange Commission. These reports are also available on the Securities and Exchange Commission's website, www.sec.gov.

Business Strategy

We are striving to be the world leader in thermal management technologies for application in automotive and certain other markets. We believe achieving this goal depends on our ability to anticipate the needs of our customers and integrate those needs into our advanced products. Our strategy includes the following key elements:

- Expanding the depth and breadth of our core technologies and the portfolio of products derived from these technologies;
- Increasing global penetration with automotive companies through an expanded array of thermal management products;
- Leveraging our global product development and production capabilities to streamline the delivery of services to our customers and offer enhanced local support;
- Improving capabilities to be a full service provider in design, development, testing and validation, and manufacturing of all required sub-system components;
- Utilizing in-house electronics expertise to develop next generation intelligent thermal management products;
- Penetrating new markets and industries by creating new innovative solutions and products such as battery thermal management, waste heat recovery, remote power generation, medical patient temperature management, customized testing systems, and heated and cooled mattresses and office furniture, among others;
- Continuing to expand our intellectual property portfolio; and
- Acquiring other companies that enhance our other strategic business elements.

Recent Acquisitions

As part of our plan to acquire other companies to further our strategic goals, we have completed the following significant acquisitions in the recent past:

On April 1, 2014, we acquired Global Thermoelectric Inc., now known as Gentherm Global Power Technologies Inc., to enhance our expertise in the areas of thermoelectrics and enter new, non-automotive markets that use thermoelectric devices (“TEDs”).

On April 1, 2016, we acquired Cincinnati Sub-Zero Products, LLC to expand our temperature management activities into the medical, industrial and testing fields.

On November 1, 2017, we acquired Etratech Enterprises Inc. to expand our electronics capabilities, including in the automotive, consumer and commercial markets.

Research and Development

Our research and development activities are an essential part of our efforts to develop new, innovative products and introduce them to the market. Through both internal and external research and development programs, we are working to develop a comprehensive knowledge of thermal management systems that can demonstrate functionality and performance. These activities are critical to optimizing energy and production efficiencies and to improving effectiveness in our products, making them less complex, easier to package and less expensive to manufacture and install while improving the customer experience.

We perform advanced research and development on thermal management systems, including the development and testing of new materials, to achieve increased efficiency and reliability. We engineer new applications of our existing products in order to meet design criteria compatible with each of our customers’ unique requirements. We believe there are substantial prospects for the design and development of innovative thermal management systems in applications both inside and outside of the industries served by our current product lines.

Research and development activities are expensed as incurred. These expenses include direct expenses for wages, materials and services associated with particular engineering activities, net of reimbursements from customers and research sponsors. Any related reimbursements for costs, whether for advanced research or a specific product application, are accounted for as a reduction of research and development expense.

Research and development is conducted around the globe, including at our world headquarters in Northville, Michigan, our test laboratory in Farmington Hills, Michigan, our advanced battery research facility in Irvine, California, our advanced materials research facilities in Azusa, California, our European research facilities in Odelzhausen, Germany and Budapest, Hungary, our industrial application research facility in Calgary, Canada, our medical application research facility in Cincinnati, Ohio and our electronics design and advanced testing facilities in Shanghai, China and Burlington, Canada. Additional product development is performed at all of our manufacturing facilities to support customers. We believe the localized development model employed at our global design and manufacturing facilities improves our ability to effectively serve our customers and increases our innovative capacity in the future.

Net research and development expense in 2017, 2016 and 2015 was $82,478,000, $72,923,000, and $59,604,000, respectively. Because of changing levels of research and development activity, our research and development expenses fluctuate from period to period.

Technologies

Gentherm’s expertise in thermal management is focused on two general areas: managing the thermal conditions of people and objects and managing the thermal energy conversion to electrical energy.

Thermoelectric Technologies

Many of our thermal products manage the thermal conditions of people and objects using our internally developed advanced TED technology. A TED is a solid state circuit that has the capability to produce both hot and cold thermal conditions by use of the

Peltier effect. The advantages of advanced TEDs over conventional compressed gas systems are that they are environmentally friendly and less complex as they have no moving parts and are compact and light weight. For the last 17 years, our work on this technology has yielded great improvements in areas of efficiency, durability and performance.

Thermoelectric generator ("TEG") technologies have the reciprocal capability to the Peltier effect, known as the Seebeck effect, whereby thermal energy is converted into electrical power. Our current research and development activities are concentrated on improving the efficiency of this process, by improving design and adapting new materials that are better suited for TEG commercialization. These efforts, together with previously sponsored research which focused on the recovery of waste heat from vehicle exhaust and other sources, has led us to introduce this technology to certain specialty markets.

Resistive Heaters

Resistive heater technologies are comprised of wire, carbon fiber or positive thermal coefficient ("PTC") heating elements which quickly and effectively deliver heat to people and objects. Wire heating elements are designed from stainless steel, copper, our proprietary carbon fiber woven lattice technology called Carbotex® or printed circuit PTC heaters based on the specifications for a particular product application.

Electronics

Gentherm manufactures and supplies electronics to our core thermal seat comfort, interior comfort and thermal convenience products. We also supply electronics for products outside this core set and have a contract to supply value-added electronic products to third parties for adjacent areas within the automotive interior, which is scheduled to launch in 2019. In November 2017, we acquired Canadian-based Etratech Enterprises to expand our electronics capabilities in automotive, consumer and commercial products.

Automotive Cable Systems

Gentherm produces automotive cable systems used to connect automotive components to sources of power. The automotive cable systems are an important element in the production of virtually all of our products and form a significant component in how we generate value to our customers by being an efficient, low-cost and high quality manufacturer. We offer cable systems as integrated parts of our products and also as stand-alone components for other automotive applications, such as oxygen sensors. Our cable systems business includes both ready-made individual cables and ready-to-install cable networks. Sales of products that utilize our automotive cable systems technology represent 9%, 9% and 10% of our total product revenues for the twelve-month periods ending December 31, 2017, 2016 and 2015, respectively.

Air Moving Devices

Our highly durable and quiet air moving devices, including our proprietary blower and fan designs, are essential to all of our products that require air movement. Production of integrated air moving devices is an example of our expanding manufacturing capabilities and is an important step toward our goal of becoming a full service provider of sub-systems.

Refrigeration Systems

Refrigeration systems are used in environmental test chambers to cool various products. In most cases the products are heated to a higher temperature (85°C and up) and then cooled down. The heat up and cool down rates are important to thoroughly test the product. Generally products are cooled to -40°C or below. To accomplish this, specialized refrigeration systems are required. Single stage refrigeration systems can cool chambers to -34°C. Two-stage refrigeration systems can achieve -50°C . Cascade refrigeration systems can cool down to -85°C. The customers' applications determine the temperature range needed.

Other Technologies

We are developing new technologies that will help enable improvements to existing products and create new product applications.

Products

Seat Comfort

Climate Control Seat®

Our CCS products utilize exclusive patented technology to regulate temperature and enhance the comfort of vehicle passengers. The most advanced CCS models use one or more TEDs to generate heating or cooling depending upon the direction of the current applied to the device.

A TED is the heart of a compact heat pump used in our active CCS products. Air is forced through the heat pump and thermally conditioned in response to electronic switch input from the seat occupant. The conditioned air circulates by one of our specially designed air moving devices through a proprietary air distribution system installed in the seat cushion and seat back, so that the seat surface can be heated or cooled. Each seat has individual electronic controls to adjust the level of heating or cooling. Active CCS products substantially improve comfort compared with conventional air conditioners by focusing cooling directly on the passenger through the seat rather than waiting until ambient air cools the seat surface beneath the passenger. A heated and ventilated variant of the CCS utilizes ambient cabin air to provide cooling comfort instead of a TED to actively cool the seat. In the heating mode, the vent-only system is supplemented with resistive heating elements.

Heated and ventilated CCS products, which are targeted for lower cost vehicle models, provide a lower level of cooling capability than our active CCS solution, but at a lower price. By offering different models of the CCS product, our customers have the opportunity to purchase a wider range of climate control products at different price points. Sales of CCS products contributed 39%, 45% and 47% to our total product revenues for the twelve-month periods ending December 31, 2017, 2016 and 2015, respectively.

Heated Seat

Heated seats, based on our resistive heater core technology, are seamlessly integrated into automotive seat designs, and are constructed using materials that offer the best capacity, installation characteristics and durability. Our capabilities allow customers to choose among a variety of resistive heater materials based on their individual vehicle specifications. Sales of heated seat products contributed 31%, 32% and 32% to our total product revenues for the twelve-month period ending December 31, 2017, 2016 and 2015, respectively.

Thermal Convenience

TrueTherm™ Cup Holder

The TrueTherm cup holder applies Gentherm’s patented TED technologies to keep beverages of automobile drivers and passengers either warm or cool. We have developed a range of cup holder models with varying degrees of functionality, designed to be packaged in multiple configurations to accommodate different console environments. Our dual independent design provides separate temperature settings in each holder allowing the driver and passenger to individually maintain a heated or cooled beverage.

TrueTherm™ Storage Unit

Gentherm’s TrueTherm storage units provide for food or beverage cooling for the global automotive market. Using patented TED or refrigeration technologies, the TrueTherm cool storage unit provides temperature control independently from a vehicle’s heating and air conditioning system. It can be custom designed to accommodate tight interior spaces, such as the front floor console of a sport utility vehicle (SUV), and provide additional cooling capacity to those who have long work commutes or transport multiple passengers.

Interior Comfort

Heated Steering Wheel

Heated steering wheels deliver heating comfort to automobile drivers through resistive wire elements, similar to those used in our seat heater products. This product can be applied to both leather and wood steering wheels. A solution for drivers in cold and mild weather climates, the heated steering wheel is designed for the global automotive market.

Heated Door and Armrest

Gentherm's thermally conductive door panel armrest and center console armrest are powered by technologies used in our advanced seat heating products. The system is thermally managed by a heating control system which can be discretely located in the door panel or seat of the vehicle. Heated door panels and armrests complement our climate controlled seat and steering wheel products and provide a superior level of thermal comfort to the driving experience.

Battery Thermal Management ("BTM")

Thermal management is critically important for the long-term operation of advanced automotive batteries. The expansion of electrified vehicle applications, such as 48-volt electrical networks, start-stop systems, regenerative braking systems and other micro-hybrid battery implementations, have drastically increased the demand for BTM systems solutions which enable wider operating temperature ranges, enhanced driving range and prolonged life of the battery. Gentherm's BTM system can provide precision battery cooling on pack or cell-level using patented TED technology. The BTM system maintains the temperature of the lithium-ion battery or other advanced chemistry battery within an acceptable temperature range without the use of chilled liquids or refrigerant loops, making it a light weight, highly scalable, compact solution ideal for automotive applications. Gentherm's proprietary BTM system is compact and energy efficient, resulting in a minimal energy budget, which is important for an electrified vehicle. The performance improvements realized with this product have been validated through the award of production BTM systems by two flagship original equipment manufacturers ("OEMs"). We are currently working with other OEMs in an effort to secure more production contracts.

Remote Power Generation

Gentherm is a leading provider of remote electric power generation systems, primarily serving large upstream and midstream oil and gas markets. Using our unique industrial TEG technologies, our generation systems deliver ultra-reliable power for long-term unattended operation in geographically remote applications that are critical to our customers' operations, such as wellhead automation, valve automation and cathodic protection of pipelines. We design and produce turnkey systems that are highly customized for application, load, power and fuel source, and location requirements. Other applications for our remote power generation systems include mobile telecommunications, security and surveillance and scientific monitoring. Our revenues from this product include large custom systems projects ranging from $200,000 to over $2,000,000. Quarterly results from our remote power generation business can vary significantly due to delivery timing of these custom systems to customers, among other factors.

Patient Temperature Management Systems

Gentherm provides a full line of patient temperature management systems, including our Blanketrol® hyper-hypothermia system, designed to manage patient body temperatures in operating rooms, recovery rooms, intensive care units and other areas of hospitals, as well as for use in the home healthcare market. Our systems offer simple programmable body temperature regulations to establish and maintain stable patient temperature. We also offer the industry-leading Hemotherm® blood temperature management solutions that delivers reliable, effective blood temperature management control during cardiopulmonary by-pass and other related cardiovascular procedures. Revenues from the sale of patient temperature management systems began in April 2016 in connection with the acquisition of CSZ.

Environmental Testing Equipment and Testing Services

Gentherm provides standard and custom designed environmental test chambers that execute reliability tests by subjecting products to environmental extremes like temperature, humidity, altitude, and vibration. Our chambers are available in a variety of sizes with capabilities ranging from basic temperature cycling to accelerated stress testing. Gentherm designs and sells environmental test chambers for a variety of industries, which include the pharmaceutical, automotive, electronics, medical, telecommunications, aerospace and defense industries. Revenues from the sale of environment testing equipment and testing services began in April 2016 in connection with the acquisition of CSZ.

Heated and Cooled Sleep Systems

Our heated and cooled sleep system solution incorporates our proprietary Climate Control Sleep System™ ("CCSS") technology. The CCSS represents an adaptation of the TED technology used in our active CCS system. The CCSS directs warmed or cooled air to the surface of a mattress through our proprietary air distribution system. Two independently controlled temperature zones have their own heat or cool settings for a personalized microclimate sleep environment. There are five available settings in each of the heat and cool modes as well as an ambient setting. The sleep system is controlled by the user through a Master Control Unit or hand-held remote controls. In addition, our Heat Vent Sleep System (HVSS) provides similar comfort features at a lower price point. Integration solutions for both CCSS and HVSS exist for foam, innerspring and air bed mattresses and we are working with mattress manufacturers and retailers to bring CCSS technology to markets around the world. Beds featuring CCSS technology is available from Symbol Mattress and their brand *SleepFresh*™ (www.sleepfreshbeds.com).

Heated and Cooled Office Chair

Gentherm has adapted our innovative automotive-grade thermal technology to office chairs. Our design and integration solutions provide personalized temperature control whether at home or in the office. With the ability to provide heat or cool to one or both of the back and seat surfaces, we are able to provide manufactures and retailers a range of product and pricing options that best meets their customers' needs. Combined with our occupant sensor switch, the rechargeable lithium-ion battery is capable of providing over 8 hours of thermally controlled comfort, granting users the freedom of movement without being tethered by an electrical cord. Office chairs featuring our technology are currently marketed and sold by National Business Furniture and Klöber, and are also available at www.amazon.com.

Heated Lift Assist Chair

Gentherm's heated seat technology has recently been added to a lift assist chair. The chair, produced by Windermere Motion and marketed as the *Ultimate Power Recliner*™ (www.ultimatepowerrecliner.com), uses dual zones allowing for the back and seat/legs to be set at different temperatures. The chair is available through Windermere Motion's network of dealers.

Sponsored Research

In April 2016, the Company was selected as a subcontractor in a U.S. Air Force sponsored program award for the engineering and development of a non-invasive warming and cooling device. The device will be incorporated as medical equipment in the Air Force Expeditionary Medicine Support and Air Force Theater Hospital units supporting overseas contingency operations. Once operational testing is complete and the manufacturing processes for initial production are fully matured, the device will be submitted to the U.S. Food and Drug Administration for certification. The 30-month, $5.7 million project will be fully funded by the U.S. Air Force. As a subcontractor, Gentherm's share of the award is approximately $2.6 million. Gentherm received $1.2 million and $300,000 in program funding during 2017 and 2016, respectively.

During 2015, Gentherm was selected by the U.S. Navy to lead the development of an energy efficient, portable patient warming system based on proprietary thermal management technologies. The objectives for the program include improving the current standard of care for patient warming in support of expeditionary health services and advanced medical development. The patient warming system is intended to be compatible with existing medical care systems and will be used for treating patients in field hospitals or in transport by ground, ship or air to traditional, better-equipped treatment centers. Our approach, which is based on new research, leverages the body's natural methods for thermal exchange and temperature management. The $2.75 million project was granted a one-year extension and is fully funded by the U.S. Navy. Total funding received from this program during 2017, 2016 and 2015 was $836,000, $1.1 million and $140,000, respectively. The portion of funding pertaining to Gentherm's project contributions during 2017, 2016 and 2015 was $648,000, $403,000 and $140,000, respectively.

Marketing, Customers and Sales

Our Automotive segment customers include light vehicle OEMs, commercial vehicle OEMs, and first tier ("Tier 1") suppliers to the automotive OEMs, including automotive seat manufacturers. We also directly supply CCS and seat heaters to aftermarket seat distributors and installers.

The Company's automotive marketing is directed primarily at automotive manufacturers and their Tier 1 suppliers and focuses on the enhanced value consumers attribute to vehicles with seat comfort, thermal convenience and interior comfort products. If interested, the manufacturers direct us to work with their suppliers to integrate our products into the vehicle's seat or interior design. These customers will sell our product, as a component of an entire seat or seating system, to automotive OEMs. Once the integration work is complete, prototypes are sent to the manufacturer for evaluation and testing. If a manufacture accepts our product, a program can then be launched for a particular model on a production basis, but it normally takes two to three years from the time a manufacturer decides to include any of our products in a vehicle model to actual volume production for that vehicle. During this process, we derive funding from prototype sales but obtain no significant revenue until mass production begins. Inherent to the automotive supplier market are costs and commitments that are incurred well in advance of the receipt of orders and resulting revenues from customers.

As automobile products comprise a majority of our current revenue, the volume of products we sell is significantly affected by the levels of new vehicle sales and the general business conditions in the automotive industry.

For 2017, our revenues from sales to our three largest customers, Lear, Adient and Bosch Automotive were $192,756,000, $173,964,000, and $75,370,000, respectively, representing 20%, 18%, and 8% of our total revenues, respectively. Revenues from Adient and Lear represent sales of our seat comfort, thermal convenience and interior comfort products. Revenues from Bosch represent product sales based on our automobile cable system technology and are used primarily in the production of automotive oxygen sensors. The loss of any one of these customers is likely to have a material adverse impact on our business; however, as noted above, our strategy is to market our seat comfort and thermal convenience products to the OEMs who then direct their suppliers, such as Adient and Lear, to work with us. Therefore it is relevant to understand how our revenues are divided among the OEMs, as shown below.

Our revenues, including those from sales of our automotive cable systems products, for each of the past three years were divided among automotive OEMs as follows:

Manufacturer	2017	2016	2015
General Motors	15%	18%	18%
Ford Motor Company	11	12	13
Volkswagen	10	10	10
Fiat Chrysler Automobiles	9	10	10
Hyundai	8	10	12
Honda	6	6	4
Renault/Nissan	6	6	6
BMW	5	6	6
Daimler	4	4	4
Toyota Motor Corporation	4	4	4
Jaguar/Land Rover	3	2	3
Other	19	12	10
Total	100%	100%	100%

Non-automotive revenues of 11% in 2017, 8% in 2016 and 6% for 2015 are included within the Other category.

Our power generation systems are used by oil and gas customers for cathodic pipeline protection and other remote applications around the world.

Patient temperature management systems customers include hospitals and other health care service providers. Customers purchase our products at prices negotiated by exclusive medical equipment distributors or, if they are a named participant, a group purchasing organization.

Our environmental testing equipment and testing services are sold to a wide variety of customer in many different industries.

We supply heated and cooled sleep systems to mattress manufactures and their distribution channels and heated and cooled office chairs to catalog and on-line retailers.

Our non-automotive electronics products are sold to a variety of industrial customers, including an elevator door manufacturer and an irrigation systems company.

Outsourcing, Production and Suppliers

Our global manufacturing facilities are located close to our key customers. Our European manufacturing operations are located at our Hungarian, Macedonian and Ukrainian sites. In North America, we operate two manufacturing production sites in Acuña, Mexico, one in Celaya, Mexico, one in Cincinnati, Ohio, one in Alberta, Canada and one in Ontario, Canada. In Asia, we operate production facilities in Langfang, China, and Ha Nam, Vietnam and two electronics production facilities in Shenzhen, China. We continue to grow our in-house manufacturing capabilities, reducing the number of components outsourced to contract manufacturers.

We rely on various domestic and foreign vendors and suppliers to supply components for our products through purchase orders, with no guaranteed supply arrangements. Components for certain products, including TEDs, are only available from a limited number of suppliers in the world. The loss of any significant supplier, in the absence of a timely and satisfactory alternative arrangement, or an inability to obtain essential components on reasonable terms or at all, could materially adversely affect our business, operations and cash flows. Our business and operations could also be materially adversely affected by delays in deliveries from our suppliers.

Proprietary Rights and Patents

The development of new technologies is critical to the execution of our business strategy. Patents obtained for new technologies form an important basis for the success of the Company and underpin the success of our research and development efforts. We have adopted a policy of obtaining, where practical, the exclusive rights to use technology related to our products through patents or licenses for proprietary technologies or processes. We adapt and commercialize such technologies in products for mass production. We also have developed technologies or furthered the development of acquired technologies through internal research and development efforts.

As of December 31, 2017, Gentherm held 565 issued patents, of which 233 were U.S. patents and 332 were non-U.S. patents. A total of 27 patents were held jointly with other companies. Gentherm held 399 patents directed to climate control products and thermoelectric technologies, 126 patents directed at heating elements and technologies, 26 patents directed to air moving devices, 13 patents directed at patient temperature management systems and 1 patent directed at refrigeration systems technologies.

Competition

The automotive components and systems business is highly competitive. We have several important competitors in the heated seat business and certain vehicle manufacturers have, for some time, offered options on certain models that combine heated seats with circulation of ambient air or cooled air from the car’s air conditioning system which works similar to our heated and ventilated seat system products. It is possible that our competitors will be able to expand or modify their current products to more directly compete with our CCS products. We believe that there are other potential competitors that are working to develop systems for heating and cooling of automotive car seats.

We may experience additional competition directly from automobile manufacturers or other major suppliers, most of which have the capability to manufacture competing products. We believe that our products will compete successfully on the basis of performance, quality, and price.

Additionally, we may experience competition from non-traditional participants that introduce new technologies, such as advanced driver assistance technologies, as well as new products or services, such as autonomous vehicles, car- and ride-sharing and transportation as a service.

See “Risk Factors” for further information regarding the significant competition in the automotive industry.

Our power generation systems compete with other technologies, such as photovoltaic solar panels and fuel cells, to deliver power to different types of oil and gas market applications. Our products have earned a reputation for delivering highly reliable power under extreme climatic and weather conditions to locations that do not offer access to an electrical grid. In addition to quality and

performance, our ability to design and support custom solutions that integrate directly with an application's existing infrastructure gives our products a competitive advantage over products based on other technologies.

The patient temperature management market has seven segments: convective warming, blood warming, fluid warming, surface warming, invasive warming, non-invasive cooling and invasive cooling. Gentherm specializes in the convective warming, blood warming, surface warming and non-invasive cooling. We compete based on the quality of our products and service to our customers and are working to develop and market the next generation of advanced temperature management systems that complies with the rules and regulations of the U.S. Food and Drug Administration and other government regulatory bodies.

Gentherm's environment test chamber business competes globally on the basis of performance, customization, quality and service. Our ability to modify our standard product lines to meet customer specifications helps differentiate Gentherm's chambers from other competitive offerings.

Risk Attendant to Foreign Operations

We internally manufacture the majority of our products at our production facilities in foreign countries. Other products we sell are manufactured by third parties in foreign countries. See "Risk Factors" for a description of risks attendant to our foreign operations.

See Note 11 of the consolidated financial statements for information regarding the Company's segment revenues by geographic composition.

Seasonality

Our principal operations are directly related to the automotive industry. Consequently, we have historically experienced seasonal fluctuations to the extent automotive vehicle production slows, such as in the summer months when many customer plants close for model year changeovers and in December when many customer plants close for the holidays. See Item 8 "Financial Statements and Supplementary Data" for selected quarterly financial data.

Employees

As of December 31, 2017 and 2016, Gentherm's employment levels worldwide were as follows:

Region	2017	2016
United States and Canada	1,155	931
Mexico	4,693	4,198
Germany	255	238
Hungary	251	218
United Kingdom	3	—
Ukraine	2,219	2,534
Malta	12	12
Macedonia	1,358	669
China	2,392	2,268
Korea	45	40
Japan	20	16
Vietnam	666	561
	13,069	11,685

Gentherm retains the services of outside contractors from time to time. None of our employees is subject to collective bargaining agreements. We consider our employee relations to be satisfactory.

Executive Officers of the Registrant

Our current executive officers are as follows:

Phillip Eyler, 46, was appointed President and Chief Executive Officer, and to the Company's Board of Directors, in December, 2017. Prior to joining Gentherm, Mr. Eyler served as President of the Connected Car division at Harman, a subsidiary of Samsung since 2015. The Connected Car division included infotainment, telematics, connected safety and cyber security solutions, among others. Mr. Eyler joined Harmon in 1997 and held various senior management positions, including Senior Vice-President and General Manager of Harman's Global Automotive Audio business from 2011 to 2015. Mr. Eyler received a Bachelor of Science degree in mechanical engineering from Purdue University and an MBA from the Fuqua School of Business at Duke University.

Frithjof Oldorff, 51, was appointed President of the Automotive business unit in July, 2013. Prior to this appointment, Mr. Oldorff served as the Chief Operating Officer of Gentherm GmbH since 2008. He previously was a Director of Operations for Freudenberg from 2005 to 2007 and held various positions at Faurecia from 1995 to 2005. Mr. Oldorff received a master's degree from Darmstadt Technical University (Germany) in Industrial and Mechanical Engineering.

Barry G. Steele, 47, was appointed Vice President Finance and Chief Financial Officer in 2004 and Treasurer in 2005. Prior to joining Gentherm, Mr. Steele worked since 1997 in a number of senior financial management positions, including Chief Financial Officer for Advanced Accessory Systems, LLC, a global supplier of specialty accessories to the automotive industry. Prior to 1997, Mr. Steele worked for PriceWaterhouse LLP. Mr. Steele received a bachelor's degree from Hillsdale College and is a Certified Public Accountant.

Kenneth J. Phillips, 44, was appointed Vice-President, General Counsel and Secretary in June, 2012. Prior to joining Gentherm, Mr. Phillips was a Partner in the Detroit, Michigan office of the law firm Honigman Miller Schwartz and Cohn LLP. Mr. Phillips graduated with a J.D. from Wayne State University and a bachelor's degree in Accounting and Finance from Oakland University. Mr. Phillips is also a Certified Public Accountant.

Darren Schumacher, 50, was appointed President of Gentherm Technologies in July, 2016 after serving as the Company's Vice-President of Product Development since 2013. Prior to joining Gentherm, Dr. Schumacher worked since 2009 at Bosch as Business Segment Vice President of Engineering. Prior to 2009, Dr. Schumacher worked at Eaton Corporation where he had a series of executive management roles including Director of Product Engineering. Dr. Schumacher graduated with a Ph.D., MSE and BSE in Aerospace Engineering from the University of Michigan and an MBA from Regis University.

Erin E. Ascher, 54, was appointed Vice-President Talent Development and Chief Human Resources Officer in February, 2015. Prior to joining Gentherm, Ms. Ascher worked since 2012 as Chief Human Resources Officer at the University of Cincinnati. From 2010 to 2012, Ms. Ascher was Senior Vice President of Human Resources for Omnicare Inc., a Fortune 500 company that provides pharmaceutical services to patients and providers across the U.S. Prior to Omnicare, from 1998 to 2007, Ms. Ascher was Vice President Human Resources, Latin America and Asia Pacific for Ecolab, a publicly-owned developer and provider of water, hygiene and energy technologies and services. Ms. Ascher received a bachelor's degree from Miami University in Ohio and a master's degree in Personnel and Employee Relations from Georgia State University.

Ryan Gaul, 42, was appointed Vice President of Business Development in November, 2014. Mr. Gaul has spent most of his professional career with Gentherm, serving in diverse roles in Gentherm's locations in North America, Europe and Asia. He started his career in IT, and moved into roles of increasing responsibility within the IT organization, finally serving as CIO from 2005 to 2009. From 2009 to 2014, he served as Managing Director of Operations for Gentherm's Asian business. Mr. Gaul received his bachelor's degree from the University of Missouri.

Officers of the Company serve at the pleasure of the Board of Directors and, to the extent applicable, in accordance with the terms of their individual Service Agreements.

ITEM 1A. RISK FACTORS

You should carefully consider each of the risks, assumptions, uncertainties and other factors described below and elsewhere in this Report, as well as any amendments or updates reflected in subsequent filings or furnishings with the SEC. We believe these risks, assumptions, uncertainties and other factors, individually or in the aggregate, could cause our actual results to differ materially from expected and historical results and could materially and adversely affect our business operations, results of operations, financial condition and liquidity.

Risks Relating to Our Business

Numerous general economic and industry factors which we do not control have significant impacts on the automotive industry, our primary market, and resulting difficulties in the automotive industry or for our key customers and suppliers would have a material and adverse effect on our business, results of operations and financial condition

Our Automotive segment represents 89%, 92% and 95% of our product revenues for the years ended December 31, 2017, 2016 and 2015, respectively. Demand for our automotive products is directly related to automotive vehicle production, which is impacted by numerous general economic and industry factors which we do not control and is highly cyclical. In particular, the automotive industry has been susceptible historically in the U.S. and globally to economic recessions, labor disputes, volatile fuel prices, complex and evolving regulatory requirements, trade agreements and government initiatives and uncertain availability and cost of credit. In addition to the continuation of these trends, future automotive vehicle production may be materially impacted by additional industry or consumer behaviors, including the development and use of autonomous vehicles and increasing use of car- and ride-sharing and transportation as a service. Further, disruptions in the global economy and volatility in the financial markets may cause, among other things, lower levels of liquidity, increased borrowing rates, increased rates of default and bankruptcy, lower consumer and business spending, and lower consumer net worth, all of which may reduce demand for our products and have a material adverse effect on our business, results of operations and financial condition. We are also limited in our ability to reduce costs to offset the results of a prolonged or severe economic downturn given certain fixed costs associated with our operations, difficulties if we overstrain our resources, and our long-term business approach that necessitates we remain in position to respond when market conditions improve.

Unfavorable economic or industry conditions could result in the financial distress of our customers and suppliers. If our customers experience an actual decline or project a future decline in vehicle sales generally, or in sales of models for which we supply products, we may experience reductions in orders from these customers, experience difficulties in obtaining new business, incur write-offs of accounts receivable, incur impairment charges or require restructuring actions. In addition, if any of our significant customers experiences a material work stoppage, the customer may halt or limit the purchase of our products. This could require us to shut down or significantly reduce production at facilities relating to such products, which could have a material adverse effect on our business and harm our profitability.

The automotive component industry, as well as the automotive industry generally, is subject to intense competition and our current automotive products may be rendered obsolete by future technological developments

The automotive component industry, from which we derive a substantial majority of our revenues, is subject to intense competition. Business is typically awarded to the supplier offering the most favorable combination of cost, quality, timely delivery, technological innovation and service. In addition, customers often demand periodic price reductions during a vehicle's life that require us to continually assess, redefine and improve our operations, products and manufacturing capabilities to maintain and improve profitability. Many of our competitors are substantially larger in size and have substantially greater financial, marketing and other resources than we do, and therefore may be more effective in adapting to customer requirements while being profitable.

We must also be responsive to the entrance of non-traditional participants in the automotive industry. These non-traditional participants may seek to disrupt the historic business model of the industry through the introduction of new technologies, such as advanced driver assistance technologies, as well as new products or services, such as autonomous vehicles, car- and ride-sharing and transportation as a service. As our business evolves, the pressure to innovate will encompass a wider range of products and services, including products and services that may be outside of our historically core business. If we do not accurately predict, prepare for and respond to new kinds of technological innovations, market developments and changing customer needs, our sales, profitability and long-term competitiveness may be harmed. In addition, there can be no assurance that we will successfully differentiate our products from those of our competitors, that the marketplace will consider our current or proposed products to be superior or even comparable

to those of our competitors, or that we can succeed in establishing new or maintaining existing relationships with automobile manufacturers.

Due to the rapid pace of technological change, as with any technology-based product, our ability to compete successfully will depend on our ability to develop and license improved technologies on a rapid and cost-efficient basis. Our business will therefore require extensive capital expenditures and investment in product development, manufacturing and management information systems. Further, certain of our products may be rendered obsolete by future technologies, including from competitors in our products or widespread use of autonomous vehicles, or consumer preferences. Our operations, financial results and competitive position would be materially and adversely affected if we were unable to anticipate such future developments and develop, or obtain access to, critical new technologies at a reasonable cost, or adapt to changes in the automotive industry generally. An inability to compete successfully may also hinder our ability to complete acquisitions or financings on reasonable terms or at all.

We are investing significant capital and employee resources to research, develop, commercialize, market and sell additional products in non-automotive industries, and we are increasingly reliant on market acceptance of new products and innovations for continued revenue and earnings growth

Although non-automotive applications represented only 11% of our total revenues in 2017, we are currently investing significant capital and utilizing key employees to improve existing products and to develop products and research technologies to be used in a wide range of non-automotive industries. For example, we are working to generate and increase sales of our products in the sleep system, office chair, cup holder, environmental test chamber, patient temperature management systems and electronic control units and systems. Developing products beyond our historical core business is speculative and complex, and commercial success will depend on a number of risks, opportunities and uncertainties specific to each industry. As we continue to expand into new markets, we will also face new sources of competition, including, in certain of these markets, from existing manufacturers with established customer bases and greater brand recognition. To be successful, we need to cultivate new relationships with customers, suppliers and other partners in each of these markets. In addition, there can be no assurance that technological advances from our research and development effort will occur in a timely or feasible way, that the funds that we have budgeted for these purposes will be adequate, or that we will be able to establish our proprietary right to the technologies. Further, there is no certainty that new product applications leveraging the technology will be commercially viable or that we will be successful in generating significant revenues, operating margins and profitability from sales of non-automotive products in the near term or at all and the operating margins and profitability may be lower than our automotive products.

If our expansion efforts are not successfully implemented, they may adversely impact our business and results of operations

As a result of a significant increase in demand for our products over the past few years and to support our customers’ global platform initiatives, we have opened or acquired new manufacturing facilities in Vietnam, Macedonia, Mexico and China, and thereby significantly increased our capacity to manufacture our products.

Opening new or acquiring existing manufacturing facilities entail a number of risks, including our ability to successfully manage the demands placed on our management resources and engineering and quality teams, our ability to begin production at levels, quality and within the cost and timeframe estimated, the implementation of internal controls and compliance, and our ability to attract and maintain a sufficient number of skilled workers at the requisite locations to meet the needs of the new facilities. Our results of operations could also be adversely impacted by start-up costs until production levels at the new facilities reach planned levels, as well as any legacy issues with acquired facilities.

These newly developed or acquired facilities, as well as our other production facilities around the world, could have significant unused capacity if our revenues do not continue to increase as they have in recent years. Significant unused capacity would result in overhead costs that would need to be absorbed by a smaller than expected revenue base, which could materially and adversely impact our financial results.

While there are currently no active projects to construct new manufacturing facilities, or agreements to acquire other manufacturing facilities, we regularly consider such development or acquisition opportunities and any future construction or acquisition activities, particularly in foreign countries, could entail a number of other risks. If we experience construction or regulatory delays or increased costs, our estimates and assumptions are incorrect, or other unforeseen events occur, our business, financial conditions and results of operations could be adversely impacted.

Our ability to market our automotive products is subject to a lengthy sales and acceptance cycle, which requires significant investment prior to significant sales revenue, and non-automotive products may be subject to similar time lags

The sales cycle for our automotive products is lengthy because an automobile manufacturer must develop a high degree of assurance that the products it buys will meet consumer needs, interface as easily as possible with the other parts of a vehicle and with the automobile manufacturer's production and assembly process, and have minimal warranty, safety and service problems. As a result, from the time that a manufacturer develops a strong interest in our products for a specified vehicle, it normally will take several years before our products are available to consumers in that vehicle.

In the automotive components industry, products typically proceed through five stages of research and development. Initial research on the product concept comes first, to assess its technical feasibility and economic costs and benefits. This stage often includes development of an internal prototype for the component supplier's own evaluation. If the product appears feasible, the component supplier manufactures a functioning prototype to demonstrate and test the product's features. These prototypes are then marketed and sold to automotive companies for testing and evaluation. If an automobile manufacturer shows interest in the product, it typically works with the component supplier to refine the product, then purchases second and subsequent generation engineering prototypes for further evaluation. Finally, the automobile manufacturer either decides to purchase the component for a production vehicle or terminates the program.

The time required to progress through these five stages to commercialization varies widely. Generally, the more a component must be integrated with other vehicle systems, the longer the process takes. Further, products that are installed by the factory usually require extra time for evaluation because other vehicle systems are affected, and a decision to introduce the product into the vehicle is not easily reversed. Because our automotive products affect other vehicle systems and are factory-installed items, the process usually takes several years from conception to commercialization.

While we currently have active development programs with various seat manufacturers and automotive OEMs for our thermal management products, no assurance can be given that our products will be implemented in any particular vehicles. During this development process, we derive minimal funding from prototype sales but generally obtain no significant revenue until mass production begins, which could have a material adverse effect on our liquidity. If our products are not selected after a lengthy development process, our results of operations and financial condition could be materially and adversely affected.

Non-automotive products that we develop or significantly update are also likely to have a lengthy sales cycle. Because the use of our proprietary technology in other markets is new and evolving, and because customers will likely require any new product or significantly changed product that we develop to pass certain feasibility, safety and economic viability tests before committing to purchase, it is expected that any new or significantly changed products we develop in non-automotive markets also will take several years before they are sold to customers, if at all.

Our ability to market our products successfully depends on acceptance of our products by existing and potential customers and consumers, as well as the success of our customers

We have been, and will continue to be, required to educate potential customers and demonstrate that the merits of our existing products justify the costs associated with them. Similar efforts will be required with potential customers for additional products we develop using technologies we develop or license. Manufacturers will only include our products if there appears to be demand for our products from the consumers. For our automotive products, we rely on OEMs and applicable dealer networks to market our products to consumers, and we do not have any control over the marketing budget or messaging nor the training of employees and agents regarding our products. Further, OEMs and dealer networks may market products offered by our competitors, including products manufactured by such OEMs. If customers or consumers conclude that temperature control seats or our other automotive products are unnecessary or too expensive or that our competitors offer more favorable terms or better products, OEMs and other manufacturers may reduce availability or decline to include our products in their vehicles.

In addition, the vehicle market is highly competitive among OEMs, which drives continual cost-cutting initiatives by our customers. It is possible that pricing pressures beyond our expectations could intensify as OEMs pursue restructuring and cost cutting initiatives. If we are unable to generate sufficient production cost savings in the future to offset such price reductions, our gross margin, rate of profitability and cash flows could be materially and adversely affected.

We must also satisfy the timing, performance and quality standards of our customers and consumers during mass production. Further, we are dependent upon the timing and success of our customers' continuation of existing vehicles and introduction of new vehicles which include our products. If such vehicles are not successful in the marketplace, our results of operations and financial condition could be materially and adversely affected.

Significant increases in the market prices and restrictions on the availability of certain raw materials may materially and adversely affect our business

Many of our products include TEDs which contain certain raw materials that generally cannot be substituted. The prices for these raw materials fluctuate depending on market conditions. We generally have no contractual price protections with our suppliers and customers regarding raw material costs. Substantial increases in the prices for our raw materials increase our operating costs and could reduce our profitability if we cannot recover these increases from our customers. As an example, Tellurium is a raw material used in TEDs. If the market price for this raw material significantly increases, as it has in the past, our gross profit may be adversely impacted as our suppliers pass those price increases on to us. Other key raw materials include copper, silver and petroleum based engineered plastics. In addition, the availability of raw materials fluctuates from time to time due to factors outside our control, including as a result of catastrophic events, which may adversely impact our ability to meet customer commitments or needs. Our business, results of operations and financial condition could be materially and adversely affected by shortages or significant price increases of key raw materials.

The disruption or loss of relationships with vendors and suppliers for the components for our products could materially and adversely affect our business

Our ability to manufacture and market our products successfully is dependent on relationships with both third party vendors and suppliers. We rely on various vendors and suppliers for the components of our products and procure these components through purchase orders, with no guaranteed supply arrangements. Certain components are only available from a limited number of suppliers. The loss of any significant supplier, in the absence of a timely and satisfactory alternative arrangement, or an inability to obtain essential components on reasonable terms or at all, could materially and adversely affect our business, results of operations and financial condition.

Our business also could be materially and adversely affected by delays in deliveries from suppliers because we carry minimal inventory of product components. Automobile manufacturers, in particular, demand on-time delivery of quality products, and some have required the payment of substantial financial penalties for failure to deliver components to their plants on a timely basis. Such penalties, as well as costs to avoid them, such as overtime costs and overnight air freighting of parts that normally are shipped by other less expensive means of transportation due to our global production operations, could have a material adverse effect on our business, results of operations and financial condition. Moreover, the inability to meet demand for our products on a timely basis would materially and adversely affect our reputation and future commercial prospects.

In addition, financial difficulties or solvency problems with our suppliers, which may be exacerbated by the cost of remediating quality issues with these items, could lead to uncertainty in our supply chain or cause supply disruptions for us which could, in turn, disrupt our operations, including production.

Further, we engage outside contractors to perform product assembly and other production functions for certain of our products. Our reliance upon third party contractors for certain production functions reduces our control over the manufacture of our products and makes us dependent in part upon such third parties to deliver our products in a timely manner, with satisfactory quality controls and on a competitive basis. If we are unable to meet commitments to our customers due to third party services in production, our business, results of operations, financial condition and reputation could be materially and adversely affected.

Our business is subject to risks associated with manufacturing processes

We internally manufacture a large and growing portion of our products at our fourteen production facilities. See Item 2. below for information regarding our significant properties. Other products we sell are manufactured by third parties. A catastrophic loss of the use of all or a portion of our facilities due to accident, fire, explosion, labor issues, civil unrest, weather conditions, other natural disaster or otherwise, whether short or long-term, could have a material adverse effect on our business, results of operations and financial condition. This risk is exacerbated by the fact that our primary manufacturing locations are in Mexico, China, Vietnam, Macedonia and Ukraine, all countries that have historically experienced a heightened degree of political, civil and labor uncertainty.

Political conflict and related demonstrations and violence in Ukraine in recent years, for example, highlights the risks to our foreign manufacturing facilities. Although our manufacturing facility in Ukraine is located approximately 700 miles by road from Kiev, and approximately the same distance from the activities along the border of Ukraine and Russia where fighting has occurred, we cannot be certain that similar demonstrations, unrest and international tensions will not affect our facility in the future, including due to electrical outages and periodic battles with separatists closer to our facility. In addition, certain of our employees in Ukraine are routinely conscripted into the military and/or sent to the Russian border to fight in the ongoing conflict. Furthermore, most of our products manufactured in Ukraine are shipped across the border from Ukraine to Hungary for further delivery to our customers. If that border crossing were to be closed or restricted for any reason, we would essentially experience a loss of the use of our Ukrainian facility, which would have a material adverse effect on our business.

Unexpected failures of our equipment and machinery also may result in production delays, revenue loss and significant repair costs, injuries to our employees, and customer claims. Any interruption in production capability may require us to delay fulfilling orders, utilize less efficient internal facilities on a temporary basis and make large capital expenditures to remedy the situation, which could have a negative impact on our profitability and cash flows.

We maintain property damage insurance that we believe to be adequate to provide for reconstruction of facilities and equipment, as well as business interruption insurance to mitigate losses resulting from any production interruption or shutdown caused by an insured loss. However, any recovery under our insurance policies may not be offset the lost sales or increased costs that may be experienced during the disruption of operations, and such proceeds may be received and accounted for in a different reporting period, which could materially and adversely affect our business, financial condition, results of operations and cash flow generally or for a specific reporting period.

Our global operations subject us to risks that may harm our operations and financial results

In 2017, 54% of our product revenue was generated from sales to customers outside the United States. We have significant personnel, property, equipment and operations in a number of countries outside of the United States, including Canada, China, Germany, Hungary, Macedonia, Mexico, Ukraine and Vietnam. We have also engaged third parties to produce products for us in China and Japan. We and these third parties maintain production facilities in lower-cost countries for cost containment reasons. Our exposure to the risks described below is substantial and increasing. We also derive a significant portion of revenues from Europe and Asia and conduct certain investing and financing activities in local currencies.

In addition to the general risks relating to our operations, our international operations are subject to unique risks inherent in doing business abroad, including:

- exposure to local economic conditions and infrastructure;
- different and complex local laws and regulations and enforcement thereof, including those relating to governance, taxes, litigation, anti-corruption, employment, employee benefits, environmental, competition, permitting, investment, product regulations, repatriation, and export/import restrictions or requirements;
- increased uncertainty regarding social, political, immigration and trade policies in the U.S. and abroad, such as recent U.S. legislation and policies and the U.K.'s pending Brexit (as defined below);
- political, economic and civil instability (including acts of terrorism, civil unrest, drug-cartel related and other forms of violence and outbreaks of war);
- expropriation, nationalization or other protectionist activities;

- currency exchange rate fluctuations and currency controls; in particular, a significant portion of our revenues and expenses are denominated in currencies other than the U.S. Dollar, including the Euro, the Chinese Renminbi, the Vietnamese Dong, the Hungarian Forint, the Macedonian Denar, the Ukrainian Hryvnia, and the Mexican Peso;
- increases in working capital requirements and greater potential for production and delivery delays due to extended logistics and geo-political developments;
- local business and cultural factors that differ from our customary standards and practices, including business practices that we are prohibited from engaging in due to anti-corruption laws and regulations; and
- global sovereign fiscal matters and creditworthiness, including potential defaults and the related impacts on economic activity, including the possible effects on credit markets, currency values, monetary unions, international treaties and fiscal policies.

See “Our business is subject to risks associated with manufacturing processes” above for a description of certain specific risks associated with our facility in Ukraine.

Modification of the North American Free Trade Agreement (“NAFTA”) or other international trade agreements, or the imposition of significant tariffs on imports into the United States, could have a material and adverse effect on our business

A significant portion of our business activities are conducted in foreign countries, including Mexico. President Trump and his administration previously announced that the U.S. intended to renegotiate or withdraw from NAFTA, although such matters remain uncertain. If the United States were to renegotiate trade such trade agreements or impose such tariffs, it is likely to make it more costly for us to manufacture goods at our Mexican facilities for the North American market. As a result, our business, financial condition and results of operations could be materially and adversely affected. Further, a complete withdrawal from NAFTA could have significant adverse consequences to our business and results of operations, and create uncertainty for our future business activities in Mexico.

The United Kingdom's departure from the European Union could materially and adversely affect our business.

In June, 2016, the United Kingdom (U.K.) voted to exit the European Union ("Brexit") in a referendum vote. In March, 2017, the U.K. formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty, which provides a two-year time period through March 2019 for the U.K. and the European Union countries to negotiate a withdrawal. The announcement of Brexit and the ongoing negotiations for the withdrawal of the U.K. from the European Union has created and may continue to create global economic uncertainty, which may continue to impact global light vehicle production, and affect the business of and/or our relationships with our customers and suppliers, as well as alter the relationship among tariffs and currencies. The long-term effects of Brexit remains uncertain, and Brexit has and may continue to contribute to volatility in stock prices of companies that have significant operations in Europe. Brexit's impact on currency exchange rates may also impact operations; we generate certain revenues in Euro, but do not generate revenues denominated in the British Pound. In addition, Brexit could result in legal uncertainty and potentially divergent national laws and regulations as new legal relationships between the United Kingdom and the European Union are established. The ultimate effects of Brexit on us also will depend on the terms of any agreements the U.K. and the European Union make to retain access to each other's respective markets either during a transitional period or more permanently.

Significant price volatility, or uncertainty in future pricing, or oil and natural gas may materially and adversely impact our Gentherm Global Power Technologies (GPT) business

A large portion of our GPT products is sold to companies in the oil and gas industry, in particular, pertaining to new oil and gas pipelines and wells. Prices for oil and natural gas historically have been volatile and are expected to continue to be volatile. Significant changes in the price of oil and natural gas or uncertainty as to future pricing can adversely impact the number of new oil explorations and installations, and cause the postponement or cancellation of existing projects, any of which would adversely affect our GPT business.

Tax matters, including the changes in corporate tax rates, disagreement with taxing authorities and imposition of new taxes could impact our results of operations and financial condition.

We are subject to income and other taxes in the U.S. and our operations, plans and results are affected by tax and other initiatives. On December 22, 2017, the Tax Cuts and Jobs Act (H.R. 1) (the "Tax Act") was signed into law by President Trump. The Tax Act contains significant changes to corporate taxation, including reduction of the corporate tax rate from 35% to 21%, limitation of the tax deduction for interest expense to 30% of earnings (except for certain small business), limitation of the deduction for net operation losses ("NOLs") to 80% of current year taxable income and elimination of NOL carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), new taxes on certain foreign earnings, a new minimum tax related to payment to foreign subsidiaries and affiliates, immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits. The decrease in the corporate tax rate will result in changes in the valuation of our deferred tax assets and liabilities which will have a material impact on our income tax expense and deferred tax balances. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain. In addition, it is uncertain if, and to what extent, various states will conform to the new tax law and foreign countries will react by adopting tax legislation or taking other actions. It is not currently anticipated that this change in law will have a material impact on our financial performance.

We are also subject to regular reviews, examinations, and audits by the Internal Revenue Service and other taxing authorities with respect to our taxes. Although we believe our tax estimates are reasonable, if a taxing authority disagrees with the positions we have taken, we could face additional tax liability, including interest and penalties. There can be no assurance that payment of such additional amounts upon final adjudication of any disputes will not have a material impact on our result of operations and financial position.

We also need to comply with new, evolving or revised tax laws and regulations. The enactment of or increases in tariffs, or other changes in the application or interpretation of the Tax Act, or on specific products that we sell or with which our products compete, may have an adverse effect on our business or on our results of operations.

Our patient temperature management systems business is subject to extensive industry regulation and failure to comply with all applicable rules and regulation may adversely impact us

Our patient temperature management products are subject to extensive, complex, costly and evolving government regulation. In the United States, this is principally administered by the Food and Drug Administration (“FDA”). Various regulatory agencies in foreign countries where our medical products are sold also regulate that business. Under these regulations, we are subject to periodic inspection of our facilities, procedures and operations and testing of our products. Following such inspections, we may receive observations, notices, citations and/or warning letters that could require us to modify certain activities identified during the inspection, possibly at a significant cost. We are also required to report adverse events associated with our medical products to the FDA and other regulatory authorities. Unexpected or serious health or safety concerns could result in liability claims, recalls, market withdrawals or other regulatory actions.

The process for obtaining governmental approval to manufacture and market new medical devices is time-consuming and costly. We are dependent on receiving FDA and other governmental or third-party approvals prior to manufacturing, marketing and shipping any new medical products. We cannot be certain that any new medical products we develop will receive FDA or other necessary approvals.

Any failure to comply with anti-corruption laws and regulations could have a material and adverse effect on our reputation, business and financial results

Our operations outside of the United States require us to comply with various anti-bribery and anti-corruption regulations, including the U.S. Foreign Corrupt Practices Act, the United Kingdom Bribery Act and the China Anti-Unfair Competition Law. Recent years have seen a substantial increase in anti-bribery law enforcement activity, with more frequent and aggressive investigations and enforcement proceedings by both U.S. and non-U.S. regulators, and increases in criminal and civil proceedings brought against companies and individuals. We operate in many parts of the world that are recognized as having governmental and commercial corruption and local customs and practices that can be inconsistent with anti-bribery laws. We have internal control policies and procedures, and we have implemented training and compliance programs for our employees and agents, with respect to these regulations. However, our policies, procedures and programs may not always protect us from negligent, reckless or criminal acts committed by our employees or agents. We could incur significant expenses in investigating any potential violation and could incur severe criminal or civil sanctions and/or fines as a result of violations or settlements regarding such laws. In addition, any allegations, settlements or violations could materially and adversely impact our reputation and our relationships with current and future customers, suppliers, employees and agents. Also, some of our competitors may not be subject to, or similarly comply with, the same anti-corruption laws, which could provide them a competitive advantage.

We are subject to significant currency risk related to our global operations

A significant portion of our global transactions is conducted in currencies other than the U.S. Dollar. While we sometimes employ financial instruments to hedge some of our transactional foreign exchange exposure, developing an effective and economical foreign currency risk strategy is complex and expensive and no strategy can completely insulate us from those exposures. Hedging arrangements also may expose us to additional risks, including that a counterparty may fail to honor its obligations, and additional costs, including transaction fees and breakage costs. Changes in the exchange rates of foreign currencies could significantly affect our reported results of operations and financial condition. For example, a significant portion of our business activities is conducted in Euros, and the weakening of the U.S. dollar against the Euro had a positive effect on our reported revenues in 2017.

In addition, concerns persist regarding the debt burden of certain European countries that have adopted the Euro currency (the "Euro Zone") and their ability to meet future financial obligations, as well as concerns regarding the overall stability of the Euro to function as a single currency among the diverse economic, social and political circumstances within the Euro Zone. For example, the announcement of the United Kingdom’s decision to exit the European Union caused significant volatility in currency exchange rates, especially between the U.S. dollar and British pound sterling. If one of the Euro Zone countries were to default on its debt or other Euro Zone countries withdraw from the Euro currency, the impact on global markets, and on our business, results of operations and financial condition, could be significant, and that impact would intensify substantially if the Euro currency were dissolved entirely. Such a development could also cause financial and capital markets across the globe to constrict, reducing liquidity and increasing borrowing costs, and could have a significant negative impact on consumer confidence and spending.

Any failure to protect our intellectual property developed or licensed could harm our business and competitive position

We believe that patents and proprietary rights have been and will continue to be very important in enabling us to compete. If our patents are circumvented, rendered invalid or unenforceable, or narrowed in scope, the patent coverage afforded to our products would be impaired, which could significantly impede our ability to market our products, negatively affect our competitive position and materially and adversely affect our business and results of operations.

There can be no assurance that any new or pending patents will be issued, that our or our licensors' proprietary rights will not be challenged, invalidated, circumvented or rendered unenforceable, or that our patents will provide us with meaningful competitive advantages. Furthermore, there can be no assurance that others will not independently develop similar products or will not design around any patents that have been or may be issued to our licensors or us. Also, failure to seek or obtain patents in certain foreign countries may materially and adversely affect our ability to compete effectively in those international markets. Further, as we expand our operations in jurisdictions where the protection of intellectual property rights is less robust, such as China, the risk of others duplicating our proprietary technologies increases, despite efforts we undertake to protect them. Foreign governments may adopt regulations—and foreign governments or courts may render decisions—requiring compulsory licensing of intellectual property rights, or foreign governments may require products to meet standards that serve to favor local companies.

Because of rapid technological developments in the automotive industry and the competitive nature of the market, the patent position of any component manufacturer is subject to uncertainties and may involve complex legal and factual issues. Consequently, although we either own or have licenses to certain patents, and are currently processing a significant number of additional patent applications, it is possible that no patents will issue from any pending applications or that claims allowed in any existing or future patents issued or licensed to us will be challenged, invalidated, circumvented, or that any rights granted under such patents will not provide us adequate protection. There is an additional risk that we may be required to participate in interference proceedings to determine the priority of inventions or may be required to commence litigation to protect our rights, which could result in substantial costs and divert the attention of management and technical and engineering personnel.

In addition to patents, we rely on a combination of trademarks, copyrights, know-how, confidentiality provisions and licensing agreements to establish and protect our proprietary rights. We cannot guarantee, however, that the steps we have taken to protect our intellectual property will be adequate to prevent infringement of our rights or misappropriate thereof.

To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our proposed projects, disputes may arise as to the proprietary rights to such information that may not be resolved in our favor. Additionally, with respect to licensed technology, there can be no assurance that the licensor of the technology will have the resources, financial or otherwise, or desire to defend against any challenges to the rights of such licensor to its patents.

Our products may conflict with patents that have been or may be granted to competitors or other

Other persons could bring legal actions against us claiming damages and seeking to enjoin manufacturing and marketing of our products for allegedly conflicting with patents held by them. Any such litigation could result in substantial cost to us, divert the attention of management and engineering and technical personnel, and harm our reputation. If any such actions are successful, in addition to any potential liability for damages, we could be required to cease selling or using infringing products, obtain a license in order to continue to manufacture or market the affected products, or redesign the infringing products. There can be no assurance that we would prevail in any such action, that any license required under any such patent would be made available on acceptable terms, if at all, or that we could redesign such products on a timely basis and at a reasonable cost, if at all. Failure to obtain needed patents, licenses or proprietary information held by others may have a material adverse effect on our business, results of operations and financial condition. From time to time, we receive notices from third parties suggesting that our products infringe on the proprietary rights of others and historically we have had litigation regarding such matters. While we do not believe that any current claim of patent is valid and material, we must spend time and resources reviewing, defending and resolving such claims.

We rely on trade secret protection through confidentiality agreements and the agreements could be breached or information may be otherwise stolen

We rely on trade secrets that we seek to protect, in part, through confidentiality and non-disclosure agreements with employees, customers and other parties. There can be no assurance that these agreements will not be breached, that we would have adequate

remedies for any such breach or that our trade secrets will not otherwise become known to or independently developed by competitors.

The theft or unauthorized use or publication of our trade secrets and other confidential business information could harm our competitive position and reduce acceptance of our products, as well as the value of our investment in research and development, product development and marketing. In addition, third parties might make claims against us related to losses of confidential or proprietary information, end-user data or system reliability. These incidents and claims could severely disrupt our business, and we could suffer losses, including the cost of product recalls and returns and reputational harm. In addition, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Our most significant customers typically reserve the right unilaterally to cancel contracts or reduce prices, and the exercise of such right could reduce or eliminate any financial benefit to us anticipated from such contract

Due to their purchasing size, automotive customers typically reserve the right unilaterally to cancel contracts completely or to require price reductions during the term of the contract. Although these customers generally agree as a commercial practice to reimburse companies for actual out-of-pocket costs incurred with respect to the particular contract up to the point of cancellation, these reimbursements typically do not cover costs associated with acquiring general purpose assets, such as facilities and capital equipment, or for increases in employee count and related costs, and may be subject to negotiation and substantial delays in receiving payment on such actual out-of-pocket costs. Any unilateral cancellation of, or price reduction with respect to, any contract could reduce or eliminate any financial benefits anticipated from such contract. If we are not able to offset pricing reductions through improved operating efficiencies and reduced expenditures, such price reduction could have a material adverse effect on our financial condition and results of operations.

The third parties that have agreed to reimburse portions of our research and development expenses generally also reserve the right to unilaterally terminate those contracts. There can be no assurance that we will continue to receive the third party reimbursements for any of our research and development efforts.

A significant product liability lawsuit, warranty claim or product recall involving us or one of our major customers, or an investigation regarding vehicle safety generally, could materially and adversely affect our financial performance

In the event that our products fail to perform as expected, whether allegedly due to our fault or that of one of our suppliers, and such failure results in, or is alleged to result in, bodily injury and/or property damage or other losses, we may be subject to product liability lawsuits and other claims or we may be required or requested by our customers or regulators to participate in a recall or other corrective action involving such products. We also are a party to agreements with certain of our customers, whereby these customers may pursue claims against us for contribution of all or a portion of the amounts sought in connection with product liability and warranty claims. We carry insurance for certain product liability claims , but such coverage may be limited. In addition, we may not be successful in recovering amounts from third parties, including suppliers, in connection with these claims. These types of claims could materially and adversely affect our financial condition, operating results and cash flows.

Over the past couple of years, there has been a significant increase in the level of scrutiny given to vehicle safety issues. Inquiries are being conducted not only by traditional regulators but also by state Attorneys General. Furthermore, the U.S. Department of Justice has commenced investigations and U.S. Congressional hearings have also been conducted in which vehicle manufacturers and in some cases suppliers are being called to testify as to particular safety risks. This increased scrutiny could materially and adversely affect the business of our customers and suppliers and subject us to fines, penalties, sanctions and/or investigations.

Our success will depend in large part on retaining key personnel and effective succession planning

Our success will depend to a large extent upon the continued contributions of key personnel. The loss of the services of one or more of our executive officers could have a material adverse effect on the success of our business. Effective succession planning is also important to our long-term success. Failure to ensure effective transfer of knowledge and smooth transitions involving key employees could hinder our strategic planning and execution. Further, our success will depend, in part, upon our ability to retain qualified engineering and other technical and marketing personnel. There is significant competition for technologically qualified personnel in our business and we may not be successful in recruiting or retaining sufficient qualified personnel.

We are required to comply with environmental laws and regulations that could cause us to incur significant costs

Our manufacturing facilities are subject to numerous laws and regulations designed to protect the environment inside and outside the United States, and we expect that additional requirements with respect to environmental matters will be imposed on us in the future. We may also assume, or be deemed to assume, significant environmental liabilities in acquisitions. Environmental liability may be imposed without regard to fault, and under certain circumstances, can be joint and several, resulting in one party being held responsible for the entire obligation. Material future expenditures may be necessary if compliance standards change or material unknown conditions that require remediation are discovered. No assurance can be given that all environmental liabilities have been identified or that no prior owner or operator of our properties or former properties has created an environmental condition not known to us. Environmental laws could also restrict our ability to expand our facilities or could require us to acquire costly equipment or to incur other significant expenses in connection with our business. Violations of these requirements could result in fines or sanctions, obligations to investigate or remediate contamination, third party property damage or personal injury claims due to the migration of contaminants off-site, or modification or revocation of our operating permits, which could materially and adversely affect our financial condition, operating results and cash flows.

We may not realize significant benefits from acquisitions or joint ventures because of integration difficulties and other challenges

We have recently completed a few acquisitions, and we are actively pursuing additional acquisitions to expand the breadth of products derived from core thermal technologies as well as the markets in which they are applied. Identifying suitable potential acquisitions, conducting due diligence, successfully negotiating and closing an acquisition and the acquisition integration process are complex, costly and time-consuming. The difficulties of completing and integrating an acquisition include, among others:

- incurring additional debt and/or issuing additional securities, increasing leverage risks or dilution;
- unsatisfactory returns on our investments and our inability to realize the expected benefits of such acquisitions or joint ventures;
- difficulties in implementing our business plan for the combined business, including achieving anticipated synergies in amount and on time;
- required significant capital expenditures to integrate our operations and pursue synergies;
- unanticipated issues in integrating manufacturing, logistics, financial and other internal controls, communications and other systems;
- diversion of management attention and capital from ongoing business concerns to integration matters;
- challenges assimilating management and other personnel, including because of differences in culture, language and background for international acquisitions;
- difficulty maintaining oversight over internal controls and preventing misconduct or other violations of applicable laws by any investment which we do not exercise control;
- the size of operations acquired relative to our existing business;
- unanticipated changes in applicable laws and regulations;
- failure to obtain regulatory or other approvals;
- failure to retain key employees, customers and suppliers of the combined business;
- assumption of known and unknown liabilities, some of which may be difficult or impossible to quantify; and
- non-cash impairment charges or other accounting charges relating to the acquired assets.

To the extent we complete an acquisition in a new industry, the above risks will be heightened due to our lack of familiarity with such business.

In the future, we may not be able to successfully identify suitable acquisition or joint venture opportunities or complete any particular acquisition, combination, joint venture or other transaction on acceptable terms. Our identification of suitable acquisition candidates and joint venture opportunities and the integration of acquired business operations involve risks inherent in assessing the values, strengths, weaknesses, risks and profitability of these opportunities, as well as significant competition for such acquisition opportunities. Our focus on acquisition opportunities may require significant financial, management and related resources that would otherwise be used for the ongoing development of our existing operations and internal expansion.

We may not generate enough liquid assets to fund our ongoing operations and investments and service our debt

Based on our current business plan, we believe our cash on hand along with cash flows from operating activities will be sufficient to meet operating and capital expenditure needs and to service our debt for the foreseeable future. However, if cash flows from operations decline, we may need to obtain alternative sources of capital and reduce or delay capital expenditures, acquisitions and investments, all of which could impede the implementation of our business strategy and materially and adversely affect our results of operations and financial condition. In addition, we may need to complete one or more equity or debt financings if we consummate any significant acquisitions. There can be no assurance that such capital will be available at all or on reasonable terms, which could materially and adversely affect our future operations and business strategy.

We may not be able to generate sufficient cash flows to meet our substantial debt service obligations, and such substantial debt service obligations could materially and adversely affect our business, results of operations and financial condition

Our ability to make payments on and to refinance our debt obligations depends on our ability to generate cash flows from operations in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We may not be able to refinance any of our indebtedness on commercially reasonable terms, or at all.

If we cannot service our indebtedness, we may have to take actions such as selling assets, seeking additional equity or reducing or delaying capital expenditures, strategic acquisitions, investments and alliances, any of which could impede the implementation of our business strategy or prevent us from entering into transactions that would otherwise benefit our business. Additionally, we may not be able to effect such actions, if necessary, on commercially reasonable terms, or at all.

Our debt obligations could have important consequences to our business, results of operations and financial condition. For example:

- we may be more vulnerable to general adverse economic and industry conditions;
- we may be required to dedicate a substantial portion of our cash flows from operations to payments on our indebtedness, thereby reducing the availability of cash flows for other purposes, including for working capital, dividends, capital expenditures, business development efforts and to finance mergers and acquisitions;
- our ability to borrow additional debt for operations, working capital or to finance future mergers and acquisitions may be limited;
- our ability to refinance or repay other debt obligations when they become due may be limited;
- we are exposed to the risk of increased interest rates because a portion of our borrowings, including under our credit facilities, are at variable rates of interest; and
- our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate may be limited, thereby placing us at a competitive disadvantage compared to our competitors that have less indebtedness.

Our debt agreements contain certain restrictive covenants and customary events of default. These restrictive covenants limit our ability to take certain actions, such as, among other things: incur additional debt, make certain payments or distributions, engage in mergers or consolidations, make certain dispositions and transfers of assets, enter into transactions with affiliates and guarantee indebtedness. While not unusual for financings of the type that we have, the restrictions in our credit facilities may prevent us from taking actions that we believe would be in the best interest of our business and may make it difficult for us to execute our business plans, take advantage of business opportunities, or react to changing industry conditions.

Upon an event of default, if not waived by our lenders, our lenders may declare all amounts outstanding as due and payable, which may cause cross-defaults under our other debt obligations. If our lenders accelerate the maturity of our indebtedness, we may not have sufficient capital available at that time to pay the amounts due to all lenders on a timely basis, and there is no guarantee that we would be able to repay, refinance, or restructure the payments on such debt. Further, under our credit facilities, the lenders would have the right to foreclose on certain of our assets, which could have a material adverse effect on our business, results of operations and financial condition.

Our results of operations and financial condition may be adversely impacted from a decrease in or cessation or clawback of government incentives related to investments

We receive economic benefits from national, state, and local governments in various regions of the world in the form of incentives designed to encourage manufacturers to establish, maintain, or increase investment, workforce, or production. These incentives may take various forms, including grants, loan subsidies, and tax abatements or credits. The impact of these incentives can be significant in a particular market during a reporting period. A decrease in, expiration without renewal of, or other cessation or clawback of government incentives for any of our business units, as a result of administrative decision or otherwise, could have an adverse impact on our results of operations and financial condition, as well as our ability to fund new investments.

Security breaches and other disruptions to our information technology networks and systems, including a disruption related to cybersecurity, could interfere with our operations and could compromise the confidentiality of our proprietary information

We rely upon information technology networks and systems, some of which are managed or hosted by third-parties, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities, including electronic communications among our locations around the world and between Company personnel and our customers and suppliers, supply chain management, manufacturing, and invoicing and collection of payments. We use these information technology network and systems to process financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting and legal and tax requirements. Additionally we collect and store sensitive data, including intellectual property, proprietary business information, the proprietary business information of our customers and suppliers, as well as personally identifiable information of our employees, customers and suppliers, in data centers, on information technology networks and systems, some of which are operated by third parties and third party locations. The secure operation of these data centers, information technology networks, and systems and the processing, maintenance, confidentiality, integrity and availability of this information, is critical to our business operations and strategy.

The Company maintains an information risk management program which is supervised by information technology management and reviewed by a cross-functional committee. As part of this program, reports that include analysis of emerging risks as well as the Company’s plans and strategies to address them are regularly prepared and presented to senior management and the Board of Directors. Despite security measures, such as disaster recovery and business continuity plans, including those measures related to cybersecurity, these data centers, our information technology networks and systems may be vulnerable to damage, disruptions or shutdowns due to attacks by hackers or breaches due to errors or malfeasance by employees, contractors and others who have access to our networks and systems, or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures, geopolitical events, or natural disasters or other catastrophic events.

Cyber threats are constantly evolving, thereby increasing the difficulty of detecting and successfully defending against them. The occurrence of any of the aforementioned events, many of which are outside our control, could compromise our systems or networks and the information stored there, which may include confidential or proprietary information or personal information of third parties, could be accessed, publicly disclosed, compromised, corrupted, lost or stolen. Any such access, disclosure or other loss or corruption of information could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information, disrupt operations, cause a loss of confidence in our reputation, goodwill, products and services, reduce the competitive advantage we expect to derive from our investment in advanced technologies and adversely affect our financial condition, operating results, and cash flows. We maintain cyber risk insurance, but this insurance may not be sufficient to cover all of our losses from any future breaches of our systems.

We may face particular privacy, data security and data protection risks due to the new European General Data Protection Regulation

We may face particular privacy, data security and data protection risks in Europe due to the new European General Data Protection Regulation (“GDPR”). Data protection regulation is an area of increase focus and changing requirements. On May 25, 2018

the GDPR will go into effect, which imposes additional obligations and risk upon our business and which increases substantially the penalties to which we could be subject in the event of any non-compliance. The GDPR requires companies to satisfy new requirements regarding the handling of personal data, including its use, protection and the rights of affected persons regarding their data. Failure to comply with GDPR requirements could result in penalties of up to 4% of worldwide revenue. The GDPR and other similar laws and regulations, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including finds or demands or orders that we modify or cease existing business practices. The company is evaluating its processes and taking measures to ensure compliance with the GDPR. Due to the lack of experience with the interpretation of this new regulation and its enforcement some measures initially might not satisfy the best practices that will be established in the coming years. As personal data is processed using information technology, the risks disclosed with respect to "Security breaches and other disruptions" apply accordingly.

Risks Related to Our Common Stock

We have anti-takeover defenses that could make it more difficult for a third party to acquire a majority of our outstanding voting stock, which could cause the market price of our Common Stock to decline

Various provisions of our articles of incorporation and bylaws, as well as the Michigan Business Corporation Act (the "MBCA"), could have the effect of discouraging, delaying or preventing a third party from accumulating a large block of our capital stock, engaging in a tender offer and making offers to acquire us, and of inhibiting a change in control, all of which could adversely affect our shareholders' ability to receive a premium for their shares in connection with any such transaction. For example, our Articles of Incorporation authorize our Board of Directors (our "Board") to issue up to 4,991,000 shares of Preferred Stock and to determine the price, rights (including conversion rights), preferences and privileges of those shares without any further vote or action by the shareholders. If we issue preferred stock in the future that has preference over our Common Stock with respect to the payment of dividends or upon our liquidation, dissolution or winding up, or if we issue preferred stock with voting rights that dilute the voting power of our Common Stock, the rights of holders of our Common Stock or the market price of our Common Stock could be adversely affected.

Consistent with this authority, in January 2009 our Board adopted a Shareholder Rights Plan (as amended the "Rights Plan") in which one purchase right was distributed as a dividend on each share of Company Common Stock held of record as of the close of business on February 10, 2009 (the "Rights"). If exercisable, each Right will entitle its holder to purchase from the Company one one-thousandth of a share of a newly created Series B Preferred Stock of the Company for $20.00 (the "Purchase Price"). The Rights will become exercisable if any person or group becomes the beneficial owner of 15% or more of the Company's Common Stock or has commenced a tender or exchange offer which, if consummated, would result in any person or group becoming the beneficial owner of 15% or more of the Company's Common Stock. If any person or group becomes the beneficial owner of 15% or more of the Company's Common Stock, each right will entitle its holder, other than the acquiring person, to purchase a number of shares of the Company's or, in the case of a merger or change in control in favor of the acquirer, the acquirer's Common Stock having a value of twice the Purchase Price.

The Rights are deemed attached to the certificates representing outstanding shares of Common Stock. The Rights Plan is designed to assure that all of our shareholders receive fair and equal treatment in the event of any proposed takeover of the Company and to guard against partial tender offers, open market accumulations and other abusive or coercive tactics without paying shareholders a control premium. The Rights Plan may have anti-takeover effects by discouraging potential proxy contests and other takeover methods, particularly those that have not been negotiated with the Board, and the Rights Plan may also inhibit the acquisition of a controlling position in our Common Stock. Therefore, transactions may not occur that shareholders would otherwise support and/or from which they would receive a substantial premium for their shares over the current market price. The Rights Plan may also make it more difficult to remove members of the current Board or management.

In addition, the anti-takeover provisions of Michigan law impose various impediments to the ability of a third party to acquire control of Gentherm, even if a change of control would be beneficial to our existing shareholders. For example, the Company is subject to Chapter 7A of the MBCA, which prohibits us from engaging in a business combination with an interested shareholder for a period of five years after the person becomes an interested shareholder, unless certain conditions are satisfied.

We are currently prohibited from making dividend payments on our Common Stock. Furthermore, we do not anticipate paying

dividends on our Common Stock in the future

Our bank credit facilities generally prohibit payment of dividends on our Common Stock so long as such facilities are outstanding. We have never paid any cash dividends on our Common Stock and do not anticipate paying dividends in the near future.

The price of our Common Stock may fluctuate significantly

The price of our Common Stock on the NASDAQ Global Select Market may fluctuate significantly in response to many factors, including:

- general market and economic conditions;
- actual or anticipated variations in our quarterly operating results due to such factors as acceptance of our product by automotive manufacturers and consumers, timing of our product introductions, availability and pricing of components from third parties, competition, timing of orders, foreign currency exchange rates, new product development, material acquisitions or dispositions, technological changes, resources spent on litigation activities and economic conditions generally;
- changes in earnings guidance by us or earnings estimates by securities analysts with respect to us;
- publication of research reports about us, the automotive industry generally or automotive component industry, and recommendations by securities or financial analysts with respect to us or other automotive suppliers;
- adverse market reaction to the amount of our outstanding debt at any time, the amount of our maturing debt in the near and medium term and our ability to refinance such debt and the terms thereof or our plans to incur additional debt in the future;
- the ability of our customers to pay us and meet their other obligations to us under current contract terms and our ability to hold and expand our customer base;
- changes in market valuations of similar companies;
- adverse market reaction to any securities we may register or issue or additional debt we incur in the future;
- additions or departures of key management personnel;
- actions by institutional shareholders;
- speculation in the press or investment community;
- continuing high levels of volatility in the capital and credit markets; and
- the realization of any of the other risk factors included in, or incorporated by reference to, this Report on Form 10-K.

Many of the factors listed above are beyond our control. These factors may cause the market price of our Common Stock to decline, regardless of our financial performance and condition and prospects. It is impossible to provide any assurance that the market price of our Common Stock will not fall in the future, and it may be difficult for holders to resell shares of our Common Stock at prices they find attractive, or at all. We expect that the market price of our Common Stock will continue to fluctuate. In addition, the stock market in general has experienced extreme volatility that has often been unrelated to the operating performance of a particular company. These broad market fluctuations may materially and adversely affect the market price of our Common Stock.

Our shareholders may experience dilution if we issue additional equity securities

Subject to the limitations set forth in our Articles of Incorporation, we are not restricted from issuing additional shares of our Common Stock or preferred stock, including securities convertible or exchangeable for, or that represent the right to receive, Common Stock or preferred stock. In most circumstances, common shareholders will not be entitled to vote on whether or not we issue additional equity securities. Future issuances of Common Stock will reduce the percentage of our Common Stock owned by shareholders who do not participate in such issuances. In addition, depending on the terms and pricing of additional offerings of our Common Stock and the value of our assets, our shareholders may experience dilution in the book value and fair value of their shares. The market price of our Common Stock could decline as a result of sales of substantial amounts of additional shares of our Common

Stock in the public market or in connection with future acquisitions, or the perception that such sales could occur. This could also impair our ability to raise additional capital through the sale of equity securities at a time and price favorable to us.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The following table presents the Company's significant properties currently in use:

Facility	Location	Purpose	Segment	Sq. Footage	Owned or leased	Monthly Rent	Lease Expiration
Gentherm Headquarters	Northville, MI U.S.A.	Corporate headquarters	Automotive	82,000	Owned	$ —	—
Gentherm North America	Farmington Hills, MI U.S.A.	Research and development	Automotive and Industrial	44,000	Owned	$ —	—
Gentherm North America	Irvine, CA U.S.A.	Research and development	Industrial	21,000	Leased	$ 26,200	June 30, 2018
Gentherm Research Facility	Azusa, CA U.S.A.	Research and development	Industrial	12,200	Leased	$ 9,800	July 1, 2022
Gentherm Materials Research Facility	Azusa, CA U.S.A.	Materials research and development	Industrial	10,100	Leased	$ 11,800	October 31, 2020
CSZ Headquarters	Cincinnati, OH U.S.A.	CSZ headquarters	Industrial	265,300	Owned	$ —	—
Gentherm GmbH	Odelzhausen, Germany	Customer service center	Automotive	170,600	Owned	$ —	—
Gentherm Hungary	Pilisszentivan, Hungary	Customer service center and warehouse	Automotive	298,700	Owned	$ —	—
Gentherm Ukraine	Vinogradov, Ukraine	Manufacturing and warehouse	Automotive	209,500	Owned	$ —	—
Gentherm Macedonia	Prilep, Macedonia	Manufacturing	Automotive	111,400	Owned	$ —	—
Gentherm China	Langfang, China	Manufacturing	Automotive	279,900	Owned	$ —	—
Gentherm Asia Electronics	Shenzhen, China	Manufacturing	Automotive	74,400	Leased	$ 54,800	December 31, 2019
Gentherm Vietnam	Ha Nam, Vietnam	Manufacturing	Automotive	245,300	Owned	$ —	—
Gentherm Mexico	Acuña, Mexico	Manufacturing	Automotive	101,100	Leased	$ 27,900	June 1, 2020
Gentherm Mexico	Acuña, Mexico	Manufacturing	Automotive	101,100	Leased	$ 44,700	July 1, 2020
Gentherm Mexico	Celaya, Mexico	Manufacturing	Automotive	143,700	Leased	$ 65,300	October 1, 2025
Global Power Technologies	Calgary, Canada	GPT headquarters	Industrial	61,400	Leased	$ 50,400	January 31, 2026
Global Power Technologies	Bassano, Canada	Manufacturing	Industrial	36,000	Owned	$ —	—
Etratech Canada	Burlington, Canada	Etratech headquarters manufacturing	Automotive	46,000	Leased	$ 23,100	November 30, 2022
Etratech Shenzhen	Shenzhen, China	Manufacturing	Automotive	49,300	Leased	$ 24,600	November 30, 2022

ITEM 3. LEGAL PROCEEDINGS

We are subject to litigation from time to time in the ordinary course of our business, however there is no current material pending litigation to which we are a party and no material legal proceedings were terminated, settled or otherwise resolved during the fourth quarter of the fiscal year ended December 31, 2017.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our Common Stock trades on the NASDAQ Global Select Market under the symbol "THRM." The following table sets forth the high and low sale prices for our Common Stock as reported on the NASDAQ Global Select Market for each quarterly period from January 1, 2016 through December 31, 2017.

	High	Low
2016		
1st Quarter	$ 45.55	$ 36.23
2nd Quarter	44.23	31.37
3rd Quarter	38.00	30.13
4th Quarter	35.95	27.40
2017		
1st Quarter	$ 39.25	$ 33.15
2nd Quarter	39.45	34.65
3rd Quarter	40.70	29.90
4th Quarter	37.55	31.75

Holders

As of February 22, 2018, our Common Stock was held by 74 stockholders of record. A substantially greater number of holders are beneficial owners whose shares of record are held by banks, brokers and other nominees.

Dividends

We have not paid any Common Stock cash dividends since formation and we do not expect to pay any in the foreseeable future. The payment of future dividends is within the discretion of our Board of Directors and will depend upon business conditions, our earnings and financial condition and other factors. Currently, our bank credit facilities limit payment of dividends on our Common Stock.

Stock Repurchase Program

On December 16, 2016, the Board of Directors authorized a three-year, $100 million stock repurchase program. Under the program, we may repurchase, from time to time, our common stock in amounts and at prices as we deem appropriate, taking into account market conditions, applicable legal requirements, debt covenants and other considerations. The number of shares repurchased and the time of the repurchases under the stock repurchase program will be determined by our management. Repurchases may be made on the open market or in privately negotiated transactions. Repurchases may also be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when we might otherwise be precluded from doing so under securities laws. The authorization of this stock repurchase program does not require we repurchase any specific dollar value or number of shares and may be modified, extended or terminated by our Board of Directors at any time. No repurchases were made under the stock repurchase program during the fourth quarter of 2017. Total repurchases to date under this program through February 22, 2018 were $5.2 million at an average price of $32.39 per share.

ITEM 6. SELECTED FINANCIAL DATA

The following table sets forth selected financial data and should be read in conjunction with the consolidated financial statements and the notes thereto, as well as Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Report.

	Year Ended December 31, (In thousands except per share data)				
	2017	**2016**	**2015**	**2014**	**2013**
Product revenues	$ 985,683	$ 917,600	$ 856,445	$ 811,300	$ 662,082
Operating income	97,324	106,119	121,319	98,434	50,384
Net income	35,227	76,598	95,393	70,119	35,133
Income (loss) attributable to non-controlling interest	—	—	—	—	1,313
Net income attributable to Gentherm Incorporated	35,227	76,598	95,393	70,119	33,820
Convertible preferred stock dividends	—	—	—	—	1,622
Net income attributable to common shareholders	35,227	76,598	95,393	70,119	32,198
Basic earnings per share	0.96	2.10	2.65	1.98	0.96
Diluted earnings per share	0.96	2.09	2.62	1.95	0.94

	As of December 31, (In thousands)				
	2017	**2016**	**2015**	**2014**	**2013**
Working capital[a][b]	$ 289,754	$ 295,130	$ 270,320	$ 187,432	$ 116,786
Total assets[b]	883,405	843,030	648,343	555,911	482,564
Long term obligations	158,216	189,002	118,596	112,465	96,683
Accumulated earnings	293,645	256,922	180,324	84,931	14,812

a) Represents current assets less current liabilities.

b) Total assets for all prior periods presented have been adjusted to conform with the current year presentation. Working capital and total assets for the years ended December 31, 2017, 2016 and 2015 reflect the noncurrent presentation of deferred tax liabilities and assets, as well as related valuation allowance. For the years ended December 31, 2014 and 2013, working capital and total assets include $6,247 and $10,616, respectively, in current deferred tax assets and $0, and $710, respectively, in current deferred tax liabilities.

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

The following discussion and analysis should be read in conjunction with, and is qualified in its entirety by, our consolidated financial statements (and notes related thereto) and other more detailed financial information appearing elsewhere in this Report. Further, you should read the following discussion and analysis of our financial condition and results of operations together with the "Risk Factors" included elsewhere in this Report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. See also "Forward-Looking Statements" in Item 1 of this Report.

Overview

Gentherm Incorporated is a global technology and industry leader in the design, development, and manufacturing of innovative thermal management technologies. Our products provide solutions for automotive passenger comfort and convenience, battery thermal management, remote power generation, patient temperature management, environmental product testing and other consumer and industrial temperature control needs. Our automotive products can be found on the vehicles of nearly all major automotive manufacturers operating in North America, Europe and Asia. We operate in locations aligned with our major customers' product strategies in order to provide locally enhanced design, integration and production capabilities and to identify future thermal technology product opportunities in both automotive and other markets. We concentrate our research on the development of new technologies and new applications from existing technologies to create product and market opportunities for a wide array of thermal management solutions.

Etratech

On November 1, 2017, we acquired substantially all of the assets and assumed substantially all of the operating liabilities of Etratech Inc., an Ontario corporation and all of the outstanding shares of Etratech Hong Kong, an entity organized under the laws of Hong Kong, in an all-cash transaction. Etratech manufactures advanced electronic controls and control systems for the automotive, RV and marine, security, medical and other industries. Etratech's world headquarters and North American manufacturing operations are located in Burlington, Canada. See Note 4 to the consolidated financial statements for additional information regarding the acquisition of Etratech.

Cincinnati Sub-Zero

On April 1, 2016, we acquired all of the equity of privately-held CSZ and related assets in an all-cash transaction. CSZ manufactures both high quality patient temperature management systems for the health care industry and custom testing equipment used by a wide range of industrial manufacturing companies for product testing. CSZ's world headquarters and manufacturing operations are located in Cincinnati, Ohio. See Note 17 to the consolidated financial statements for additional information regarding the acquisition of CSZ.

North American Reorganization

On January 4, 2016 and January 5, 2016, the Company completed reorganization transactions (the "Reorganization") related to our North American business (the "Windsor Operations"). As part of our original integration plan to eliminate redundancies associated with the 2011 acquisition of Gentherm GmbH (formerly named W.E.T. Automotive Systems AG), the Windsor Operations have been consolidated into our existing European and North American facilities. As a result of the Reorganization, some of the business activities previously performed by the Windsor Operations are now being performed by other subsidiaries.

Related to the Reorganization, the Company declared intercompany dividends, incurred and paid withholding taxes to the Canadian Revenue Agency of $7,600,000 during 2016. Additionally, the Company incurred income tax expense of $2,500,000 related to the intercompany dividends. These amounts incurred are expected to cover all future intercompany dividends needed to distribute the remaining earnings of the subsidiary to its parent in conjunction with the potential future liquidation of the subsidiary.

In addition to the $7,600,000 of withholding tax and $2,500,000 of income taxes, the Reorganization required the Company to make a one-time income tax payment of approximately $32,600,000. The one-time income tax payment was accrued during the first quarter of 2016; however, the Company also recorded an offsetting deferred charge for approximately the same amount because the one-time income tax payment will result in tax deductions against income taxes in future periods. Therefore, the income tax payment did not have a material impact on the Company's earnings during the first quarter of 2016 nor any subsequent quarter. The withholding tax payment was paid entirely in 2016. The income tax payments of $2,500,000 and $32,600,000 that were included in the accrued liabilities as of December 31, 2016, were paid during the first half of 2017.

Reportable Segments

The Company has two reportable segments for financial reporting purposes: Automotive and Industrial. See Note 11 to the consolidated financial statements for a description of our reportable segments as well as their proportional contribution to the Company's reported product revenues and operating income. The financial information used by our chief operating decision maker to assess operating performance and allocate resources is based on these reportable segments.

Critical Accounting Policies

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amount of assets and liabilities, revenues and expenses, and related disclosures at the date of our financial statements. Actual results may differ from these estimates under different assumptions or conditions. These estimates and assumptions include, but are not limited to:

- Product revenues;
- Warranty reserves;
- Litigation reserves;

- Allowances for doubtful accounts;
- Income taxes;
- Inventory reserves;
- Stock compensation; and
- Pension plans.

Product Revenues

The Company sells its products under long term supply or purchase order contracts issued by its customers. These contracts involve the sale of goods and services at fixed prices and provide for related transfer of ownership risk to the customer upon shipment from the Company's warehouse location or in some cases upon receipt of the goods at the customer's facility, or completion of services. Shipping and handling costs are recognized in cost of sales. With only a few minor exceptions, payment terms for these contracts range from 30 to 120 days from the date of shipment. Cash discounts for early payment are only extended to customer purchases recognized within the Industrial reporting segment. Unless a payment is for a distinct good or service, any consideration paid to a customer is recognized directly against the revenue earned from that customer.

For construction-type contract revenues recognized in our Industrial segment, the completed-contract method is used to determine revenue and the cost of earned revenue. The transfer of ownership upon shipment is used to determine substantial completion and the recognition of revenue for these construction-type contracts.

Accrued Warranty Costs

The Company accrues warranty obligations for products sold based on management estimates of future failure rates and current claim cost experience, with support from the sales, engineering, quality and legal functions. While we believe our warranty reserve is adequate and that the judgment applied is appropriate, such estimates could differ materially from what will actually transpire in the future. The warranty policy is reviewed by management annually. Using historical information available to the Company, including claims already filed by customers, the warranty accrual is adjusted quarterly to reflect management's best estimate of future claims.

Litigation Reserves

We record estimated future costs related to new or ongoing litigation based on input from legal counsel and our best estimate of potential loss. These estimates include costs associated with attorney fees and potential claims and assessments less any amounts we anticipate are recoverable under insurance policies. Final resolution of the litigation contingencies could result in amounts different from current accruals and, therefore, have an impact on our consolidated financial results in future reporting periods.

Allowance for Doubtful Accounts

We record an allowance for doubtful accounts once exposure to collection risk of an accounts receivable is specifically identified. We analyze the length of time an account receivable is outstanding, as well as a customer's payment history to determine the need for and amount of an allowance for doubtful accounts.

Income Taxes

We record income tax expense using the liability method which specifies that deferred tax assets and liabilities be measured each year based on the difference between the financial statement and tax bases of assets and liabilities at the applicable enacted tax rates. A valuation allowance is provided for deferred tax assets when management considers it more likely than not that the asset will not be realized. At December 31, 2017 and 2016, a valuation allowance has been provided for certain deferred tax assets which we have concluded are more likely than not to not be realized. If future annual taxable income were to be significantly less than current and projected levels, there is a risk that certain of our deferred tax assets not already provided for by the valuation allowance would expire prior to utilization.

We recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount

recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority. We recognize interest and penalties related to income tax matters in income tax expense.

Inventory Reserves

We recognize a reserve for obsolete and slow moving inventories based on estimates of future sales and an inventory item's capacity to be repurposed for a different use. We consider the number of months supply on hand based on current planned requirements, uncommitted future projections and historical usage in estimating the inventory reserve. Additional provisions are made for supplier claims for obsolete materials, prototype inventory, spare or customer service inventory and, for all periods other than at year-end, estimates for physical inventory adjustments.

Stock Based Compensation

We account for grants of employee stock options and restricted stock as compensation expense based upon the fair value on the date of grant and such expense is recognized over the vesting period. We determine fair value of awards using the Black-Scholes option pricing model. The Black-Scholes option pricing model incorporates certain assumptions, such as expected volatility, expected life of options, risk-free interest rate and expected dividend yield, in order to arrive at a fair value estimate. Expected volatilities are based on the average of the historical volatility of the Company's Common Stock and that of an index of companies in our industry group. To evaluate our assumptions for the expected lives of options, we consider the average holding period of previously exercised options and the remaining terms of outstanding options. The risk free interest rate is based upon quoted market yields for United States Treasury debt securities. The expected dividend yield is based upon the Company's history of having never issued a dividend, the limitations to issue a dividend under the Amended Credit Agreement and management's current expectation regarding future dividends. We believe that the assumptions selected by management are reasonable; however, significant changes could materially impact the results of the calculation of fair value.

Pension Plans

The Company's obligations and expenses for its pension plans are substantially dependent on the Company's selection of discount rate and, for the Gentherm GmbH Plan, expected long-term rate of return on plan assets assumptions used by actuaries to calculate these amounts. Actual results that differ from assumptions used are accumulated and amortized over future periods and generally affect recognized expense in future periods. As such, assumptions used to calculate benefit obligations as of the annual measurement date directly impact the expense to be recognized in future periods. See Note 12 to our consolidated financial statements for additional information about the pension plans, including their impact to Gentherm's financial statements.

Results of Operations Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Product Revenues. Product revenues for 2017 were $985,683,000 compared with product revenues of $917,600,000 for 2016, an increase of $68,083,000, or 7.4%. This increase included the full year effect of the 2016 acquisition of CSZ, which operated as a part of Gentherm for a full year in 2017 but only for nine months during 2016, $8,398,000 in additional revenue attributable to the 2017 acquisition of Etratech after it was acquired on November 1, 2017, and a $4,995,000 favorable impact of foreign currency translation. Adjusting for these effects, our pro-forma product revenue growth was 4.6% and included a 2.7% increase in Automotive segment product revenues to $879,457,000 and a 23.4% increase in Industrial segment product revenue to 106,226,000.

The increase in the Automotive segment occurred despite lower global automotive production volumes and a special rebate of $2,000,000 recorded during 2017. The increases included higher revenue volume for seat heaters, totaling $18,370,000, or 6.4%, steering wheel heaters of $12,609,000, or 25.5%, automotive cable systems of $6,810,000, or 8.0%, and battery thermal management products of $3,497,000, or 53.4%. These higher amounts were attributable to new program awards, higher vehicle application rates and higher component content. Higher component content in seat heaters, for example, included a greater number of programs for which Gentherm provides the electronic controlling device along with the heating element. These increases were partially offset by lower Climate Controlled Seats ("CCS") product revenues which decreased by $17,834,000 or 4.4%. CCS product revenue was disproportionately impacted by the lower global production volumes which were more unfavorable in our primary CCS market, North America, which was down by 4%, compared to an increase of 2% for the global automotive industry. CCS revenues were also reduced as a result of certain vehicle programs changing technologies from the higher priced active cooling seat application to the lower priced heated and ventilated seat technology.

Product revenues from Global Power Technologies ("GPT") totaled $31,891,000 which represented an increase of $13,263,000, or 71%. Continuing market weakness in North America was more than offset by higher sales to other markets. Product sales in this business unit are typically large custom remote power systems having long lead times and, during 2017, there were more shipments than in the prior year. During 2016, demand for GPT's products sold in North America was unfavorably impacted by lower oil prices. While we do not generally sell our products for oil exploration, production or transportation activities, the impact of lower oil prices reduced capital investments for the natural gas industry being made by GPT's principal customers. As a result, those customers curtailed orders during that year.

CSZ product revenue increased by $22,791,000 which included both an acquisition related increase of $15,905,000 and organic growth of $6,886,000, or 10%. This increase included higher revenue of environmental chamber products totaling $8,106,000 or 22% partially offset by lower revenue of patient temperature management products of $1,220,000 or 3.9%. The higher revenue for environmental chambers included several large custom orders as well as stronger demand for standard chambers. Patient temperature management product revenue equally benefited 2017 and 2016 from a temporary surge in demand for the Hemotherm product, a blood heater cooler used in hospital operating rooms during open heart surgery, but did not yet show improvements associated with a transition to a direct sales force that occurred throughout 2017.

Cost of Sales. Cost of sales increased to $674,570,000 in 2017 from $622,563,000 in 2016. The increase of $52,007,000, or 8%, was due to increased sales volume, unfavorable inventory adjustments, other increased expenses and changes in product mix partially offset by a one-time $3,973,000 expense from the purchase accounting effect of inventory for the CSZ acquisition which occurred in 2016. The gross margin rate was 31.6% during 2017 representing a decrease of 60 basis points as compared with the 2016 gross margin rate of 32.2%. This decrease was due to the special rebate and the inventory adjustments and the higher expenses. The unfavorable inventory adjustments totaled $2,307,000 and were mainly comprised of a reserve recorded for inventory held for the heated and cooled mattress product line based upon a reduced sales outlook. Increased expenses totaling approximately $7,000,000 included higher fixed costs associated with our new manufacturing facilities in Mexico and Macedonia, labor expense inflation at our Ukraine factory, and factory launch expenses for the new advanced battery thermal management product and electronics.

Net Research and Development Expenses. Net research and development expenses were $82,478,000 during 2017 compared to $72,923,000 in 2016, an increase of $9,555,000, or 13%. This increase was primarily driven by higher costs for additional resources, including personnel focused on application engineering for new production programs of existing products, development of new products and a program to develop the next generation of seat comfort products. New product development includes automotive cooled storage devices, automotive interior thermal management devices, medical thermal management devices, battery thermal management devices, battery management systems, advanced automotive electronics solutions and other potential products.

Increases in research and development were partially offset by research and development reimbursement totaling $12,037,000 during 2017 and $6,660,000 during 2016. We classify development and prototype costs and related reimbursements as research and development. This is consistent with accounting standards applied in the automotive industry. Depreciation costs for tooling are included in cost of sales.

Many new products have begun to reach the more cost intensive phases that typically occur after we receive firm customer orders or later as we ramp up our manufacturing operations specific to these products. Important examples include battery thermal management, which began shipping at the end of 2017, and a new automotive electronic control module, which will launch in early 2019. During 2017 and 2016 we incurred expenses of $5,477,000 and $3,400,000, respectively, associated with battery thermal management and $2,600,000 and $2,000,000, respectively for the electronic module. We estimate that these two products will add over $65,000,000 in annual revenue by the time they reach their full run rate in 2020 based on current awarded programs and are likely to grow rapidly in later periods. The growth in the battery thermal management product is expected to mirror an expected rapid growth in 48-volt mild hybrid automotive drive trains for which it is designed whereas the growth in the electronic control module product is anticipated to be driven by market share penetration due to an important design innovation that we believe gives us an important competitive advantage.

Acquisition Transaction Expenses. During 2017, we incurred $789,000 in fees and expenses associated with the acquisition of Etratech which was completed on November 1, 2017. During 2016, we incurred $743,000 in fees and expenses associated with the acquisition of CSZ which was completed on April 1, 2016.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $130,522,000, which included $1,080,000 in selling, general and administrative expenses for Etratech and $6,100,000 in higher expenses for CSZ due to the additional three months of operations during 2017 as compared to 2016, the year CSZ was acquired. Excluding the Etratech expenses and additional CSZ expenses, selling, general and administrative expenses increased by $8,090,000, or 7%, from $115,252,000 in the prior year. This increase was partly due to expenses associated with the transition to a new chief executive officer, higher selling costs for CSZ's medical products business, and increased management incentive compensation costs partially offset by a one-time expense associated with a management reorganization totaling $2,000,000 incurred in 2016 but not 2017. On June 28, 2017 we announced the planned retirement of Daniel R. Coker, our CEO, and related retirement package. During 2017, we recorded expenses totaling $6,694,000 which included accelerated stock compensation amortization and accrued cash bonus. The amount also included a signing bonus and a make whole bonus for Mr. Coker's successor and fees associated with the recruitment process. CSZ's selling expenses include an increase of $3,869,000 associated with a direct sales force for its medical division started during 2017. Our management incentive program includes various forms of equity compensation including stock options, restricted stock and stock appreciation rights ("SARs"). Stock options and restricted stock are accounted for using the equity method and are valued at the grant date fair value and amortized over the respective service period of the employee beneficiary. SARs are accounted for using the liability method since they are settled in cash which requires mark-to-market adjustments based on the current trading price of Gentherm Common Stock. Expenses for this program were $968,000 higher during 2017 as compared to 2016.

Foreign currency gain (loss). During 2017 we incurred a net foreign currency loss of $23,108,000 which included a net realized loss of $1,289,000 and a net unrealized loss of $21,819,000. During 2016, we incurred a net foreign currency gain of $7,810,000 which included a net realized gain of $1,706,000 and a net unrealized gain of $6,104,000. The unrealized loss in 2017 and the unrealized gain in 2016 was primarily the result of holding significant amounts of U.S. Dollar ("USD") cash at our subsidiaries in Europe which have the European Euro ("EUR") as the functional currency and due to certain intercompany relationships between these European subsidiaries and our U.S. based companies. During 2017, the USD significantly weakened relative to the EUR but strengthened during 2016. If the USD continues to weaken, we will likely have further unrealized currency losses whereas if the USD strengthens we will likely have unrealized gains.

Income Tax Expense. We recorded an income tax expense of $34,028,000 during 2017 which included the one-time transition tax of $20,153,000 relating to the 2017 Tax Cut and Jobs Act (the "Tax Act"). Excluding this one-time expense, our income tax expense would have been $13,875,000 representing an effective tax rate of 20% on earnings before income tax of $69,255,000. We recorded an income tax expense of $33,965,000 during 2016 which included the one-time withholding tax expense of $7,600,000 and income tax expense of $2,500,000 related to Reorganization. Excluding these one-time expenses, our income tax expense would have been $23,865,000 representing an effective tax rate of 22% on earnings before income tax of $110,563,000.

The Tax Act was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on all offshore earnings that were previously tax deferred and creates new taxes on certain foreign sourced earnings. As of December 31, 2017, in accordance with guidance provided by Staff Accounting Bulletin No. 118 (SAB 118), we have not completed our accounting for the tax effects of the Tax Act; however, in certain cases, as described below, we have made a provisional estimate of the effects on our existing deferred tax balances and the one-time transition tax. In the year ended December 31, 2017, the provision for income taxes includes a provisional income tax expense of $20,153,000 related to items for which we were able to determine a reasonable estimate. In all cases, we will continue to make and refine our calculations as additional analysis is completed. In addition, our estimates may be affected as additional regulatory guidance is issued with respect to the Tax Act. Any adjustments to the provisional amounts will be recognized as a component of the provision for income taxes in the period in which such adjustments are determined, but in any event, no later than the fourth quarter of 2018, in accordance with SAB 118.

Deferred tax assets and liabilities. We remeasured our U.S. deferred tax assets and liabilities at 21%. However, we are still analyzing certain aspects of the Tax Act and refining our calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. In the year ended December 31, 2017, the provision for income taxes includes provisional income tax expense of $5,808,000 related to the remeasurement of deferred tax balances.

Transition Tax on Deferred Foreign Earnings. The one-time transition tax is based on our post-1986 earnings and profits ("E&P") that were previously deferred from U.S. income taxes. In the year ended December 31, 2017, the provision for income taxes includes provisional income tax expense of $23,923,000 related to the one-time transition tax liability of our foreign subsidiaries. We have not completed our calculation of the total post-1986 E&P for these foreign subsidiaries. Further, the transition tax is based in part on the amount of those earnings held in cash and other specified assets. This amount may change when we finalize the calculation of post-1986 E&P previously deferred from U.S. income taxes and the amounts held in cash or other specified assets. A benefit of $9,578,000 was included in the provision for income taxes to offset the one-time transition tax related to the previous deferred tax liability that existed for the undistributed foreign earnings that were not permanently reinvested. However, we continue to recognize a deferred tax liability related to foreign withholding tax that will be incurred for undistributed foreign earnings that are not permanently reinvested. See Note 2 to our consolidated financial statements for additional information about the one-time transition tax.

Industrial Segment Operating Loss. The Industrial segment, which includes CSZ, GPT and our advanced research and development activities, reported an operating loss totaling $14,751,000 and $16,702,000 during 2017 and 2016, respectively. The loss during 2016 included the one-time purchase accounting adjustment related to the CSZ acquisition. After adjusting for this one-time expense, the 2017 loss was $2,022,000, or 16%, higher than the loss in the Industrial segment, as adjusted, in 2016. We incurred these losses for three reasons. First, the advanced research and development activities, the total cost for which were $13,899,000 and $12,106,000, during 2017 and 2016, respectively, are focused on products and technologies that are currently not generating product revenues. We expect that many of the individual projects included in the business unit will generate profitable revenue in future periods. Second, CSZ incurred approximately $2,000,000 in cost overruns on several large customer environmental test chambers during 2017. These cost overruns are not expected to recur in future periods. Finally, CSZ's $3,869,000 in higher expenses in 2017 associated with the new direct sales force was not yet offset by a corresponding increase in the amount of revenue and related operating income. We continue to believe that the direct sales force will lead to higher CSZ product revenue in future periods that will generate operating profits in excess of the cost for the direct sales persons.

Results of Operations Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Product Revenues. Product revenues for 2016 were $917,600,000 compared with product revenues of $856,445,000 for 2015, an increase of $61,155,000, or 7%. This increase was attributable to the acquisition of CSZ, which we acquired on April 1, 2016, and continued growth in our automotive products, partially offset by lower product revenues from GPT. Revenues for CSZ during 2016 were $51,540,000. Our automotive product revenues were higher during 2016 including higher sales for CCS which increased by $9,778,000, or 2% to $412,053,000, higher sales for automotive Seat Heaters which increased by $21,956,000, or 8% to $293,543,000 and Steering Wheel Heaters which increased by $7,482,000, or 18% to $49,689,000. Product revenues from GPT totaled $18,624,000 which represented a decrease of $27,254,000, or 59%. This decrease partly reflects continued softness in the demand for GPT's products in North America, which continues to be unfavorably impacted by the market weakness in the oil industry that has carried over to and reduced capital investments being made by GPT's principal customers that build and operate natural gas pipelines and related natural gas exploration and production companies. During 2015, this weakness had been offset by higher sales of products that are sold into geographical markets outside of GPT's home market of North America. However, these are typically larger custom products which are more impacted by the timing of shipments which favor some periods over others. Fewer of these custom systems were shipped during 2016.

Our 2015 product revenues were negatively affected by the strengthening of the U.S. Dollar against the Euro when compared to 2016 product revenues.

Cost of Sales. Cost of sales increased to $622,563,000 in 2016 from $580,066,000 in 2015. This increase of $42,497,000, or 7%, was due to was due to increased sales volume, including the new product revenues from CSZ, higher overhead for our new production facilities in Vietnam and Macedonia and a one-time $3,973,000 expense from the purchase accounting effect of inventory for the CSZ acquisition. The gross margin percentage was 32.2% during 2016. This amount would have been 32.5% without the impact of the one-time purchase accounting impact for CSZ which is 0.2% higher than the gross margin percentage of 32.3% during 2015. The higher gross margin was due to the CSZ revenue, which has a higher than average gross margin percentage, and a favorable foreign currency impact on production expenses. These were offset partially by the lower GPT revenue, which also has a higher than average gross margin percentage.

Net Research and Development Expenses. Net research and development expenses were $72,923,000 during 2016 compared to $59,604,000 in 2015, an increase of $13,319,000, or 22%. This increase was primarily driven by higher costs for additional resources,

including personnel, focused on application engineering for new production programs of existing products, development of new products and a program to develop the next generation of seat comfort products. New product development includes automotive cooled storage devices, automotive interior thermal management devices, medical thermal management devices, battery thermal management devices, battery management systems, advanced automotive electronics solutions and other potential products. The CSZ acquisition also increased our net research and development expenses by $1,856,000.

Increases in research and development were partially offset by research and development reimbursement totaling $6,660,000 during 2016 and $9,607,000 during 2015.

We classify development and prototype costs and related reimbursements as research and development. This is consistent with accounting standards applied in the automotive industry. Depreciation costs for tooling are included in cost of sales.

Acquisition Transaction Expenses. During 2016, we incurred $743,000 in fees and expenses associated with the acquisition of CSZ which was completed on April 1, 2016. During 2015, we did not incur any acquisition transaction expenses.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased to $115,252,000, which included $16,258,000 in selling, general and administrative expenses for CSZ, during 2016 from $95,456,000 during 2015. Excluding the CSZ expenses, selling, general and administrative expenses increased by $3,538,000, or 4%.   This increase primarily resulted from new human resource management system and product lifecycle management business software implementation projects totaling $3,513,000, a one-time expense during the fourth quarter associated with a management reorganization totaling $2,000,000 and higher wages and benefits costs resulting from new employee hiring, merit increases and administrative costs associated with the new facilities in Vietnam and Macedonia, partially offset by lower management incentive expenses.

Since the trading price of our Common Stock decreased during 2016 but increased during 2015, we recorded a SAR related compensation benefit totaling $738,000 for 2016 as compared with an expense of $6,298,000 during 2015, a change that reduced our total selling, general and administrative expense by $7,035,000 during 2016 compared with 2015.

Foreign currency gain (loss). During 2016 we incurred a net foreign currency gain of $7,810,000 which included a net realized gain of $1,706,000 and a net unrealized gain of $6,104,000. The unrealized gain is primarily the result of holding significant amounts of USD cash at our subsidiaries in Europe which have the EUR as the functional currency and due to certain intercompany relationships between these European subsidiaries and our U.S. based companies. Much of the gain was recorded during the fourth quarter when the USD strengthened relative to the EUR. During 2015, we had a foreign currency loss of $1,121,000. This amount was lower than 2016 mainly due to lower cash balances and due to a higher ratio of cash held as Euro at our European subsidiaries.

Income Tax Expense. We recorded an income tax expense of $33,965,000 during 2016 which included the one-time withholding tax expense of $7,600,000 and income tax expense of $2,500,000 related to the Reorganization. Excluding these one-time expenses, our income tax expense would have been $23,865,000 representing an effective tax rate of 22% on earnings before income tax of $110,563,000. We recorded an income tax expense of $33,545,000 during 2015 representing an effective tax rate of 26% on earnings before income tax of $128,938,000. This reduction was due to lower average tax rates on our foreign income. The effective tax rates for 2016, excluding the one-time expense related to the Reorganization, and 2015 were lower than the U.S. Federal rate of 34% primarily due to the impact of lower statutory rates for our subsidiaries operating in foreign jurisdictions.

Liquidity and Capital Resources

Cash and Cash Flows

The Company has funded its financial needs primarily through cash flows from operating activities and equity and debt financings. Based on its current operating plan, management believes cash and cash equivalents at December 31, 2017, together with cash flows from operating activities, and borrowing available under our credit agreement, are sufficient to meet operating and capital expenditure needs, and to service debt, for at least the next 12 months. However, if cash flows from operations decline, we may need to obtain alternative sources of capital and reduce or delay capital expenditures, acquisitions and investments, all of which could impede the implementation of our business strategy and adversely affect our results of operations and financial condition. In addition, it is likely that we will need to complete one or more equity or debt financings if we consummate any significant acquisition or a

number of smaller acquisitions. There can be no assurance that such capital will be available at all or on reasonable terms, which could adversely affect our future operations and business strategy.

The following table represents our cash and cash equivalents and short-term investments:

	December 31, 2017	December 31, 2016
	(in Thousands)	
Cash and cash equivalents at beginning of period	$ 177,187	$ 144,479
Cash from operating activities	49,880	108,400
Cash used in investing activities	(117,688)	(144,338)
Cash from financing activities	(31,564)	79,858
Foreign currency effect on cash and cash equivalents	25,357	(11,212)
Cash and cash equivalents at end of period	$ 103,172	$ 177,187

Cash Flows From Operating Activities

We manage our cash, cash equivalents and short-term investments in order to fund operating requirements and preserve liquidity to take advantage of future business opportunities. The following table compares the cash flows from operating activities earned during 2017 with those earned in 2016:

	Year Ended December 31,		
	2017	2016	Change
Operating Activities:		(in Thousands)	
Net income	$ 35,227	$ 76,598	$ (41,371)
Non-cash adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	44,972	37,764	7,208
Deferred income taxes	5,135	(8,843)	13,978
Stock compensation	12,507	9,186	3,321
Loss on sale of property and equipment	1,042	468	574
Provision for doubtful accounts	(469)	108	(577)
Defined benefit pension plan expense	(23)	184	(207)
Net income before non-cash adjustments	98,391	115,465	(17,074)
Changes in operating assets and liabilities:			
Accounts receivable	6,033	(17,971)	24,004
Inventory	(4,348)	(5,933)	1,585
Prepaid expenses and other assets	(12,334)	9,106	(6,984)
Accounts payable	(7,691)	4,419	(12,110)
Accrued liabilities	(39,171)	3,314	(47,941)
Net cash provided by operating activities	49,880	108,400	(58,520)

Cash provided by operating activities during 2017 was $49,880,000, representing a decrease of $58,520,000 or 54% from cash provided by operating activities during 2016, which was $108,400,000. The following table highlights significant differences between the operating cash flows for the periods ending December 31, 2017 and 2016, respectively:

	(in Thousands)
Net cash provided by operating activities during 2016	$ 108,400
Decrease from lower net income before non-cash adjustments	(17,074)
Taxes paid related to the Reorganization	(35,100)
Other changes in working capital, net.	(6,346)
Net cash provided by operating activities during 2017	$ 49,880

Net income before non-cash adjustments decreased due to higher net research and development expense, higher selling, general and administrative expenses and higher interest expense in 2017 as compared to 2016. These amounts were partially offset by higher product revenue and gross margin. Other changes in working capital, net exclude changes in accrued liabilities associated with the Reorganization tax payments and primarily consist of favorable cash flows related to accounts receivable and inventory and unfavorable amounts related to accounts payable.

Working Capital

The following table illustrates changes in working capital during 2017:

	(in Thousands)
Working capital at December 31, 2016	$ 290,740
Decrease in cash and cash equivalents	(74,015)
Foreign currency effect on working capital	13,916
Working capital acquired with Etratech	11,430
Prepaid expenses and other assets	12,334
Tax payments associated with the Reorganization	35,100
Other items	249
Working capital at December 31, 2017	$ 289,754

Our working capital decreased due to our lower cash balance which was offset by four significant increases, including currency translation, an acquisition, an increase in our prepaid and other assets and tax payments made during 2017. The currency impact of $13,916,000 on working capital is mainly the result of the currency translation of working capital at our European subsidiaries. At December 31, 2017 the U.S. Dollar/European Euro exchange rate was $1.20 as compared with an exchange rate of $1.05 at December 31, 2016. Approximately 22% of our product revenues are generated in Europe. Working capital also increased due to the acquisition of Etratech which had $11,430,000 in working capital when it was acquired on November 1, 2017. Prepaid expenses and other assets were higher primarily due to higher prepaid income tax receivables in Europe. Finally, the Reorganization tax payment, which was accrued as of December 31, 2016, and therefore part of working capital, was paid during the first half of 2017.

Cash Flows From Investing Activities

Cash used in investing activities was $117,688,000 during 2017, reflecting the acquisition of Etratech and purchases of property and equipment related to expansion of production capacity, including at our newest facilities in Mexico, Vietnam and Macedonia, and replacement of existing equipment. See Note 4 to the consolidated financial statements included herein for information regarding the acquisition of Etratech.

Cash Flows From Financing Activities

Cash used in financing activities was $31,564,000 during 2017, reflecting payments of principal on the U.S. Revolving Note, DEG China Loan and the DEG Vietnam Loan (each as defined below) totaling $27,156,000 in aggregate. As of December 31, 2017, the total availability under the Revolving Note was $220,859,000. Cash was also paid for cancellations of restricted stock awards totaling $1,837,000.

Debt

The Company, together with certain direct and indirect subsidiaries, has an outstanding credit agreement (the “Credit Agreement”) with a consortium of lenders and Bank of America, N.A., as administrative agent. The Credit Agreement provides the Company a revolving credit note (“U.S. Revolving Note”) with a maximum borrowing capacity of $350,000,000.

All subsidiary borrowers and guarantors participating in the Credit Agreement have entered into a related pledge and security agreement. The security agreement grants a security interest to the lenders in substantially all of the personal property of subsidiaries designated as borrowers to secure their respective obligations under the Credit Agreement, including the stock and membership interest of specified subsidiaries (limited to 66% of the stock in case of certain non-US subsidiaries). The Credit Agreement restricts the amount of dividend payments the Company can make to shareholders.

The Credit Agreement requires the Company to maintain a minimum Consolidated Interest Coverage Ratio and a Consolidated Leverage Ratio. Definitions for these financial ratios are provided in the Credit Agreement.

Under the Credit Agreement, U.S. Dollar denominated loans bear interest at either a base rate ("Base Rate Loans") or Eurocurrency rate ("Eurocurrency Rate Loans"), plus a margin ("Applicable Rate"). The base rate is equal to the highest of the Federal Funds Rate (1.33% at December 31, 2017) plus 0.50%, Bank of America's prime rate (4.50% at December 31, 2017), or a one month Eurocurrency rate (0.00% at December 31, 2017) plus 1.00%. The Eurocurrency rate for loans denominated in U.S. Dollars is equal to the London Interbank Offered Rate (1.56% at December 31, 2017). All loans denominated in a currency other than the U.S. Dollar must be Eurocurrency Rate Loans. Interest is payable at least quarterly.

The Applicable Rate varies based on the Consolidated Leverage Ratio reported by the Company. As long as the Company is not in default of the terms and conditions of the Credit Agreement, the lowest and highest possible Applicable Rate is 1.25% and 2.00%, respectively, for Eurocurrency Rate Loans and 0.25% and 1.00%, respectively, for Base Rate Loans.

The Company also has two fixed interest rate loans with the German Investment Corporation ("DEG"), a subsidiary of KfW banking group, a German government-owned development bank. The first, a loan we used to fund capital investments in China (the "DEG China Loan"), is subject to semi-annual principal payments that began March, 2015 and will end September, 2019. Under the terms of the DEG China Loan, the Company must maintain a minimum Debt-to-Equity Ratio, Current Ratio and Debt Service Coverage Ratio, as defined by the DEG China Loan agreement, based on the financial statements of Gentherm's wholly owned subsidiary, Gentherm Automotive Systems (China) Ltd.

The Company's second fixed interest rate senior loan agreement with DEG was used to finance the construction and set up of the Vietnam production facility ("DEG Vietnam Loan"). The DEG Vietnam Loan is subject to semi-annual principal payments that began November, 2017 and will end May, 2023. Under the terms of the DEG Vietnam Loan, the Company must maintain a minimum Currency Ratio, Equity Ratio and Enhanced Equity Ratio, each as defined by the DEG Vietnam Loan agreement, based on the financial statements of Gentherm's wholly owned subsidiary, Gentherm Vietnam Co. Ltd.

The following table summarizes the Company's debt at December 31, 2017 (in thousands).

	Interest Rate	Principal Balance
Credit Agreement:		
U.S. Revolving Note (U.S. Dollar Denominations)	3.07%	$ 129,000
DEG China Loan	4.25%	1,919
DEG Vietnam Loan	5.21%	13,750
Total debt		144,669
Current portion		(3,460)
Long-term debt, less current maturities		$ 141,209

As of December 31, 2017, we were in compliance with all terms as outlined in the Credit Agreement, DEG China Loan and DEG Vietnam Loan. Undrawn borrowing capacity under the U.S. Revolving Note was $220,859,000 as of December 31, 2017.

Recent Accounting Pronouncements

Derivatives and Hedging. In August, 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." ASU 2017-12 expands the number and type of nonfinancial and interest rate risk components an entity has the ability to designate as the hedged risk in a qualifying hedging relationship. ASU 2017-12 requires entities to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedge item is reported. This approach simplifies the financial statement reporting for qualifying hedging relationships by

eliminating the requirement to separately report the portion of the hedge deemed to be ineffective. For cash flow hedges, the entire change in the fair value of the hedging instrument included in the assessment of hedge effectiveness is recorded in other comprehensive income and reclassified to earnings when the hedged item affects earnings. Furthermore, income statement effects from fair value and cash flow hedges are to be presented in tabular disclosure.

ASU 2017-12 is effective for annual and any interim periods beginning after December 15, 2018. Early adoption of the amendments in this update are permitted. For cash flow hedges existing at the date of adoption, an entity should apply a cumulative catch-up adjustment related to eliminating the separate measurement of ineffectiveness to accumulative other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year that an entity adopts the amendments in this update. We are currently in the process of determining the impact the implementation of ASU 2017-12 will have on the Company's financial statements.

Share-Based Payment Awards. In May, 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting." ASU 2017-09 clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting, in accordance with Topic 718. An entity should account for the effect of a modification unless all of the following are met:

1) The fair value of the modified award is the same as the fair value of the original award immediately before the original award is modified. If the modification does not affect any of the inputs of the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification.

2) The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified.

3) The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified.

ASU 2017-09 is effective for annual and any interim periods beginning after December 15, 2017. Early adoption of the amendments in this update is permitted. The amendments in ASU 2017-09 should be applied on a prospective basis and in the initial period of adoption, entities must disclose the nature of and reason for the change in accounting principle. The Company has not historically made changes to the terms or conditions of shared-based payment awards and does not expect adoption of ASU 2017-09 to have a material impact the consolidated financial statements when it is adopted in the first quarter of 2018.

Goodwill Impairment. In January, 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." ASU 2017-04 modified the concept of impairment of goodwill to be a condition that exists when the carrying value of a reporting unit that includes goodwill exceeds its fair value. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, limited to the total amount of goodwill allocated to that reporting unit. Entities no longer will determine goodwill impairment by calculating the implied fair value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities as if the reporting unit had been acquired in a business combination.

ASU 2017-04 is effective for annual and any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption of the amendments in this update is permitted. The amendments in ASU 2017-04 must be applied on a prospective basis and in the initial period of adoption, entities must disclose the nature of and reason for the change in accounting principle. The Company expects adoption of ASU 2017-04 will reduce the complexity of evaluating goodwill for impairment.

Business Combinations. In January, 2017, the FASB issued ASU 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business" to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. To be considered a business, the integrated set of activities and assets to be evaluated must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create an output. If substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, the integrated set or activities and assets is not considered a business. ASU 2017-01 provides a framework to assist entities in evaluating whether an integrated set of activities and assets include both an input and a substantive process when the assets' fair value is not concentrated in a single identifiable asset or group of similar identifiable assets.

ASU 2017-01 is effective for fiscal years and interim periods beginning after December 15, 2017. The amendments in ASU 2017-01 should be applied on or after the effective date. No disclosure is required at adoption. The Company expects the impact from adopting this update to be immaterial to the consolidated financial statements.

Income Taxes. In October, 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." ASU 2016-16 modifies the current prohibition to recognize deferred income taxes from differences between the tax basis of assets in the buyer's tax jurisdiction and their cost resulting from an intra-entity transfer from one tax-paying component to another tax-paying component of the same consolidated group. Under current GAAP, deferred income taxes for intra-entity asset transfers are not recognized until the asset is sold to an outside party. ASU 2016-16 allows entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs.

ASU 2016-16 is effective for fiscal years and interim periods beginning after December 15, 2017. For entities that issue interim financial statements and whose current fiscal year end date is December 31, 2016, early adoption can be made during the three-month period ending March 31, 2017. The amendments in ASU 2016-16 should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We have evaluated the impact the amendments in ASU 2016-16 will have on the Company's consolidated financial statements and determined that a favorable adjustment of approximately $27,771,000 will be recorded directly to retained earnings during the three-month period ending March 31, 2018.

Statement of Cash Flows. In August, 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." ASU 2016-15 provides guidance on the classification of eight specific cash receipt and cash payment transactions in the statement of cash flows. The Company focused its evaluation on the following transactions to determine the effect ASU 2016-15 will have on the Company's Consolidated Statements of Cash Flows:

4) Debt extinguishment payments and debt prepayments are to be shown as cash outflows for financing activities. Presently, Gentherm classifies debt extinguishment payments within operating activities.

5) Payments made to settle contingent consideration liabilities not made soon after the acquisition date of a business combination should be recognized as cash outflows for financing activities up to the amount of the liability recognized at the acquisition date. Payments, or the portion of a payment, to settle contingent consideration liabilities that exceed the amount of the liability recognized at the acquisition date will be recognized as cash outflows for operating activities.

6) Cash receipts from the settlement of insurance claims, excluding those related to corporate-owned life insurance policies shall be classified on the basis of the related insurance coverage. For example, proceeds received to cover claims issued under product recall liability insurance would be classified as cash inflows from operating activities.

7) Cash receipts from the settlement of corporate-owned life insurance policies shall be classified as cash inflows from investing activities.

For public companies, ASU 2016-15 is effective for fiscal years and interim periods beginning after December 15, 2017 and must be applied retrospectively to all periods presented. Early adoption of the amendments in this update is permitted. None of the cash receipt and cash payment transactions, including those that were not the focus of management's evaluation, addressed by the update are transactions that are typical or customary to Gentherm business. According, management does not expect the amendments in this update have a material impact to the Company. Gentherm will adopt the amendments in ASU 2016-15 during the three-month period ending March 31, 2018.

Stock Compensation. In March, 2016, the FASB issued ASU 2016-09, "Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." ASU 2016-09 involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under the new standard, income tax benefits and deficiencies are to be recognized as income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. An entity should also recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. ASU 2016-09 requires excess tax benefits to be classified along with other income tax cash flows as an operating activity and clarifies that cash paid by an employer when directly withholding shares for tax-withholding purposes should be classified as a financing activity.

ASU 2016-09 is effective for fiscal years and interim periods beginning after December 15, 2016. The Company adopted ASU 2016-09 the first quarter of 2017 and recognized a $1,496,000 adjustment to the beginning balance of retained earnings for previously unrecognized excess tax benefits on share-based payment awards. Amendments related to the presentation of employee taxes paid on the statements of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement were applied retrospectively to all periods presented. Amendments requiring recognition of excess tax payments in the income statement and the classification of those excess tax benefits on the statement of cash flows were applied prospectively, beginning with the three-month period ended March 31, 2017. Excess tax benefits on share-based payment awards in the statement of cash flows in prior years have not been adjusted.

Leases. In February, 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." ASU 2016-02 requires lessees to recognize on their balance sheet a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term. Payments to be made in optional periods should be included in the measurement of lease assets and liabilities if the lessee is reasonably certain it will exercise an option to extend the lease or not exercise an option to terminate the lease. While ASU 2016-02 continues to differentiate between finance or capital leases and operating leases, the principal change from current lease accounting guidance is that lease assets and liabilities arising from operating leases should be recognized on the balance sheet.

ASU 2016-02 is effective for fiscal years and interim periods beginning after December 15, 2018. Early adoption of the amendments in this update are permitted. Lessees are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach which includes a number of practical expedients, including the ability to use hindsight in evaluating lessee options to extend or terminate a lease. An entity that elects to apply the practical expedients will be required to recognize a right-of-use asset and lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payment that were tracked and disclosed under previous GAAP. We are currently in the process of determining the impact the implementation of ASU 2016-02 will have on the Company's financial statements.

Revenue from Contracts with Customers. In May, 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-09, "Revenue from Contracts with Customers." ASU 2014-09 was developed to enable financial statement users to better understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The update's core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Companies are to use a five-step contract review model to ensure revenue gets recognized, measured and disclosed in accordance with this principle. The FASB issued several amendments to the new standard, including a one-year deferral of the original effective date, and new methods for identifying performance obligation aimed at reducing the cost and complexity or compliance.

This update permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). We have chosen to use the cumulative catch-up transition method.

Gentherm is in the process of completing the five-step contract review process for all existing contracts with customers, across all business units. While we continue to assess all potential impacts from the update, we currently believe the most significant impact relates to our accounting for options that give customers the right to purchase additional goods under long-term supply agreements in the future. Due to the complexity of certain of our automotive supply contracts, the actual revenue recognition treatment for customer purchase options will depend on contract-specific terms and could vary from other contracts that are similar in nature. An unfavorable adjustment will be recorded directly to retained earnings during the three-month period ending March 31, 2018. Our current estimate for this adjustment is $3,600,000. We are not aware of any impacts to revenue from contracts with customers at Etratech as a result of our assessment of potential impacts from the update.

Off-Balance Sheet Arrangements

We use letters of credit to guarantee our performance under specific construction contracts executed by our subsidiaries, GPT and CSZ. The expiration dates of the letter of credit contracts coincide with the expected completion date of the contract. Extensions are normally made if performance obligations continue beyond the expected completion date. At December 31, 2017, we had outstanding letters of credit of $141,000.

Tabular Disclosure of Contractual Obligations

As of December 31, 2017, the following amounts, aggregated by type of contract obligation, are known to come due in the periods stated:

Contractual Obligations	Total	Less than 1 Yr	1-3 Yrs	3-5 Yrs	More than 5 Yrs
Long-Term Debt Obligations(1)	$ 144,669	$ 3,460	$ 5,959	$ 134,000	$ 1,250
Operating Lease Obligations	$ 29,058	$ 10,630	$ 10,595	$ 4,022	$ 3,811
Totals	$ 173,727	$ 14,090	$ 16,554	$ 138,022	$ 5,061

(1) Long-Term Debt Obligations do not include an amount payable for interest.

The Company does not have any outstanding capital lease agreements or purchase obligations that exceed one year.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk for changes in interest rates relates primarily to our debt obligations and foreign currency contracts. We have in the past, and may in the future, place our investments in bank certificates of deposits, debt instruments of the U. S. government, and in high-quality corporate issuers.

We are exposed to market risk from changes in foreign currency exchange rates, short-term interest rates and price fluctuations of certain material commodities such as copper. Market risks for changes in interest rates relate primarily to our debt obligations under our Amended Credit Agreement. Foreign currency exchange risks are attributable to sales to foreign customers and purchases from foreign suppliers not denominated in a location's functional currency, foreign plant operations, intercompany indebtedness, intercompany investments and include exposures to the European Euro, Mexican Peso, Canadian Dollar, Hungarian Forint, Macedonian Denar, Ukrainian Hryvnia, Japanese Yen, Chinese Renminbi, Korean Won and Vietnamese Dong.

The Company regularly enters into derivative contracts with the objective of managing its financial and operational exposure arising from these risks by offsetting gains and losses on the underlying exposures with gains and losses on the financial instruments used to hedge them. The maximum length of time over which we hedge our exposure to foreign currency exchange risks is one year. We had foreign currency derivative contracts with a notional value of $29,273,000 and $29,538,000 outstanding at December 31, 2017 and 2016, respectively.

The maximum length of time over which we hedge our exposure to price fluctuations in material commodities is two years. We had copper commodity swap contracts with a notional value of $404,250 and $407,000 outstanding at December 31, 2017 and 2016, respectively.

We do not enter into derivative financial instruments for speculative or trading purposes. Our hedging relationships are formally documented at the inception of the hedge, and hedges must be highly effective in offsetting changes to future cash flows on hedged transactions both at the inception of a hedge and on an ongoing basis to be designated for hedge accounting treatment. For derivative contracts which can be classified as a cash flow hedge, the effective portion of the change in the fair value of the derivative is recorded to accumulated other comprehensive loss in the consolidated balance sheet. When the underlying hedge transaction is realized, the gain or loss included in accumulated other comprehensive loss is recorded in earnings in the consolidated statement of income on the same line as the gain or loss on the hedged item attributable to the hedged risk. We record the ineffective portion of foreign currency hedging instruments, if any, to foreign currency gain (loss) in the consolidated statements of income. See Note 16 to our consolidated financial statements for the amount of unrealized loss associated with copper commodity derivatives reported in accumulated other comprehensive income as of December 31, 2016 that was reclassified into earnings during 2017. Though we continuously monitor the hedging program, derivative positions and hedging strategies, foreign currency forward exchange agreements have not always been designated as hedging instruments for accounting purposes.

The Company uses an income approach to value derivative instruments, analyzing quoted market prices to calculate the forward values and then discounts such forward values to the present value using benchmark rates at commonly quoted intervals for the instrument's full term.

In December 2015, our subsidiary, Gentherm GmbH, entered into an agreement settling all claims against UniCredit Bank AG pertaining to a 10 year currency related swap ("CRS") entered into by Gentherm Germany in March 2008. Prior to the settlement, a lawsuit filed by Gentherm GmbH in 2011 was pending appeal at the Higher Regional Court in Munich, Germany. As a result of the settlement, the CRS and its related liability to Gentherm have been terminated and Gentherm's remaining interest in an offsetting derivative contract designed to limit the market risk of payments due under the CRS was sold. Gentherm realized a one-time, pre-tax gain of $9,949,000 in the fourth quarter of 2015. Gentherm made a final cash settlement payment of $7,593,000 during the fourth quarter of 2015.

Information related to the fair values of derivative instruments in our consolidated balance sheet as of December 31, 2017 is as follows (in thousands):

			Asset Derivatives		Liability Derivatives		
	Hedge Designation	**Fair Value Hierarchy**	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**	**Net Asset/ (Liabilities)**
Foreign currency derivatives	Cash flow hedge	Level 2	Current assets	141	Current liabilities	$ (1,050)	$ (909)
Commodity derivatives	Cash flow hedge	Level 2	Current assets	$ 72			$ 72

Information related to the fair values of derivative instruments in our consolidated balance sheet as of December 31, 2016 is as follows (in thousands):

			Asset Derivatives		Liability Derivatives		
	Hedge Designation	**Fair Value Hierarchy**	**Balance Sheet Location**	**Fair Value**	**Balance Sheet Location**	**Fair Value**	**Net Asset/ (Liabilities)**
Foreign currency derivatives	Cash flow hedge	Level 2			Current liabilities	$ (1,395)	$ (1,395)
Commodity derivatives	Cash flow hedge	Level 2	Current assets	$ 18			$ 18

Information related to the effect of derivative instruments on our consolidated income statement and statement of comprehensive income is as follows (in thousands):

	Location	**Year Ended December 31, 2017**	**Year Ended December 31, 2016**
Foreign currency derivatives	Product revenues	(3)	—
	Cost of sales	2,209	(608)
	Selling, general and administrative	(216)	139
	Other comprehensive (loss) income	302	(1,395)
	Foreign currency gain	(112)	102
Total foreign currency derivatives		$ 2,180	$ (1,762)
Commodity derivatives	Cost of sales	$ 202	$ (666)
	Other comprehensive income (loss)	54	743
Total commodity derivatives		$ 256	$ 77

Interest Rate Sensitivity

The table presents principal cash flows and related weighted average interest rates by expected maturity dates for each of the Company's debt obligations. The information is presented in U.S. dollar equivalents, which is the Company's reporting currency. The instruments actual cash flows are denominated in U.S. dollars ($USD) or European Euros (€EUR), as indicated in parentheses.

December 31, 2017

	Expected Maturity Date							
	2018	2019	2020	2021	2022	Thereafter	Total	Fair Value
	(In Thousands except rate information)							
Liabilities								
Long Term Debt:								
Fixed Rate (€EUR)	$ 960	$ 959	$ —	$ —	$ —	$ —	$ 1,919	$ 2,000
Average Interest Rate	4.25%	4.25%					4.25%	
Variable Rate ($USD)	$ —	$ —	$ —	$ 129,000	$ —	$ —	$ 129,000	$ 129,000
Average Interest Rate				3.07%			3.07%	
Fixed Rate ($USD)	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$ 1,250	$ 13,750	$ 13,600
Average Interest Rate	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	

Exchange Rate Sensitivity

The table below provides information about the Company's foreign currency forward exchange rate agreements that are sensitive to changes in foreign currency exchange rates. The table presents the notional amounts and weighted average exchange rates by expected (contractual) maturity dates for each type of foreign currency forward exchange agreement. These notional amounts generally are used to calculate the contractual payments to be exchanged under the contract.

December 31, 2017

	Expected Maturity or Transaction Date							
Anticipated Transactions And Related Derivatives	2018	2019	2020	2021	2022	Thereafter	Total	Fair Value
	(In thousands except rate information)							
$US functional currency								
Forward Exchange Agreements:								
(Receive MXN/Pay USD$)								
Total Contract Amount ($)	$ 23,420	—	—	—	—	—	$ 23,420	$ (1,050)
Average Contract Rate	19.21						19.21	
(Receive CAD/Pay USD$)								
Total Contract Amount ($)	$ 5,853	—	—	—	—	—	$ 5,853	$ 141
Average Contract Rate	1.28						1.28	

Commodity Price Sensitivity

The table below provides information about the Company's futures contracts that are sensitive to changes in commodity prices, specifically copper prices. For the futures contracts the table presents the notional amounts in metric tons (MT), the weighted average contract prices, and the total dollar contract amount by expected maturity dates. Contract amounts are used to calculate the contractual payments and quantity of copper to be exchanged under the futures contracts.

December 31, 2017

	Carrying Amount	Fair Value
On Balance Sheet Commodity Position and Related Derivatives (in thousands)	$ 72	$ 72

	Expected Maturity	
	2018	Fair Value
Related Derivatives		
Futures Contracts (Long):		
Contract Volumes (metric tons)	70	
Weighted Average Price (per metric ton)	$ 5,775	
Contract Amount (in thousands) ($)	$ 404	$ 72

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Supplementary Financial Information – Selected Quarterly Financial Data

Unaudited Quarterly Financial Data
For the Years Ended December 31, 2017 and 2016
(In thousands, except per share data)

	For the three months ended,			
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Product revenues	$ 249,267	$ 243,378	$ 235,853	$ 257,185
Gross margin	85,160	78,405	70,229	77,319
Operating income	34,849	25,223	16,177	21,075
Net income	25,402	8,513	6,554	(5,242)
Basic earnings per share	$ 0.69	$ 0.23	$ 0.18	$ (0.14)
Diluted earnings per share	$ 0.69	$ 0.23	$ 0.18	$ (0.14)

	For the three months ended,			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
Product revenues	$ 215,714	$ 232,720	$ 232,625	$ 236,541
Gross margin	68,242	71,495	76,694	78,606
Operating income	29,885	22,353	27,415	26,466
Net income	11,893	18,446	20,223	26,036
Basic earnings per share	$ 0.33	$ 0.51	$ 0.55	$ 0.71
Diluted earnings per share	$ 0.33	$ 0.50	$ 0.55	$ 0.71

The sum of the quarterly amounts shown above may not be the same as the annual totals shown in our consolidated financial statements or elsewhere in this report due to rounding. The audited consolidated financial statements and related financial information required to be filed hereunder are indexed on page F-1 of this report and are incorporated herein by reference.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Disclosure controls and procedures are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

In designing and evaluating disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired objectives. Also, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations of all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. The design of any system of controls is based, in part, upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Our management has evaluated, with the participation of our principal executive and principal financial officers, the effectiveness of our disclosure controls and procedures as of December 31, 2017. Based on their evaluation, our principal executive and principal financial officers have concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2017.

Management's Report On Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting 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. 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 our transactions and dispositions of assets, (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 our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, including the possibility of collusion or improper management override of controls, misstatements due to error or fraud, internal control over financial reporting may not prevent or detect misstatements on a timely basis or not at all. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management of the Company assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 Internal Control-Integrated Framework. We have excluded from our assessment the internal control over financial reporting of Etratech, Inc. ("Etratech"), which we acquired on November 1, 2017. Total assets and revenues of this acquisition represent approximately 7% and 1%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2017.

Based on this assessment, management concluded that, as of December 31, 2017, the Company's internal control over financial reporting was effective at the reasonable assurance level.

Our independent registered public accounting firm, Grant Thornton LLP, independently assessed the effectiveness of our internal control over financial reporting as stated in its report included herein.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with such evaluation that occurred during our fourth quarter ended December 31, 2017 that has materially affected, or is reasonable likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is set forth under the following captions in our proxy statement to be filed with respect to the 2018 annual meeting of shareholders (the "Proxy Statement"), all of which is incorporated herein by reference: "Proposal No. 1 – Election of Directors", "Board Matters – The Board of Directors", "Board Matters – Committees of the Board", "Board Matters – Corporate Governance", "Additional Information – Section 16(a) Beneficial Ownership Reporting Compliance" and "Additional Information – Requirements for Submission of Shareholder Proposals and Nominations for 2019 Annual Meeting."

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item set forth under the following captions in our Proxy Statement, all of which is incorporated herein by reference: "Compensation Discussion and Analysis", "Named Executive Officer Compensation Tables", "Board Matters – Director Compensation", "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report."

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

The information required by this item is set forth under the following captions in our Proxy Statement, all of which is incorporated herein by reference: "Additional Information – Equity Compensation Plans" and "Security Ownership of Certain Beneficial Owners and Management."

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

The information required by this item is set forth under the following captions in our Proxy Statement, all of which is incorporated herein by reference: "Related Person Transactions" and "Proposal No. 1 – Election of Directors – Director Independence."

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this item is set forth under the following captions in our Proxy Statement, which is incorporated by reference herein by reference: "Audit Committee Matters."

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this Report:

1. Financial Statements.

The following financial statements of the Company and reports of independent accountants are included in Item 15 of this Annual Report:

	Page
Reports of Independent Registered Public Accounting Firm.	F-2
Consolidated Balance Sheets	F-5
Consolidated Statements of Income	F-6
Consolidated Statements of Comprehensive Income	F-7
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2. Financial Statement Schedule.

The following Schedule to Financial Statements is included herein:

Schedule II — Valuation and Qualifying Accounts.

3. Exhibits.

The exhibits to this Report are as follows:

			Incorporated by Reference			
Exhibit Number	Exhibit Description	Filed/Furnished Herewith	Form	Period Ending	Exhibit / Appendix Number	Filing Date
2.1**	Membership Interest Purchase Agreement dated April 1, 2016 by and among the Company, Cincinnati Sub-Zero Products, LLC, CSZ Holdings, Inc., The Leonard Berke Q-Tip Trust, The Leonard Berke Exempt Q-Tip Trust, The Leonard Berke Credit Shelter Trust, Cincinnati Sub-Zero Trust F/B/O Steven Berke DTD 5/20/1999 and Steven J. Berke		8-K		2.1	4/4/16
2.2**	Real Estate Purchase Agreement		8-K		2.2	4/4/16
2.3**	Share and Asset Purchase Agreement, dated as of November 1, 2017, by and among Gentherm Incorporated, certain of its subsidiaries, Etratech Inc., Etratech Enterprises Inc., and certain subsidiaries and all of the shareholders of Etratech Enterprises Inc.		8-K		2.1	11/1/17
3.1	Restated Articles of Incorporation of Gentherm Incorporated (the “Company”)		8-K		3.1	5/28/15
3.2	Amended and Restated Bylaws of the Company		8-K		3.1	5/26/16
4.1	Rights Agreement dated January 26, 2009 by and between the Company and Computershare Trust Company, N.A., as Rights Agent		8-K		4.1	1/27/09
4.2	Amendment to Rights Agreement, dated as of March 30, 2011, by and between the Company and Computershare Trust Company, N.A., as Rights Agent		8-K		4.2	3/31/11
10.1*	Summary of Non-Employee Director Compensation	X				
10.2.1*	2006 Equity Incentive Plan		Schedule 14A		A	4/24/06
10.2.2*	First Amendment to 2006 Equity Incentive Plan		10-K	12/31/06	10.3.2	2/20/07
10.2.3*	Second Amendment to 2006 Equity Incentive Plan		8-K		10.1	3/20/07
10.2.4*	Third Amendment to 2006 Equity Incentive Plan		Schedule 14A		B	4/20/09
10.2.5*	Fourth Amendment to 2006 Equity Incentive Plan		8-K		10.8	3/31/11
10.2.6*	Fifth Amendment to 2006 Equity Incentive Plan		10-K	12/31/11	10.3.6	3/15/12
10.2.7*	Sixth Amendment to 2006 Equity Incentive Plan		8-K		10.2	5/20/13
10.3.1*	2011 Equity Incentive Plan		Schedule 14A		A	5/20/11
10.3.2*	First Amendment to 2011 Equity Incentive Plan		10-K	12/31/11	10.3.8	3/15/12
10.3.3*	Second Amendment to 2011 Equity Incentive Plan		8-K		10.3	5/11/12
10.3.4*	Third Amendment to 2011 Equity Incentive Plan		8-K		10.3	5/20/13
10.4.1*	2013 Equity Incentive Plan		Schedule 14A		A	4/22/13
10.4.2*	Amendment to the Gentherm Incorporated 2013 Equity Incentive Plan		8-K		10.2	5/19/17
10.4.3*	Form of Stock Option Award Agreement under the 2013 Equity Incentive Plan		8-K		10.1	6/27/13
10.4.4*	Form of Stock Appreciation Right Award Agreement under the 2013 Equity Incentive Plan		8-K		10.2	6/27/13
10.4.5*	Form of Restricted Stock Award Agreement under the 2013 Equity Incentive Plan		8-K		10.3	6/27/13

Exhibit Number	Exhibit Description	Filed/Furnished Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit / Appendix Number	Filing Date
10.4.6*	Form of Restricted Stock Award Agreement (Retention Award) under the 2013 Equity Incentive Plan		8-K		10.1	10/4/17
10.5.1*	The Executive Nonqualified Defined Benefit Plan of Gentherm Incorporated effective as of April 1, 2008		10-Q	6/30/08	10.18	8/11/08
10.5.2*	Amendment To The Executive Nonqualified Benefit Plan Adoption Agreement		8-K		10.1	5/19/17
10.6.1	Credit Agreement, dated as of August 7, 2014, by and among the Company, Gentherm GmbH, Gentherm (Texas), Inc., Gentherm Canada Ltd., Global Thermoelectric Inc., the lenders party thereto and Bank of America, N.A., as administrative agent		8-K		10.1	8/7/14
10.6.2	First Amendment to Credit Agreement, dated as of April 15, 2015, by and among Gentherm Incorporated, Gentherm GmbH, Gentherm (Texas), Inc., Gentherm Canada Ltd., Global Thermoelectric Inc., Gentherm Properties II, LLC, the lenders party thereto, and Bank of America, N.A., as administrative agent.		8-K		10.1	4/16/15
10.6.3	Second Amendment to Credit Agreement, dated March 17, 2016, by and among Gentherm Incorporated, Gentherm GmbH, Gentherm (Texas), Inc., Gentherm GmbH, Gentherm Global Power Technologies Inc., Gentherm Canada ULC, Gentherm Licensing, LP, Gentherm Enterprises GmbH, Gentherm Licensing GmbH, Gentherm Enterprises, Gentherm Properties III, LLC, the lenders party thereto, and Bank of America, N.A., as administrative agent.		8-K		10.1	3/18/16
10.6.4	Designated Borrower Request and Assumption Agreement		8-K		10.1	4/4/16
10.6.5	Third Amendment to Credit Agreement, dated December 15, 2016, by and among Gentherm Incorporated, Gentherm GmbH, Gentherm (Texas), Inc., Gentherm Licensing, LP, Gentherm GmbH, Gentherm Enterprises GmbH, Gentherm Licensing GmbH, Gentherm Global Power Technologies, Inc., Gentherm Canada ULC, the lenders party thereto, and Bank of America, N.A., as administrative agent.		8-K		10.1	12/16/16
10.6.6	Pledge and Security Agreement, dated as of August 7, 2014, by and among the Company, Gentherm (Texas), Inc., Westridge Haggerty LLC and Bank of America, N.A.		8-K		10.2	8/7/14
10.7*	Amended and Restated Gentherm Incorporated Performance Bonus Plan dated as of February 12, 2018		8-K		10.1	2/14/18
10.8.1*	Executive Relocation and Employment Agreement, dated August 1, 2015, by and between Gentherm Incorporated and Frithjof Oldorff		8-K		10.1	8/3/15
10.8.2*	Extension of Executive Relocation and Employment Agreement dated as of October 3, 2017		10-Q	9/30/17	10.2.2	10/30/17
10.9*	Retirement Agreement between Gentherm Incorporated and Daniel R. Coker, dated as of June 28, 2017		8-K		10.1	6/28/17
10.10*	Employment Contract between Gentherm Incorporated and Phillip Eyler, dated as of September 18, 2017		8-K		10.1	10/3/17
21	List of Subsidiaries (Direct and Indirect) of the Company	X				
23.1	Consent of Grant Thornton LLP	X				
24	Power of Attorney	X				
31.1	Section 302 Certification - CEO	X				
31.2	Section 302 Certification – CFO	X				
32.1	Section 906 Certification – CEO	X				

Exhibit Number	Exhibit Description	Filed/Furnished Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit / Appendix Number	Filing Date
32.2	Section 906 Certification - CFO	X				
101.INS	XBRL Instance Document.	X				
101.SCH	XBRL Taxonomy Extension Schema Document.	X				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	X				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	X				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	X				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	X				

* Indicates management contract or compensatory plan or arrangement.

** Gentherm Incorporated agrees to furnish any omitted schedules or exhibits upon the request of the Securities and Exchange Commission.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Gentherm Incorporated

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Gentherm Incorporated (a Michigan corporation) and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement 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, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Controls – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated February 23, 2018 expressed an unqualified opinion.

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 statement 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 or 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 supporting 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

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2007.

Southfield, Michigan
February 23, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Gentherm Incorporated

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Gentherm Incorporated (a Michigan corporation) and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* 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, 2017, based on criteria established in the 2013 *Internal Control –Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2017, and our report dated February 23, 2018 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting ("Management's Report"). 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.

Our audit of, and opinion on, the Company's internal control over financial reporting does not include the internal control over financial reporting of Etratech Enterprises, Inc, a wholly-owned subsidiary, whose financial statements reflect total assets and revenues constituting 7 and 1 percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2017. As indicated in the accompanying Management's Report, Etratech Enterprises, Inc was acquired during 2017. Management's assertion on the effectiveness of the Company's internal control over financial reporting excluded internal control over financial reporting of Etratech Enterprises, Inc.

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/ GRANT THORNTON LLP

Southfield, Michigan
February 23, 2018

GENTHERM INCORPORATED

CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

	December 31,	
	2017	2016
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 103,172	$ 177,187
Accounts receivable, less allowance of $973 and $1,391, respectively	185,058	170,084
Inventory, net	121,409	105,074
Derivative financial instruments	213	18
Prepaid expenses and other assets	51,217	32,000
Total current assets	461,069	484,363
Property and equipment, net of accumulated depreciation of $83,404 and $47,267, respectively	200,294	172,052
Goodwill	69,685	51,735
Other intangible assets, net of accumulated amortization of $77,622 and $53,965, respectively	83,286	57,557
Deferred financing costs	936	1,221
Deferred income tax assets	30,152	35,299
Other non-current assets	37,983	40,803
Total assets	$ 883,405	$ 843,030
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 89,596	$ 84,511
Accrued liabilities	77,209	105,625
Current maturities of long-term debt	3,460	2,092
Derivative financial instruments	1,050	1,395
Total current liabilities	171,315	193,623
Pension benefit obligations	7,913	7,419
Other Liabilities	2,747	4,092
Long-term debt, less current maturities	141,209	169,433
Deferred tax liabilities	6,347	8,058
Total liabilities	329,531	382,625
Shareholders' equity:		
Common Stock:		
No par value; 55,000,000 shares authorized, 36,761,362 and 36,534,464 issued and outstanding at December 31, 2017 and 2016, respectively	265,048	262,251
Paid-in capital	15,625	10,323
Accumulated other comprehensive income	(20,444)	(69,091)
Accumulated earnings	293,645	256,922
Total shareholders' equity	553,874	460,405
Total liabilities and shareholders' equity	$ 883,405	$ 843,030

The accompanying notes are an integral part of these financial statements

GENTHERM INCORPORATED

CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share data)

	Year Ended December 31,		
	2017	2016	2015
Product revenues	$ 985,683	$ 917,600	$ 856,445
Cost of sales	674,570	622,563	580,066
Gross margin	311,113	295,037	276,379
Operating costs and expenses:			
Research and development expenses	94,515	79,583	69,211
Reimbursed research and development expenses	(12,037)	(6,660)	(9,607)
Net research and development expenses	82,478	72,923	59,604
Acquisition transaction expenses	789	743	—
Selling, general and administrative expenses	130,522	115,252	95,456
Total operating costs and expenses	213,789	188,918	155,060
Operating income	97,324	106,119	121,319
Interest expense	(4,885)	(3,257)	(2,610)
Revaluation of derivatives loss	—	—	(1,102)
Gain on settlement of lawsuit	—	—	9,949
Foreign currency (loss) gain	(23,108)	7,810	1,121
Other (loss) income	(76)	(109)	261
Earnings before income tax	69,255	110,563	128,938
Income tax expense	34,028	33,965	33,545
Net income	$ 35,227	$ 76,598	$ 95,393
Basic earnings per share	$ 0.96	$ 2.10	$ 2.65
Diluted earnings per share	$ 0.96	$ 2.09	$ 2.62
Weighted average number of shares—basic	36,721	36,448	36,032
Weighted average number of shares—diluted	36,814	36,601	36,475

The accompanying notes are an integral part of these financial statements

GENTHERM INCORPORATED

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)

	Year Ended December 31,		
	2017	2016	2015
Net Income	$ 35,227	$ 76,598	$ 95,393
Other comprehensive loss, gross of tax:			
Net gain (loss) on pension benefit obligations	244	(675)	847
Foreign currency translation adjustments	48,059	(16,678)	(25,904)
Unrealized gain (loss) on foreign currency derivative securities	301	(1,395)	10
Unrealized gain (loss) on commodity derivative securities	55	743	(725)
Other comprehensive loss, gross of tax	$ 48,659	$ (18,005)	$ (25,772)
Other comprehensive loss, related tax effects:			
Net gain (loss) on pension benefit obligations	(60)	185	(234)
Foreign currency translation adjustments	148	297	(417)
Unrealized gain (loss) on foreign currency derivative securities	(81)	375	—
Unrealized gain (loss) on commodity derivative securities	(19)	(273)	496
Other comprehensive loss, related tax effect	$ (12)	$ 584	$ (155)
Other comprehensive loss, net of tax:	$ 48,647	$ (17,421)	$ (25,927)
Comprehensive income:	83,874	59,177	69,466

The accompanying notes are an integral part of these financial statements

GENTHERM INCORPORATED

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(In thousands)

	Common Stock		Paid-in	Loss on Pension Benefit	Currency Translation	Foreign Currency Hedge	Commodity Hedge	Accumulated	
	Shares	Amount	Capital	Obligation	Adjustment	Adjustment	Adjustment	Earnings	Total
Balance at December 31, 2014	35,697	$ 243,255	$ (8,224)	$ (2,673)	$ (23,060)	$ (10)	$ —	$ 84,931	$ 294,219
Exercise of Common Stock options for cash	571	12,146	(2,873)	—	—	—	—	—	9,273
Tax benefit from Exercises of Common Stock options	—	—	6,681	—	—	—	—	—	6,681
Common Stock issued to Board of Directors and employees	108	3,734	—	—	—	—	—	—	3,734
Stock option compensation	—	—	3,025	—	—	—	—	—	3,025
Cancelation of restricted stock	(54)	(2,216)	—	—	—	—	—	—	(2,216)
Net loss on pension benefit obligation, net	—	—	—	613	—	—	—	—	613
Currency translation, net	—	—	109	—	(26,321)	—	—	—	(26,212)
Foreign currency hedge, net	—	—	—	—	—	10	—	—	10
Commodity hedge, net	—	—	—	—	—	—	(229)	—	(229)
Net income	—	—	—	—	—	—	—	95,393	95,393
Balance at December 31, 2015	36,322	$ 256,919	$ (1,282)	$ (2,060)	$ (49,381)	$ —	$ (229)	$ 180,324	$ 384,291
Exercise of Common Stock options for cash	113	1,939	(501)	—	—	—	—	—	1,438
Tax benefit from Exercises of Common Stock options	—	—	7,509	—	—	—	—	—	7,509
Common Stock issued to Board of Directors and employees	137	4,589	—	—	—	—	—	—	4,589
Stock option compensation	—		4,597	—	—	—	—	—	4,597
Cancelation of restricted stock	(38)	(1,196)	—	—	—	—	—	—	(1,196)
Net gain on pension benefit obligation, net	—	—	—	(490)	—	—	—	—	(490)
Currency translation, net	—	—	—	—	(16,381)	—	—	—	(16,381)
Foreign currency hedge, net	—	—	—	—	—	(1,020)	—	—	(1,020)
Commodity hedge, net	—	—	—	—	—	—	470	—	470
Net income	—	—	—	—	—	—	—	76,598	76,598
Balance at December 31, 2016	36,534	$ 262,251	$ 10,323	$ (2,550)	$ (65,762)	$ (1,020)	$ 241	$ 256,922	$ 460,405
Exercise of Common Stock options for cash	202	3,662	(907)	—	—	—	—	—	2,755
Cumulative effect of accounting change due to adoption of ASU 2016-09	—	—	—	—	—	—	—	1,496	1,496
Common Stock issued to Board of Directors and employees	242	6,298	—	—					6,298
Stock repurchase	(164)	(5,326)	—	—	—	—	—	—	(5,326)
Stock option compensation	—	—	6,209	—	—	—	—	—	6,209
Cancelation of restricted stock	(53)	(1,837)	—	—	—	—	—	—	(1,837)
Net loss on pension benefit obligation, net	—	—	—	184	—	—	—	—	184
Currency translation, net	—	—	—	—	48,207	—	—	—	48,207
Foreign currency hedge, net	—	—	—	—	—	220	—	—	220
Commodity hedge, net	—	—	—	—	—	—	36	—	36
Net income	—	—	—	—	—	—	—	35,227	35,227
Balance at December 31, 2017	36,761	$ 265,048	$ 15,625	$ (2,366)	$ (17,555)	$ (800)	$ 277	$ 293,645	$ 553,874

The accompanying notes are an integral part of these financial statements

GENTHERM INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,		
	2017	**2016**	**2015**
Operating Activities:			
Net income	$ 35,227	$ 76,598	$ 95,393
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	44,972	37,764	31,029
Deferred income taxes	5,135	(8,843)	(711)
Gain on CRS settlement	—	—	(9,949)
Revaluation of derivatives	—	—	(490)
Stock compensation	12,507	9,186	6,018
Loss on sale of property and equipment	1,042	468	20
Loss from write-off of intangible assets	—	—	358
Provision for doubtful accounts	(469)	108	(120)
Defined benefit pension plan (income) expense	(23)	184	668
Changes in operating assets and liabilities:			
Accounts receivable	6,033	(17,971)	(12,399)
Inventory	(4,348)	(5,933)	(10,954)
Prepaid expenses and other assets	(12,334)	9,106	(11,122)
Accounts payable	(7,691)	4,419	8,049
Accrued liabilities	(30,171)	3,314	8,922
Net cash provided by operating activities	49,880	108,400	104,712
Investing Activities:			
Settlement of derivative financial instruments	—	—	(7,593)
Investment in subsidiary, net of cash acquired	(66,994)	(73,593)	107
Investment in development-stage entity	—	(4,486)	—
Purchases of property and equipment	(50,785)	(66,316)	(55,490)
Proceeds from the sale of property and equipment	91	57	248
Net cash used in investing activities	(117,688)	(144,338)	(62,728)
Financing Activities:			
Cash paid for financing costs	—	(649)	—
Borrowing of Debt	—	115,000	15,000
Repayments of Debt	(27,156)	(42,244)	(5,053)
Cash paid for the cancellation of restricted stock	(1,837)	(1,196)	(1,475)
Cash paid for the repurchase of common stock	(5,326)	—	—
Excess tax benefit from equity awards	—	7,509	6,681
Proceeds from the exercise of Common Stock options	2,755	1,438	9,273
Net cash (used in) provided by financing activities	(31,564)	79,858	24,426
Foreign currency effect on cash and cash equivalents	25,357	(11,212)	(7,631)
Net (decrease) increase in cash and cash equivalents	(74,015)	32,708	58,779
Cash and cash equivalents at beginning of period	177,187	144,479	85,700
Cash and cash equivalents at end of period	$ 103,172	$ 177,187	$ 144,479
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 4,540	$ 3,029	$ 2,826
Cash paid for taxes	$ 76,741	$ 21,608	$ 32,376
Supplemental disclosure of non-cash transactions:			
Common Stock issued to directors and employees	$ 6,298	$ 4,589	$ 3,734

The accompanying notes are an integral part of these financial statements

Note 1 — The Company

Gentherm Incorporated is a global technology and industry leader in the design, development, and manufacturing of innovative thermal management technologies. Unless the context otherwise requires, the terms “Company”, “we”, “us” and “our” used herein refer to Gentherm Incorporated and its consolidated subsidiaries. Our products provide solutions for automotive passenger comfort and convenience, battery thermal management, remote power generation, patient temperature management, environmental product testing and other consumer and industrial temperature control needs. Our automotive products can be found on the vehicles of nearly all major automotive manufacturers operating in North America, Europe and Asia. We operate in locations aligned with our major customers’ product strategies in order to provide locally enhanced design, integration and production capabilities and to identify future thermal technology product opportunities in both automotive and other markets. We concentrate our research on the development of new technologies and new applications from existing technologies to create product and market opportunities for a wide array of thermal management solutions.

Etratech

On November 1, 2017, we acquired substantially all of the assets and assumed substantially all of the operating liabilities of Etratech Inc., an Ontario corporation and all of the outstanding shares of Etratech Hong Kong, an entity organized under the laws of Hong Kong, in an all-cash transaction. Etratech manufactures advanced electronic controls and control systems for the automotive, recreational vehicle, marine, security, medical and other industries. Etratech’s world headquarters and North American manufacturing operations are located in Burlington, Canada. See Note 4 to the consolidated financial statements for additional information regarding the acquisition of Etratech.

Investment

On December 22, 2016, Gentherm entered into a subscription agreement to purchase preferred shares of stock from a development-stage technology company for approximately $4,500. The proceeds will be used to finance the development of new technologies we hope to be able to leverage in our design and development of new electric power generation applications. The investment was accounted for using the cost-method. Management did not observe any event or changes in circumstances that would indicate the carrying amount of our investment may not be recoverable during the years ended December 31, 2017 and 2016. No dividends were paid to Gentherm during the years ended December 31, 2017 and 2016. The investment was recorded to other non-current assets in the Company’s consolidated balance sheet.

Cincinnati Sub-Zero

On April 1, 2016, we acquired all of the equity of privately-held Cincinnati Sub-Zero Products, LLC (“CSZ”) and related assets in an all-cash transaction. CSZ manufactures both high quality patient temperature management systems for the health care industry and custom testing equipment used by a wide range of industrial manufacturing companies for product testing. CSZ’s world headquarters and manufacturing operations are located in Cincinnati, Ohio. See Note 17 for additional information regarding the acquisition of CSZ.

North American Reorganization

On January 4, 2016 and January 5, 2016, the Company completed reorganization transactions (the “Reorganization”) related to our North American business (the “Windsor Operations”). As part of our original integration plan to eliminate redundancies associated with the 2011 acquisition of Gentherm GmbH (formerly named W.E.T. Automotive Systems AG), the Windsor Operations have been consolidated into our existing European and North American facilities. As a result of the Reorganization, some of the business activities previously performed by the Windsor Operations are now being performed by other subsidiaries.

Note 1 — The Company (Continued)

Related to the Reorganization, the Company declared intercompany dividends, incurred and paid withholding taxes to the Canadian Revenue Agency of $7,600 during 2016. Additionally, the Company incurred income tax expense of $2,500 related to the intercompany dividends. These amounts incurred are expected to cover all future intercompany dividends needed to distribute the remaining earnings of the subsidiary to its parent in conjunction with the potential future liquidation of the subsidiary.

In addition to the $7,600 of withholding tax and $2,500 of income taxes, the Reorganization required the Company to make a one-time income tax payment of approximately $32,600. The one-time income tax payment was accrued during the first quarter of 2016; however, the Company also recorded an offsetting deferred charge for approximately the same amount because the one-time income tax payment will result in tax deductions against income taxes in future periods. Therefore, the income tax payment did not have a material impact on the Company’s earnings during the first quarter of 2016 nor any subsequent quarter. The withholding tax payment was paid entirely in 2016. The income tax payments of $2,500 and $32,600 were paid during the first quarter of 2017.

Reportable Segments

The Company has two reportable segments for financial reporting purposes: Automotive and Industrial.

Automotive

The Automotive reporting segment is comprised of the results from our global automotive businesses. Operating results from our major products, including automotive seat comfort systems, specialized automotive cable systems, advanced electronic controls and control systems, and other automotive and non-automotive thermal convenience products are all reported in the Automotive segment because of their complementary focus on automotive content and/or individual comfort and convenience. All of our activities with respect to electronics are also included in our Automotive segment because a majority of these activities relate to the manufacture of electronic components for our automotive products or the automotive products of third parties. Etratech’s operating results are included within Gentherm’s Automotive segment due to the concentration of product applications with the automotive, RV and marine industries.

Automotive seat comfort systems include seat heaters, variable temperature Climate Control Seats™ (“CCS”) designed to provide individualized thermal comfort to automobile passengers, and integrated electronic components, such as advanced electronic controls and control systems, that utilize our proprietary electronics technology . Specialized automotive cable system products include ready-made wire harnesses and related wiring products. Automotive products include the automotive steering wheel heater, heated and cooled cup holder and thermal storage bin. Revenues from our non-automotive products include the heated and cooled mattress and furniture.

Our Automotive segment customers include light vehicle original equipment manufacturers (“OEMs”), commercial vehicle OEMs, and Tier 1 suppliers to the automotive OEMs, including automotive seat manufacturers. We also directly supply CCS and seat heaters to aftermarket seat distributors and installers.

Industrial

The Industrial reporting segment represents the combined results from our remote power generation systems business, our patient temperature management systems business, our environmental testing equipment business and our advanced research and product development division. Our remote power generation systems business is managed by our subsidiary Gentherm Global Power Technologies (“GPT”) and our patient temperature management and environment test equipment is managed by our subsidiary CSZ. The advanced research and product development division is engaged in projects to improve the efficiency of thermal management technologies and to develop, market, and distribute products based on these new technologies. The operating results from these businesses and division are presented together as one reporting segment because of their joint concentration on identifying new, non-automotive markets and product applications based on thermal management technologies.

Note 1 — The Company (Continued)

See Note 11 for information regarding the Company's segment revenues from external customers, including geographic composition, operating income, goodwill and changes to the presentation of prior year information.

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation

Consolidation

The consolidated financial statements at and for the years ended December 31, 2017, 2016 and 2015, reflect the consolidated financial position and consolidated operating results of the Company. Investments in affiliates in which Gentherm does not have control, but does have the ability to exercise significant influence over operating and financial policies, are accounted for under the equity method. Intercompany accounts have been eliminated in consolidation. Certain reclassifications of prior years' amounts have been made to conform with the current year's presentation. Specifically, the Company changed its classification of prepayments made during the construction of plant assets from prepaid expenses and other assets to other non-current assets on the consolidated balance sheet. The Company reclassified $4,390 from prepaid expenses and other assets to other non-current assets on the December 31, 2016 consolidated balance sheet in order to conform with the current year's presentation.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of less than 90 days to be cash equivalents. Cash balances in individual banks may exceed the federally insured limit by the Federal Deposit Insurance Corporation. The Company had cash and cash equivalents of $88,440 and $162,881 held in foreign jurisdictions as of December 31, 2017 and 2016, respectively.

Disclosures About Fair Value of Financial Instruments

The carrying amounts of financial instruments comprising cash and cash equivalents, short-term investments and accounts receivable approximate fair value because of the short maturities of these instruments. The carrying amount of the Company's U.S. Revolving Note approximates its fair value because interest charged on the loan balance is variable. See Note 13 for information about the techniques used to assess the fair value of financial assets and liabilities, including our fixed rate debt instruments.

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation (Continued)

Use of Estimates

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

Accrued Warranty Costs

The Company accrues warranty obligations for products sold based on management estimates of future failure rates and current claim cost experience, with support from the sales, engineering, quality and legal functions. Using historical information available to the Company, including claims already filed by customers, the warranty accrual is adjusted quarterly to reflect management's best estimate of future claims. The following is a reconciliation of the changes in accrued warranty costs for the reporting period:

	December 31,	
	2017	2016
Balance at beginning of year	$ 5,443	$ 4,558
Warranty claims paid or retired	(979)	(1,096)
Expense	507	2,053
Adjustment due to currency translation	411	(72)
Balance at end of year	$ 5,382	$ 5,443

Concentration of Credit Risk

Financial assets, which subject the Company to concentration of credit risk, consist primarily of cash equivalents, short-term investments and accounts receivable. Cash equivalents consist primarily of money market funds managed by major financial services companies. The credit risk for these cash equivalents is considered low. The Company does not require collateral from its customers. As of December 31, 2017, Lear, Adient and Magna comprised 24%, 20% and 7% respectively, of the Company's accounts receivable balance. As of December 31, 2016, Lear, Adient, and Faurecia comprised 25%, 24% and 7% respectively, of the Company's accounts receivable balance. These accounts are currently in good standing.

Allowance for Doubtful Accounts

We record an allowance for doubtful accounts once exposure to collection risk of an accounts receivable is specifically identified. We analyze the length of time an account receivable is outstanding, as well as a customer's payment history and ability to pay to determine the need to record an allowance for doubtful accounts.

Inventory

The Company's inventory is measured at the lower of cost or market, with cost being determined using the first-in first-out basis. Raw materials, consumables and commodities are measured at cost of purchase and unfinished and finished goods are measured at cost of production, using the weighted average method. If the net realizable value expected on the reporting date is below cost, a write-down is recorded to adjust inventory to its net realizable value. We recognize a reserve for obsolete and slow moving inventories based on estimates of future sales and an inventory item's capacity to be repurposed for a different use. We consider the number of months supply on hand based on current planned requirements, uncommitted future projections and historical usage in estimating the inventory reserve. Additional provisions are made for supplier claims for obsolete materials, prototype inventory, spare or customer service inventory and, for all periods other than at year-end, estimates for physical inventory adjustments.

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation (Continued)

The following is a reconciliation of the changes in the inventory reserve:

	December 31, 2017	December 31, 2016
Balance at beginning of year	$ 4,790	$ 4,308
Expense	3,521	876
Inventory write off	(726)	(326)
Adjustment due to currency translation	302	(68)
Balance at end of year	$ 7,887	$ 4,790

Property and Equipment

Property and equipment, including additions and improvements, are recorded at cost less accumulated depreciation. Expenditures for repairs and maintenance are charged to expense as incurred. When property or equipment is retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts. Gains or losses from retirements and disposals are recorded as operating income or expense.

Depreciation and amortization are computed using the straight-line method. The estimated useful lives of the Company's property and equipment are as follows:

Asset Category	Useful Life
Buildings and building improvements	5 to 50 years
Plant and Equipment	1 to 20 years
Production tooling	2 to 7 years
Leasehold improvements	Term of lease
Computer equipment and software	1 to 10 years
Capital Leases	Term of lease

The Company recognized depreciation expense of $32,224, $24,873 and $18,399 for the years ended December 31, 2017, 2016 and 2015, respectively.

Goodwill and Other Intangible Assets

Goodwill and other intangible assets recorded in conjunction with business combinations are based on the Company's estimate of fair value, as of the date of acquisition. A roll forward of goodwill from December 31, 2015 to December 31, 2017 is as follows:

December 31, 2015	$ 27,765
Goodwill arising from the acquisition of CSZ	24,622
Exchange rate impact	(652)
December 31, 2016	$ 51,735
Goodwill arising from the acquisition of Etratech	14,866
Exchange rate impact	3,084
December 31, 2017	$ 69,685

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation (Continued)

The fair value and corresponding useful lives for acquired intangible assets are listed below as follows:

Asset Category	Useful Life
Customer relationships	8-15 years
Technology	5-10 years
Production Development Costs	4 years

Our business strategy largely centers on designing products based upon internally developed and purchased technology. When possible, we protect these technologies with patents. Our policy is to expense all costs associated with the development and issuance of new patents as incurred. Such costs are classified as research and development expenses in our consolidation statements of income.

Patents purchased as part of a business combination are capitalized based on their fair values. Periodically, we review the recoverability and remaining lives of our capitalized patents, and if necessary, make adjustments to reported amounts, based upon unfavorable impacts from market conditions, the emergence of competitive technologies and changes in our projected business plans.

A total of $12,425, $12,675 and $12,751 in other intangible assets, including capitalized patent costs, were amortized in 2017, 2016 and 2015, respectively.

An estimate of intangible asset amortization by year, is as follows:

2018	$	12,968
2019		10,041
2020		8,230
2021		10,762
2022		10,334
Thereafter		30,950

Impairments of Long-Lived Assets, Other Intangible Assets and Goodwill

Whenever events or changes in circumstances indicate that an asset’s carrying amount may not be recoverable, the Company will compare the carrying amount of the asset to the recoverable amount of the asset. The recoverable amount is defined as the greater of the asset’s fair value less costs to sell or its value in use. An impairment loss is recognized if the carrying amount of an asset exceeds the recoverable or fair value amount. An assessment of fair value could utilize quoted market prices, fair value appraisals, management forecasts or discounted cash flow analyses.

Annually on December 31st, and at interim periods when circumstances require, the Company tests the recoverability of its goodwill. The goodwill test utilizes a two-step analysis, whereby the Company compares the carrying value of each identified reporting unit to its fair value. If the carrying value of the reporting unit is greater than its fair value, the second step is performed, where the implied fair value of goodwill is compared to its carrying value. The Company recognizes an impairment charge for the amount by which the carrying amount of goodwill exceeds its fair value. The fair values of the reporting units are estimated using the net present value of discounted cash flows, excluding any financing costs or dividends, generated by each reporting unit and a comparison of market values of a group of comparable companies. The Company’s discounted cash flows are based upon reasonable and appropriate assumptions, which are weighted for their likely probability of occurrence, about the underlying business activities of the Company’s reporting units. An impairment of goodwill did not occur during the periods ending December 31, 2017, 2016 and 2015, respectively.

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation (Continued)

Product Revenues

The Company sells its products under long term supply or purchase order contracts issued by its customers. These contracts involve the sale of goods and services at fixed prices and provide for related transfer of ownership risk to the customer upon shipment from the Company's warehouse location or in some cases upon receipt of the goods at the customer's facility, or completion of services. Shipping and handling costs are recognized in cost of sales. With only a few minor exceptions, payment terms for these contracts range from 30 to 120 days from the date of shipment. Cash discounts for early payment are extended to customer purchases recognized within the Industrial reporting segment. Unless the payment is for a distinct good or service, any consideration paid to a customer is recognized directly against the revenue earned from that customer.

For construction-type contract revenues recognized in our Industrial segment, the completed-contract method is used to determine revenue and the cost of earned revenue. The transfer of ownership upon shipment is used to determine substantial completion and the recognition of revenue for these construction-type contracts.

For 2017, our revenues from sales to our three largest customers, Lear, Adient and Bosch Automotive were $192,756, $173,964 and $75,370, respectively, representing 20%, 18% and 8% of our total revenues, respectively.

Tooling

The Company incurs costs related to tooling used in the manufacture of products sold to its customers. In some cases, the Company enters into contracts with its customers whereby the Company incurs the costs to design, develop and purchase tooling and is then reimbursed by the customer under a reimbursement contract. Tooling costs that will be reimbursed by customers are included in prepaid expenses and other current assets at the lower of accumulated cost or the customer reimbursable amount. Approximately $6,994 and $5,604 of reimbursable tooling was capitalized within prepaid expenses and other current assets as of December 31, 2017 and 2016, respectively. Company-owned tooling is included in property and equipment and depreciated over its expected useful life, generally two to seven years. Management periodically evaluates the recoverability of tooling costs, based on estimated future cash flows, and makes provisions, where appropriate, for tooling costs that will not be recovered.

Research and Development Expenses

Research and development activities are expensed as incurred. The Company groups development and prototype costs and related reimbursements in research and development. The Company recognizes amounts due as reimbursements for expenses as these expenses are incurred.

Income Taxes

The Company records income tax expense using the liability method which specifies that deferred tax assets and liabilities be measured each year based on the difference between the financial statement and tax base of assets and liabilities at the applicable enacted tax rates. A valuation allowance is provided for deferred tax assets when management considers it more likely than not that the asset will not be realized. At December 31, 2017 and 2016, a valuation allowance has been provided for certain deferred tax assets which the Company has concluded are more likely than not to not be realized. If future annual taxable income were to be significantly less than current and projected levels, there is a risk that certain of our deferred tax assets not already provided for by the valuation allowance would expire prior to utilization.

The Company recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority. The Company recognizes interest and penalties related to income tax matters in income tax expense.

Note 2 — Summary of Significant Accounting Policies and Basis of Presentation (Continued)

Derivative Financial Instruments – Hedge Accounting

The Company accounts for some of its derivative financial instruments as cash flow hedges as defined in Financial Accounting Standards Board Accounting Standards Codification ("ASC") Topic 815. For derivative contracts which can be classified as a cash flow hedge, the effective potion of the change in the fair value of the derivative is recorded to accumulated other comprehensive income in the consolidated balance sheet. When the underlying hedge transaction is realized, the gain or loss included in accumulated other comprehensive income is recorded in earnings in the consolidated statement of income on the same line as the gain or loss on the hedged item attributable to the hedged risk. Any ineffective portion of the gain or loss is recognized in the income statement under foreign currency (loss) gain or revaluation of derivatives gain (loss). These hedging transactions and the respective correlations meet the requirements for hedge accounting.

Earnings per Share

Basic earnings per share is computed by dividing net income by the weighted average number of shares of Common Stock outstanding during the respective period. The Company's diluted earnings per common share give effect to all potential shares of Common Stock outstanding during a period that are not anti-dilutive. In computing the number of diluted shares outstanding, the treasury stock method is used in order to arrive at a net number of shares created upon the conversion of Common Stock equivalents.

Stock Based Compensation

Share based payments that involve the issuance of Common Stock to employees, including grants of employee stock options and restricted stock, are recognized in the financial statements as compensation expense based upon the fair value on the date of grant.

Share based payments that are satisfied only by the payment of cash, such as stock appreciation rights, are accounted for as liabilities. The liability is reported at market value of the vested portion of the underlying units. During each period, the change in the liability is recorded as compensation expense during periods when the liability increases or income during periods in which the liability decreases.

The Company's stock based compensation expense and related deferred tax benefit were $12,727 and $4,339, respectively, for the year ended December 31, 2017, $8,147 and $2,891, respectively, for the year ended December 31, 2016, and $12,316 and $3,787, respectively, for the year ended December 31, 2015.

Pension Plans

The Company's obligations and expenses for its pension plans are dependent on the Company's selection of discount rate, expected long-term rate of return on plan assets and other assumptions used by actuaries to calculate these amounts.

Subsequent Events

We have evaluated subsequent events through the date that our consolidated financial statements are issued. No events have occurred that would require adjustment to or disclosure in the consolidated financial statements.

Note 3 — Details of Certain Financial Statement Components

	December 31, 2017	December 31, 2016
Inventory:		
Raw materials, net of reserve	$ 64,175	$ 60,525
Work in process, net of reserve	16,139	13,261
Finished goods, net of reserve	41,095	31,288
	$ 121,409	$ 105,074
Property and equipment:		
Buildings, plant and equipment	$ 213,329	$ 151,977
Automobiles	1,281	861
Production tooling	16,540	12,991
Leasehold improvements	15,263	11,695
Computer equipment and software	27,880	21,048
Construction in progress	9,405	20,747
	283,698	219,319
Less: Accumulated depreciation *	(83,404)	(47,267)
	$ 200,294	$ 172,052
Other intangible assets:		
Customer relationships	$ 101,213	$ 66,542
Technology	47,641	35,378
Product development costs	12,054	9,602
	$ 160,908	$ 111,522
Less: Accumulated amortization	(77,622)	(53,965)
	$ 83,286	$ 57,557
Accrued liabilities:		
Tax accruals	$ 16,169	$ 51,197
Accrued warranty	5,382	5,443
Accrued employee liabilities	25,503	21,323
Liabilities from discounts and rebates	16,057	13,413
Other accrued liabilities	14,098	14,249
	$ 77,209	$ 105,625

* Includes accumulated amortization of capital lease obligations.

Note 4 — Etratech Acquisition

Etratech designs, develops, manufactures and sells electronic control modules and control systems to customers across a range of industries, including automotive, recreational vehicles and marine, HVAC systems and medical, amongst others. Each function is part of an integrated, customer-focused process designed to exceed customer expectations for product quality, reliability and cost. Etratech's global manufacturing footprint will enable us to provide customers with scalable and flexible manufacturing solutions across a variety of application and geographies.

Results of operations for Etratech are included in the Company's consolidated condensed financial statements beginning November 1, 2017. Etratech contributed $8,398 in product revenues and a net loss of $510 for the year ended December 31, 2017.

Note 4 – Etratech Acquisition (Continued)

Purchase Price Allocation

The purchase price of $64,994, net of cash acquired of $670, has been allocated to the values of assets acquired and liabilities assumed as of November 1, 2017. The allocation of the purchase price is preliminary. The Company is in the process of obtaining additional information required to finalize the valuation. An appraisal by an independent third party valuation firm will be completed to assist management in determining the fair value of acquired assets and assumed liabilities, including identifiable intangible assets. The final purchase price allocation may be materially different than the preliminary allocation recorded. The purchase price allocation is expected to be finalized by March 31, 2018. The allocation as of November 1, 2017 was as follows:

Accounts receivable	$	12,654
Inventory		7,014
Prepaid expenses and other assets		535
Property and equipment		6,205
Customer relationships		24,774
Technology		8,588
Goodwill		14,866
Assumed liabilities		(9,642)
Net assets acquired		64,994
Cash acquired		670
Purchase price	$	65,664

The gross contractual amount due of accounts receivable is $12,654, all of which is expected to be collectible.

Supplemental Pro Forma Information

The unaudited pro forma combined historical results including the amounts of Etratech revenue and earnings that would have been included in the Company's consolidated statements of income had the acquisition date been January 1, 2017 or January 1, 2016 are as follows:

	Twelve Months Ended December 31,			
	2017		2016	
Product revenues	$	1,032,273	$	966,355
Net income	$	35,911	$	77,577
Basic earnings per share	$	0.98	$	2.13
Diluted earnings per share	$	0.98	$	2.12

The pro forma information includes adjustments for the effect of the amortization of intangible assets recognized in the acquisition. This pro forma information is not indicative of future operating results.

Goodwill

We recorded goodwill of approximately $14,866 arising from the acquisition. The acquired goodwill represents intangible assets that do not qualify for separate recognition. It is estimated that approximately $8,651 of the goodwill recognized will not be deductible for income tax purposes.

Note 4 – Etratech Acquisition (Continued)

Intangible Assets

In conjunction with the acquisition, intangible assets of $33,362 were recorded. The Company's estimate of the fair value of these assets at the time of the acquisition was determined with the assistance of an independent third-party valuation firm. As part of the estimated valuation, an estimated useful life for the assets was determined.

Intangible assets, net consisted of the following:

	December 31, 2017			
	Gross Value	Accumulated Amortization	Net Value	Useful Life
Customer relationships	$ 24,774	$ 358	$ 24,416	8 -12 yrs
Technology	8,588	277	8,311	5 -6 yrs
Total	$ 33,362	$ 635	$ 32,727	

Amortization expense of $635 for the period November 1, 2017 through December 31, 2017 was recorded as follows:

	Three Months Ended December 31, 2017	Twelve Months Ended December 31, 2017
Product revenues	$ 358	$ 358
Research and development expenses	277	277

Amortization expense for the prospective five years is estimated to be as follows:

2018	$ 3,769
2019	$ 3,769
2020	$ 3,769
2021	$ 3,706
2022	$ 3,278

Property, Plant & Equipment

Property and equipment consist of the following:

Asset category	Useful life	Amount
Leashold improvements	10 yrs	$ 342
Machinery and equipment	4-11 yrs	5,248
Furniture and fittings	4 yrs	230
Motor vehicles	3 yrs	25
Computer hardware and software	1 yrs	360
		$ 6,205

Note 5 — Income Taxes

U.S. Tax Reform

The Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on all offshore earnings that were previously tax deferred and creates new taxes on certain foreign sourced earnings. As of December 31, 2017, in accordance with guidance provided by Staff Accounting Bulletin No. 118 (SAB 118), the Company has not completed its accounting for the tax effects of the Tax Act; however, in certain cases, as described below, the Company has made a provisional estimate of the effects on our existing deferred tax balances and the one-time transition tax. For the year ended December 31, 2017, the provision for income taxes includes a provisional income tax expense of $20,153 related to items for which the Company was able to determine a reasonable estimate. In all cases, we will continue to make and refine our calculations as additional analysis is completed. In addition, the Company's estimates may be affected as additional regulatory guidance is issued with respect to the Tax Act. Any adjustments to the provisional amounts will be recognized as a component of the provision for income taxes in the period in which such adjustments are determined, but in any event, no later than the fourth quarter of 2018, in accordance with SAB 118.

Deferred tax assets and liabilities

The Company remeasured its U.S. deferred tax assets and liabilities at 21%. However, the Company is still analyzing certain aspects of the Tax Act and refining the calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. In the year ended December 31, 2017, the provision for income taxes includes provisional income tax expense of $5,808 related to the remeasurement of deferred tax balances.

Transition Tax on Deferred Foreign Earnings

The one-time transition tax is based on the Company's post-1986 earnings and profits ("E&P") that were previously deferred from U.S. income taxes. In the year ended December 31, 2017, the provision for income taxes includes provisional income tax expense of $23,923 related to the one-time transition tax liability of the Company's foreign subsidiaries. The Company has not completed its calculation of the total post-1986 E&P for these foreign subsidiaries. Further, the transition tax is based in part on the amount of those earnings held in cash and other specified assets. This amount may change when the Company finalizes the calculation of post-1986 E&P previously deferred from U.S. income taxes and the amounts held in cash or other specified assets. A benefit of $9,578 was included in the provision for income taxes to offset the one-time transition tax related to the previous deferred tax liability that existed for the undistributed foreign earnings that were not permanently reinvested. However, we continue to recognize a deferred tax liability related to foreign withholding tax that will be incurred for undistributed foreign earnings that are not permanently reinvested.

Note 5 — Income Taxes (Continued)

The deferred tax assets and deferred tax liabilities and related valuation allowance were comprised of the following:

	December 31,	
	2017	2016
Deferred tax assets:		
Net operating losses	12,731	13,643
Research and development credits	27,257	23,012
Depreciation	5,571	5,457
Valuation reserves and accrued liabilities	6,020	9,667
Foreign tax credit	—	6,926
Stock compensation	3,955	4,508
Inventory	2,062	1,571
Patents	163	218
Defined benefit obligation	1,977	2,306
Other credits	589	639
Unrealized foreign currency exchange loss	2,556	—
Other	36	116
	62,917	68,063
Valuation allowance	(27,578)	(19,304)
Deferred tax liabilities:		
Intangible assets	(2,925)	(8,442)
Unrealized foreign currency exchange gains	—	(285)
Undistributed profits of subsidiary	(6,450)	(12,002)
Property and equipment	(1,611)	(470)
Other	(548)	(319)
	(11,534)	(21,518)
Net deferred tax asset	$ 23,805	$ 27,241

Note 5 — Income Taxes (Continued)

Reconciliations between the statutory Federal income tax rate of 34% and the effective rate of income tax expense for each of the three years in the period ended December 31, 2017 are as follows:

	Year Ended December 31,		
	2017	2016	2015
Statutory Federal income tax rate	34.0%	34.0%	34.0%
Increase (Decrease) resulting from:			
U.S. Taxes on foreign income, net of taxes paid credit	—	1.3%	1.0%
Change in valuation allowance	10.6%	5.3%	(1.9%)
Foreign, state and local tax, net of Federal benefit	0.8%	1.1%	1.6%
Nondeductible expenses	2.4%	2.4%	1.8%
Stock option compensation	(2.2%)	—	(0.1%)
Research and development credits	(4.6%)	(0.7%)	(0.9%)
Effect of different tax rates of foreign jurisdictions	(20.8%)	(15.0%)	(12.1%)
Undistributed profits of subsidiaries	5.8%	7.9%	2.4%
Tax reform items	29.1%	—	—
Other tax exempt income	—	—	(0.1%)
Tax effects of intercompany transfers	(5.0%)	(5.3%)	—
Other	(1.0%)	(0.3%)	0.3%
Effective rate	49.1%	30.7%	26.0%

The Company has Net Operating Loss (“NOL”) carryforwards as follows:

Jurisdiction	Amount as of December 31, 2017	Years of Expiration
U.S. Federal and state income tax	$ 61,302	2018- 2036
Foreign	$ 12,499	2018-2037
Foreign	$ 24,911	Indefinite

A portion of the U.S. Federal NOLs was incurred prior to the June 8, 1999 Preferred Financing, which qualified as a change in ownership under Section 382 of the Internal Revenue Code (“IRC”). Due to this change in ownership, the NOL accumulated prior to the change in control can only be utilized against current earnings up to a maximum annual limitation of approximately $591. As a result of the annual limitation, approximately $6,025 remaining of these carryforwards are expected to expire before ultimately becoming available to reduce future tax liabilities in addition to $13,324 in NOLs generated prior to the change in control which have already expired without being utilized.

We have incurred NOLs in various states associated with the benefits of the state dividends received reduction along with the foreign royalty exclusion. The state net operating loss carryforwards expire at various dates from 2018 to 2036. Management has concluded that it is more likely than not that a majority of these NOLs will not be utilized, and thus has not recognized the benefit of these NOLs.

At December 31, 2017, certain non-U.S. subsidiaries have net operating loss carryforwards totaling $37,410. This amount includes $12,499 in NOLs that expire at various dates from 2018 through 2037 and the remaining $24,911 have no expiration date. The Company has a valuation allowance recorded against $22,294 of the total non-U.S. subsidiaries’ net operating loss carryforwards as of December 31, 2017. In 2014 through 2017, we incurred NOLs in Vietnam associated with the startup activities of new production facilities. In 2015 through 2016, we incurred a loss in Ukraine associated with foreign currency losses. The remaining NOLs are expected to be utilized in 2018 through 2019 as the locations maintain profitability. We also incur NOLs in Luxembourg associated with our foreign holding company legal structure. Management has concluded that it is more likely than not these NOLs will not be utilized, and thus has not recognized the benefit of these NOLs.

Note 5 — Income Taxes (Continued)

On January 1, 2017, the Company adopted Accounting Standards Update ("ASU") 2016-09, "Improvements to Employee Share-Based Payment Accounting." Under the new standard, income tax benefits and deficiencies are recognized as an income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the period they occur. The update also requires the Company to recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. The standard also required a modified retrospective adoption for previously unrecognized excess tax benefits. Accordingly, the Company recognized a deferred tax asset and a corresponding credit to retained earnings equal to $1,496 in conjunction with the adoption. The effects of adopting the other provisions of ASU 2016-09 resulted in approximately 2% reduction of the effective tax rate during 2017.

The earnings before income taxes and our tax provision are comprised of the following:

	Year Ended December 31,		
	2017	2016	2015
Income before income taxes:			
Domestic	$ 1,258	$ 12,981	$ 25,508
Foreign	67,997	97,582	103,430
Total income before income taxes	$ 69,255	$ 110,563	$ 128,938

	Year Ended December 31,		
	2017	2016	2015
Current income tax expense:			
Federal	$ 4,140	$ 9,215	$ 8,428
State and local	150	749	606
Foreign	24,672	32,844	24,622
Total current income tax expense	$ 28,962	$ 42,808	$ 33,656
Deferred income tax expense (benefit):			
Federal	$ 15,207	$ (10,597)	$ (3,051)
State and local	2,308	(742)	(183)
Foreign	(12,449)	2,496	3,123
Total deferred income tax expense	$ 5,066	$ (8,843)	$ (111)
Total tax expense	$ 34,028	$ 33,965	$ 33,545

As of December 31, 2017, the previously recognized deferred taxes related to earnings from foreign subsidiaries has been reversed since all of these earnings are subject to the one-time transition tax and are not taxable upon repatriation to the United States. However, the Company continues to provide a deferred tax liability for foreign withholding tax that will be incurred with respect to the undistributed foreign earnings that are not permanently reinvested.

The Company is subject to taxation in the United States and various state and foreign jurisdictions. As of December 31, 2017, the Company is no longer subject to U.S. Federal examinations by tax authorities for tax years before 2014 and is no longer subject to foreign examinations by tax authorities for tax years before 2009.

Note 5 — Income Taxes (Continued)

During 2015, to entice the Company to construct a new facility in Macedonia, the government of Macedonia granted the Company a tax holiday that released the Company from the obligation to pay corporate income taxes for a ten year period, subject to certain limitations. The amount of corporate income tax savings realized by the Company as a result of this tax holiday during 2017 and 2016, respectively, was zero as a result of operating losses generated during each period. The aggregate dollar effect and per share effect of the corporate income tax holiday during 2017 and 2016 was, therefore, immaterial.

At December 31, 2017, 2016 and 2015, the Company had total unrecognized tax benefits of $4,522, $4,486 and $4,443, respectively, all of which, if recognized, would affect the effective income tax rates. The reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	Year Ended December 31,		
	2017	2016	2015
Balance at beginning of year	$ 4,486	$ 4,443	$ 4,651
Additions based on tax position related to current year	1,758	80	—
Additions based on tax positions related to prior year	(4)	366	262
Reductions from settlements and statute of limitation expiration	(2,247)	(299)	(19)
Effect of foreign currency translation	529	(104)	(451)
Balance at end of year	$ 4,522	$ 4,486	$ 4,443

The Company classifies income tax-related penalties and net interest as income tax expense. In the years ended December 31, 2017, 2016 and 2015 income tax related interest and penalties were insignificant. The Company believes that it is reasonably possible that there may be a decrease to its unrecognized tax benefits in the next 12 months due to audit settlements and statute expirations, but the amount expected to reverse is insignificant in relation to the consolidated financial statements.

Note 6 — Debt

Credit Agreement

The Company, together with certain direct and indirect subsidiaries, have an outstanding credit agreement (the "Credit Agreement") with a consortium of lenders and Bank of America, N.A., as administrative agent. The Credit Agreement provides the Company a revolving credit note ("U.S. Revolving Note") with a maximum borrowing capacity of $350,000.

All subsidiary borrowers and guarantors participating in the Credit Agreement have entered into a related pledge and security agreement. The security agreement grants a security interest to the lenders in substantially all of the personal property of subsidiaries designated as borrowers to secure their respective obligations under the Credit Agreement, including stock and membership interest of specified subsidiaries (limited to 66% of the stock in case of certain non-U.S. subsidiaries). The Credit Agreement restricts the amount of dividend payments the Company can make to shareholders.

The Credit Agreement requires the Company to maintain a minimum Consolidated Interest Coverage Ratio and a Consolidated Leverage Ratio. Definitions for these financial ratios are provided in the Credit Agreement.

Under the Credit Agreement, U.S. Dollar denominated loans bear interest at either a base rate ("Base Rate Loans") or Eurocurrency rate ("Eurocurrency Rate Loans"), plus a margin ("Applicable Rate"). The base rate is equal to the highest of the Federal Funds Rate (1.33% at December 31, 2017) plus 0.50%, Bank of America's prime rate (4.50% at December 31, 2017), or a one month Eurocurrency rate (0.00% at December 31, 2017) plus 1.00%. The Eurocurrency rate for loans denominated in U.S. Dollars is equal to the London Interbank Offered Rate (1.56% at December 31, 2017). All loans denominated in a currency other than the U.S. Dollar must be Eurocurrency Rate Loans. Interest is payable at least quarterly.

The Applicable Rate varies based on the Consolidated Leverage Ratio reported by the Company. As long as the Company is not in default of the terms and conditions of the Credit Agreement, the lowest and highest possible Applicable Rate is 1.25% and 2.00%, respectively, for Eurocurrency Rate Loans and 0.25% and 1.00%, respectively, for Base Rate Loans.

The Company also has two fixed interest rate loans with the German Investment Corporation ("DEG"), a subsidiary of KfW banking group, a German government-owned development bank.

DEG China Loan

The first, a loan we used to fund capital investments in China (the "DEG China Loan"), is subject to semi-annual principal payments that began March, 2015 and end September, 2019. Under the terms of the DEG China Loan, the Company must maintain a minimum Debt-to-Equity Ratio, Current Ratio and Debt Service Coverage Ratio, as defined by the DEG China Loan agreement, based on the financial statements of Gentherm's wholly owned subsidiary, Gentherm Automotive Systems (China) Ltd.

Note 6 — Debt (Continued)

DEG Vietnam Loan

The Company's second fixed interest rate senior loan agreement with DEG was used to finance the construction and set up of the Vietnam production facility ("DEG Vietnam Loan"). The DEG Vietnam Loan is subject to semi-annual principal payments that began November, 2017 and will end May, 2023. Under the terms of the DEG Vietnam Loan, the Company must maintain a minimum Currency Ratio, Equity Ratio and Enhanced Equity Ratio, as defined by the DEG Vietnam Loan agreement, based on the financial statements of Gentherm's wholly owned subsidiary, Gentherm Vietnam Co. Ltd.

As of December 31, 2017, we were in compliance with all terms as outlined in the Credit Agreement, DEG China Loan and DEG Vietnam Loan. Undrawn borrowing capacity under the U.S. Revolving Note was $220,859 as of December 31, 2017. The following table summarizes the Company's debt at December 31, 2017.

	Interest Rate	Principal Balance
Credit Agreement:		
U.S. Revolving Note (U.S. Dollar Denominations)	3.07%	$ 129,000
DEG China Loan	4.25%	1,919
DEG Vietnam Loan	5.21%	13,750
Total debt		$ 144,669
Current portion		(3,460)
Long-term debt, less current maturities		$ 141,209

The following table summarizes the Company's debt at December 31, 2016.

	Interest Rate	Principal Balance
Credit Agreements:		
U.S. Revolving Note (U.S. Dollar Denominations)	2.27%	154,000
DEG China Loan	4.25%	2,525
DEG Vietnam Loan	5.21%	15,000
Total debt		$ 171,525
Current portion		(2,092)
Long-term debt, less current maturities		$ 169,433

The scheduled principal maturities of our debt as of December 31, 2017 is as follows:

Year	U.S. Revolving Note	DEG China Loan	DEG Vietnam Loan	Total
2018	$ —	$ 960	$ 2,500	$ 3,460
2019	—	959	2,500	3,459
2020	—	—	2,500	2,500
2021	129,000	—	2,500	131,500
2022	—	—	2,500	2,500
Thereafter	—	—	1,250	1,250
Total	$ 129,000	$ 1,919	$ 13,750	$ 144,669

Note 7 — Accounting for Stock Based Compensation

On May 16, 2013, the Compensation Committee of the Company's Board of Directors (the "Board") approved the Gentherm Incorporated 2013 Equity Incentive Plan (the "2013 Plan"), covering 3,500,000 shares of our Common Stock. On May 19, 2017 the 2013 Plan was amended, increasing the amount of available shares by 2,000,000. The 2013 Plan permits the granting of various awards including stock options (including both nonqualified options and incentive options), stock appreciation rights ("SARs"), restricted stock and restricted stock units, performance shares and certain other awards to employees, outside directors and consultants and advisors of the Company. All shares of our Common Stock that remained available for issuance under the Amended and Restated 2006 Stock Incentive Plan (the "2006 Plan") and the Gentherm Incorporated 2011 Equity Incentive Plan (the "2011 Plan), were reduced to zero; however, some options under the 2011 and 2006 Plans are still outstanding. As of December 31, 2017 the Company had an aggregate of 1,751,554 shares of Common Stock available to issue under the 2013 Plan.

All plans are administered by the Compensation Committee of the Board. The selection of participants, allotment of shares, determination of price and other conditions are determined by the Compensation Committee at its sole discretion, in order to attract and retain personnel instrumental to the success of the Company. Stock options, for example, granted under such plans have lives for a period of up to ten years from the date of grant at an exercise price which is not less than the fair market value of the Common Stock on the date of the grant.

During the three year period ended December 31, 2017, the Company has issued stock options, stock appreciation rights ("SARs") and restricted stock awards to employees, directors and consultants. These awards become available to the recipient upon the satisfaction of a vesting condition, either based on a period of service or based on the performance of a specific achievement. For equity based awards with a service condition, the requisite service period typically ranges between three to five years for employees and consultants and one year for directors. As of December 31, 2017, no performance based, unvested stock options, SARs or restricted stock were outstanding. All other outstanding, unvested equity based awards were service based. Equity based award vesting may be accelerated at the discretion of the Board.

Total unrecognized compensation cost related to nonvested options, restricted stock and SARs outstanding under all of the Company's equity plans was $18,593 and $17,258 as of December 31, 2017 and 2016, respectively. That cost is expected to be recognized over a weighted average period of three years. Compensation expense for the years ended December 31, 2017, 2016 and 2015 was $12,727, $8,147 and $12,316, respectively. No share-based payment arrangements expired during the three-year period ended December 31, 2017. If Gentherm were to realize expired shared-based payment arrangements, they would be reported as a forfeit in the activity roll forward tables below.

Note 7 — Accounting for Stock Based Compensation (Continued)

Stock Options

The following table summarizes stock option activity during the three year period ended December 31, 2017:

Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2014	1,674,534	$ 19.14		
Granted	524,534	41.97		
Exercised	(571,723)	16.21		
Forfeited	(96,500)	28.47		
Outstanding at December 31, 2015	1,530,845	$ 27.46	4.97	$ 30,573
Granted	862,000	40.87		
Exercised	(112,875)	13.24		
Forfeited	(176,500)	39.32		
Outstanding at December 31, 2016	2,103,470	$ 32.72	4.86	$ 12,265
Granted	808,500	37.23		
Exercised	(202,328)	13.62		
Forfeited	(57,500)	42.54		
Outstanding at December 31, 2017	2,652,142	$ 35.34	4.76	$ 6,964
Exercisable at December 31, 2015	439,561	$ 12.18	3.51	$ 15,480
Exercisable at December 31, 2016	675,152	$ 21.40	3.45	$ 9,646
Exercisable at December 31, 2017	984,374	$ 29.84	3.44	$ 6,534

The fair value of each option is estimated on the date of grant using the Black-Scholes option-pricing model in order to measure the compensation cost associated with the award. This model incorporates certain assumptions for inputs including a risk-free interest rate, expected dividend yield of the underlying Common Stock, expected option life and expected volatility in the market value of the underlying Common Stock. The following assumptions were used for options issued in the following periods:

	2017	2016	2015
Expected volatility	33%	37%	35%
Weighted average expected volatility	33%	37%	35%
Expected lives	3 yrs.	3 yrs.	3 yrs.
Risk-free interest rate	1.49-1.93%	0.90-1.07%	1.00%
Expected dividend yield	none	none	none

Expected volatilities are based on the historical volatility of the Company’s Common Stock. The Company uses historical exercise data and several other factors in developing an assumption for the expected lives of stock options, including the average holding period of outstanding options and their remaining terms. The risk-free interest rate is based upon quoted market yields for United States Treasury debt securities. The expected dividend yield is based upon the Company’s history of having never issued a dividend, the limitations to issue a dividend under terms of the Credit Agreement and management’s current expectation regarding future dividends. We do not expect any of the options granted to be forfeited for purposes of computing fair value.

The weighted-average grant-date fair value of options granted during the year ended December 31, 2017, 2016 and 2015 was $9.11, $10.74 and $10.60, respectively. The total intrinsic value of options exercised during the year ended December 31, 2017, 2016 and 2015 was $4,715, $2,456 and $18,745, respectively.

Note 7 — Accounting for Stock Based Compensation (Continued)

Restricted Stock

The following table summarizes restricted stock activity during the three year period ended December 31, 2017:

Unvested Restricted Shares	Shares		Weighted-Average Grant-Date Fair Value
Nonvested at December 31, 2014	177,084	$	23.70
Granted	108,026		44.01
Vested	(82,084)		23.86
Forfeited	(24,000)		30.87
Outstanding at December 31, 2015	179,026	$	34.92
Granted	141,784		39.73
Vested	(100,330)		32.47
Forfeited	(9,999)		40.99
Outstanding at December 31, 2016	210,481	$	39.02
Granted	237,542		37.30
Vested	(165,923)		37.99
Forfeited	—		—
Outstanding at December 31, 2017	282,100	$	38.06

The compensation cost associated with restricted shares is estimated on the date of grant using quoted market prices (Level 1 input). The total fair value of restricted shares vested in 2017, 2016 and 2015 was $6,006, $3,865 and $4,088, respectively.

Stock Appreciation Rights

The following table summarizes SARs activity during the three year period ended December 31, 2017:

Stock Appreciation Rights	Units		Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term		Aggregate Intrinsic Value
Outstanding at December 31, 2014	1,060,250	$	29.97			
Granted	259,600		43.97			
Exercised	(167,500)		23.90			
Forfeited	(102,500)		27.82			
Outstanding at December 31, 2015	1,049,850	$	34.61	5.46	$	13,425
Granted	244,000		40.64			
Exercised	(18,750)		24.28			
Forfeited	(30,500)		28.23			
Outstanding at December 31, 2016	1,244,600	$	36.11	4.80	$	3,511
Granted	235,000		38.05			
Exercised	(94,250)		22.21			
Forfeited	(193,000)		32.53			
Outstanding at December 31, 2017	1,192,350	$	38.17	4.36	$	2,278
Exercisable at December 31, 2015	153,575	$	38.12	5.59	$	1,425
Exercisable at December 31, 2016	424,992	$	34.49	4.39	$	2,315
Exercisable at December 31, 2017	613,808	$	37.68	3.72	$	1,904

Note 7 — Accounting for Stock Based Compensation (Continued)

The total intrinsic value of SARs converted during the year ended December 31, 2017, 2016 and 2015 was $1,495, $261 and $4,185, respectively.

Note 8 — Earnings Per Share

The Company's diluted earnings per share give effect to all potential common shares outstanding during a period that do not have an anti-dilutive impact to the calculation. The following summarizes the shares included in the dilutive shares as disclosed in the statements of income:

	Year ended December 31,		
	2017	2016	2015
Weighted average number of shares for calculation of basic EPS – Common Stock	36,720,749	36,448,138	36,031,792
Stock options under equity incentive plans	92,970	152,665	443,310
Weighted average number of shares for calculation of diluted EPS – Common Stock	36,813,719	36,600,803	36,475,102

The accompanying table represents Common Stock issuable upon the exercise of certain stock options and that have been excluded from the diluted earnings calculation because the effect of their inclusion would be anti-dilutive.

	Year ended December 31,		
	2017	2016	2015
Stock options outstanding for equity incentive plans	2,055,784	1,314,784	17,534

See Note 7 for information about the Company's different equity incentive plans.

Note 9 — Commitments and contingencies

The Company's operating leases cover primarily buildings and underlying real estate, software subscriptions, office equipment and automobiles. We do not have lease arrangements with related parties. A summary of lease and construction commitments as of December 31, 2017, under all non-cancelable operating leases with terms exceeding one year is as follows:

2018	$	10,630
2019		6,966
2020		3,629
2021		2,106
2022		1,916
2023 or later		3,811
Total	$	29,058

The Company does not have any outstanding capital lease agreements or purchase obligations that exceed one year. Rent expense under all of the Company's operating leases was $8,424, $7,479 and $6,660 for 2017, 2016 and 2015, respectively.

We are subject to litigation from time to time in the ordinary course of our business; however there is no current material pending litigation to which we are a party as of December 31, 2017 and 2016, respectively. No material legal proceeding was terminated, settled or otherwise resolved during the fiscal year ended December 31, 2017 and 2016, respectively.

Note 10 — Shareholder Rights Plan

The Company’s Board has the authority to issue up to 4,991,000 shares of Preferred Stock and to determine the price, rights (including conversion rights), preferences and privileges of those shares without any further vote or action by the shareholders. Consistent with this authority, in January, 2009 our Board adopted a Shareholder Rights Plan (as amended the “Rights Plan”) in which one purchase right was distributed as a dividend on each share of Common Stock held of record as of the close of business on February 10, 2009 (the “Rights”). The Rights Plan will expire in January, 2019. If exercisable, each Right will entitle its holder to purchase from the Company one one-thousandth of a share of a newly created Series B Preferred Stock of the Company for $20.00 (the “Purchase Price”). The Rights will become exercisable if any person or group becomes the beneficial owner of 15% or more of the Company’s Common Stock or has commenced a tender or exchange offer which, if consummated, would result in any person or group becoming the beneficial owner of 15% or more of the Company’s Common Stock. If any person or group becomes the beneficial owner of 15% or more of the Company’s Common Stock, each right will entitle its holder, other than the acquiring person, to purchase a number of shares of the Company’s or the acquirer’s Common Stock having a value of twice the Purchase Price. The Rights are deemed attached to the certificates representing outstanding shares of Common Stock.

Note 11 — Segment Reporting

Segment information is used by management for making operating decisions for the Company. Management evaluates the performance of the Company’s segments based primarily on operating income or loss (see Note 2). As discussed in Note 4, Gentherm acquired Etratech on November 1, 2017. The acquisition enhances key elements of our business strategy by greatly expanding our knowledge and capability to produce in-house electronic components for next generation intelligent thermal management products.

The Company’s reportable segments are as follows:

- *Automotive* — this segment represents the design, development, manufacturing and sales of automotive seat comfort systems, specialized automotive cable systems and certain automotive and non-automotive thermal convenience products. All of our activities with respect to electronics are also included in our Automotive segment because a majority of these activities relate to the manufacture of electronic components for our automotive products or the automotive products of third parties. Etratech’s operating results are included within Gentherm’s Automotive segment due to the concentration of Etratech’s product applications within the automotive, RV and marine industries.
- *Industrial* — the combined operating results of GPT, CSZ and Gentherm’s advanced research and development division. Advanced research and development includes efforts focused on improving the efficiency of thermoelectric technologies and advanced heating wire technology as well as other applications. Unlike research and development that relates to a specific product application for a customer, advanced research and development activities affect products and technologies that aren’t currently generating product revenue. The segment includes government sponsored research projects.
- *Reconciling Items* — include corporate selling, general and administrative costs and acquisition transaction costs.

Note 11 — Segment Reporting (Continued)

The tables below present segment information about the reported product revenues and operating income of the Company for years ended December 31, 2017, 2016 and 2015. With the exception of goodwill, asset information by segment is not reported since the Company does not manage assets at a segment level. As of December 31, 2017, goodwill assigned to our Automotive and Industrial segments were $38,912 and $30,773, respectively. As of December 31, 2016, goodwill assigned to our Automotive and Industrial segments were $20,962 and $30,773, respectively.

	Automotive	Industrial	Reconciling Items	Consolidated Total
2017:				
Product revenues	$ 879,457	$ 106,226	$ —	$ 985,683
Depreciation and amortization	36,801	5,399	2,772	44,972
Operating income (loss)	166,604	(14,751)	(54,529)	97,324
2016:				
Product revenues	$ 847,428	$ 70,172	$ —	$ 917,600
Depreciation and amortization	31,826	3,789	2,149	37,764
Operating income (loss)	174,027	(16,702)	(51,206)	106,119
2015:				
Product revenues	$ 810,567	$ 45,878	$ —	$ 856,445
Depreciation and amortization	27,251	1,726	2,052	31,029
Operating income (loss)	170,358	(2,461)	(46,578)	121,319

The Industrial operating loss is net of reimbursement for developmental expense of $2,116, $641 and $2,483 for the years ended 2017, 2016 and 2015, respectively. Reconciling items include selling, general and administrative costs of $43,457, $39,059 and $32,116, respectively, for the years ended December 31, 2017, 2016 and 2015 and acquisition costs of $789, $743 and $0 for the years ended December 31, 2017, 2016 and 2015, respectively.

Revenue (based on shipment destination) by geographic area is as follows:

	2017	%	2016	%	2015	%
United States	$ 454,669	46%	$ 449,065	49%	$ 393,206	46%
China	93,645	9%	80,493	9%	76,864	9%
Germany	71,768	7%	70,258	8%	74,003	9%
South Korea	64,715	7%	75,396	8%	84,758	10%
Japan	57,467	6%	45,103	5%	46,058	5%
Canada	46,368	5%	37,954	4%	27,076	3%
Czech Republic	38,828	4%	38,164	4%	28,273	3%
United Kingdom	36,033	4%	28,540	3%	25,952	3%
Mexico	22,684	2%	22,767	2%	28,274	3%
Other	99,506	10%	69,860	8%	71,981	9%
Total Non U.S.	531,014	54%	468,535	51%	463,239	54%
	$ 985,683	100%	$ 917,600	100%	$ 856,445	100%

Note 11 — Segment Reporting (Continued)

We rely on three customers, two domestic and one foreign, to derive a significant portion of our product revenues. The table below lists the percentage of total product revenues generated from sales to these customers:

	2017	2016	2015
Lear (domestic)	20%	21%	22%
Adient (domestic)	18%	21%	23%
Bosch (foreign)	8%	8%	9%

Note 12 — Pension and Other Post Retirement Benefit Plans

On August 8, 2008 the Company established The Executive Nonqualified Defined Benefit Plan of Gentherm Incorporated (the "Plan"), an unfunded executive pension plan, with an effective date of April 1, 2008. The Company's former Chief Executive Officer, Daniel R. Coker, is the only participant in the Plan.

On May 10, 2017 the Company amended (the "Plan Amendment") the Plan. Prior to the Plan Amendment, the Plan provided for 15 annual retirement benefit payments of $300,000 each beginning January 1, 2018. Mr. Coker became fully vested in the benefits under the Benefit Plan on April 1, 2017. The Plan Amendment provided that if Mr. Coker continued to provide employment service to the Company through and including January 1, 2018, the fifteen annual retirement benefit payments would be increased to $342,000, otherwise the 15 annual retirement benefits would remain at $300,000.

On June 28, 2017, the same day a leader transition plan leading up to Mr. Coker's retirement was announced, the Company entered into a Retirement Agreement with Mr. Coker (the "Retirement Agreement"). The Retirement Agreement provided that if Mr. Coker's retirement date was prior to January 1, 2018, the Company would amend the terms of the Plan, as amended, to accelerate the in-service vesting date to ensure an increase in the annual accrued benefit from $300,000 to $342,000. Mr. Coker became fully vested in the incremental benefit, as described in the Plan Amendment, on December 4, 2017.

The Company records a projected benefit obligation representing the present value of future plan benefits when earned by the participant. The following table sets forth the benefit obligation, amounts recognized in the Company's financial statements and the principal assumptions used:

	2017	2016
Change in projected benefit obligation:		
Benefit obligation at beginning of year	$ 3,419	$ 2,898
Service cost	101	387
Interest cost	111	98
Actuarial (gain) loss	78	36
Prior service cost	509	—
Benefit obligation at end of year	$ 4,218	$ 3,419

Note 12 — Pension and Other Post Retirement Benefit Plans (Continued)

The portion of the benefit obligation from the Plan expected to be paid in 2018 is classified as a current liability within accrued liabilities in the Company's consolidated balance sheet. The remaining portion is classified as a non-current liability within pension benefit obligations. Service and interest cost is included in selling, general and administrative expenses in the Company's consolidated statements of income and actuarial gains and losses are included the Company's consolidated balance sheet as part of accumulated other comprehensive income within shareholders' equity. Actuarial gains or losses are amortized to selling, general and administrative expense in the Company's consolidated statements of income based on the average future service life of the Plan using the corridor method. A discount rate assumption of 2.95%, 3.25% and 3.40% was used to determine the benefit obligation for the years ended December 31, 2017, 2016 and 2015, respectively. A discount rate assumption of 3.25%, 3.40% and 3.25% was used to determine and the net periodic service cost for years ended December 31, 2017, 2016 and 2015, respectively. Prior service costs reflect an increase to the projected benefit obligation as a result of the Plan Amendment, which retroactively increased benefits. Prior service cost is included in selling, general and administrative expenses in the Company's consolidated statements of income. We do not expect contributions to be paid to the Plan during the next fiscal year.

Although the Plan is not funded, the Company has established a separate trust having the sole purpose of paying benefits under the Plan. The only asset of the trust is a corporate-owned life insurance policy ("COLI"). The COLI is valued at fair value using quoted prices listed in active markets (Level 1 input based on the U.S. GAAP fair value hierarchy). The policy value of the COLI was $2,353 and $2,112 as of December 31, 2017 and 2016, respectively, and was included in other non-current assets.

Components of the Plan's net periodic pension benefit cost for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Service cost	$ 101	$ 387	$ 379
Interest cost	111	98	80
Amortization of actuarial losses	—	—	27
Amortization of prior service cost	509	—	—
Net periodic benefit cost	$ 721	$ 485	$ 486

Pretax amounts recognized in other comprehensive income for the years ended December 31, 2017, 2016 and 2015 are as follows

	2017	2016	2015
Actuarial Losses/(gains)	$ 78	$ 36	$ (35)
Amortization of actuarial losses	—	—	(27)
Establish prior service cost	509	—	—
Amortization prior service cost	(509)	—	—
	$ 78	$ 36	$ (62)

Tax benefit of $26 was recognized in other comprehensive income related to the Plan for the year ended December 31, 2017. Tax benefit of $14 was recognized in other comprehensive income related to the Plan for the year ended December 31, 2016. Tax expense of $23 was recognized in other comprehensive income related to the Plan for the years ended December 31, 2015.

Pretax unrecognized actuarial losses recorded in accumulated other comprehensive loss not yet recognized in net periodic benefit cost were $380 and $302 as of December 31, 2017 and 2016, respectively. No amount of pretax unrecognized actuarial loss recorded in accumulated other comprehensive income as of December 31, 2017 are expected to be recognized as components of net periodic benefit cost in the year ending December 31, 2018.

Note 12 — Pension and Other Post Retirement Benefit Plans (Continued)

Gentherm GmbH has an established defined benefit plan for retired and current members of its executive management team.

Gentherm GmbH records a projected benefit obligation representing the present value of future plan benefits when earned by the participant. The following table sets forth the benefit obligation and amounts recognized in the Company's financial statements:

	2017	2016
Change in projected benefit obligation:		
Benefit obligation at beginning of year	$ 7,326	$ 6,980
Interest cost	130	154
Paid pension distributions	(272)	(261)
Actuarial (gains)/losses	(257)	691
Exchange rate impact	1,000	(238)
Benefit obligation at end of year	$ 7,927	$ 7,326

The following table sets forth the fair value of the plan assets for the periods ending December 31, 2017 and 2016:

	2017	2016
Change in plan assets:		
Plan assets at beginning of year	$ 3,326	$ 3,333
Actual return on plan assets	121	125
Contributions	272	261
Paid pension distributions	(272)	(261)
Actuarial losses	(28)	(27)
Exchange rate impact	472	(105)
Plan assets at end of year	$ 3,891	$ 3,326

The $4,036 and $4,000 net liability from the Gentherm GmbH plan as of December 31, 2017 and 2016, respectively, is classified as a noncurrent liability in pension benefit obligation.

Pretax amounts recognized in other comprehensive (loss) income for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Actuarial (gains)/losses	$ (229)	$ 718	$ (154)
Amortization of actuarial losses	(78)	(48)	(59)
Amortization of prior service cost	—	—	(572)
	$ (307)	$ 670	$ (785)

Tax expense of $86 was recognized in other comprehensive income related to the Gentherm GmbH defined benefit plan for the year ended December 31, 2017. Tax benefit of $171 and tax expense of $211 were recognized in other comprehensive income for the years ended December 31, 2016 and 2015, respectively.

Note 12 — Pension and Other Post Retirement Benefit Plans (Continued)

Pretax unrecognized actuarial losses recorded in accumulated other comprehensive loss not yet recognized in net periodic benefit cost were $2,416 and $2,406 as of December 31, 2017 and 2016, respectively. We expect $74 of pretax unrecognized actuarial loss recorded in accumulated other comprehensive income as of December 31, 2017 to be recognized as components of net periodic benefit cost in the year ending December 31, 2018.

Components of the Plan's net periodic pension benefit cost for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Interest cost	$ 130	$ 154	$ 142
Return on plan assets	(121)	(125)	(126)
Amortization of prior service cost	—	—	572
Amortization of actuarial loss (gains)	78	48	59
Net periodic benefit cost	$ 87	$ 77	$ 647

The Gentherm GmbH defined benefit plan is underfunded by $4,036 and $4,000 as of December 31, 2017 and 2016, respectively. The net periodic benefit cost is included in selling, general and administrative expenses in the Company's consolidated statements of income and actuarial gains and losses are included the Company's consolidated balance sheet as part of accumulated other comprehensive income within shareholders' equity. Actuarial gains or losses are amortized to selling, general and administrative expense in the Company's consolidated statements of income using the corridor method. The following table describes the actuarial assumptions used to determine the benefit obligation and the net periodic service cost:

	2017	2016	2015
Discount rate	1.93%	1.69%	2.21%
Expected long term rate of return on plan assets	3.40%	3.40%	3.70%

Plan assets are comprised of Gentherm GmbH's pension insurance policies and are pledged to the beneficiaries of the plan. A market valuation technique, based on observable underlying insurance charges, is used to determine the fair value of the pension plan assets (Level 2). The expected return on plan assets assumption used to calculate Gentherm GmbH's pension benefit obligation was determined using actual returns realized on plan assets in the prior year. We do not expect contributions to be paid to the Gentherm GmbH defined benefit plan during the next fiscal year.

The schedule of expected pension payments made to Gentherm GmbH defined benefit plan participants over the next 10 years is as follows:

Year	
2018	$ 293
2019	291
2020	289
2021	287
2022	283
2023 - 2027	1,392
Total	$ 2,835

Note 12 — Pension and Other Post Retirement Benefit Plans (Continued)

Gentherm has adopted a 401(k) plan to provide all eligible employees a means to accumulate retirement savings on a tax-advantaged basis, and eligible executive officers can participate in this plan on the same basis as other participants. Participants may defer specified portions of their compensation. On a discretionary basis, the Company matches a portion of the employee contributions. The Plan also allows for additional discretionary contributions. Gentherm made $1,396, $1,289 and $959 in matching contributions to the 401(k) plan in 2017, 2016 and 2015, respectively.

Note 13 — Fair Value Measurement

The Company bases fair value on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We have adopted a fair value hierarchy to measure fair value into three broad levels, which are described below:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2: Inputs, other than quoted market prices included in Level 1, that are observable either directly or indirectly for the asset or liability

Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible and also considers counterparty credit risk in its assessment of fair value.

Except for derivative instruments (see Note 14), pension liabilities, pension plan assets and a corporate owned life insurance policy (see Note 12), the Company has no financial assets and liabilities that are carried at fair value at December 31, 2017 and 2016. The carrying amounts of financial instruments comprising cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the relatively short maturity of such instruments. The Company uses an income valuation technique to measure the fair values of its debt instruments by converting amounts of future cash flows to a single present value amount using rates based on current market expectations (Level 2 inputs).

As of December 31, 2017 and 2016, the carrying values of the Company's Credit Agreement indebtedness were not materially different than their estimated fair values because the interest rates on variable rate debt approximated rates currently available to the Company (see Note 6). Discount rates used to measure the fair value of Gentherm's DEG Vietnam Loan and DEG China Loan are based on quoted swap rates. As of December 31, 2017, the carrying values of the DEG Vietnam Loan and DEG China Loan were $13,750 and $1,919, respectively, as compared to an estimated fair value of $13,600 and $2,000, respectively. As of December 31, 2016, the carrying value of the DEG Vietnam Loan and DEG China Loan were $15,000 and $2,525, as compared to an estimated fair value of $14,900 and $2,600, respectively.

Certain Company assets are required to be recorded at fair value on a non-recurring basis when events and circumstances indicate that the carrying value may not be recoverable. As of December 31, 2017 and 2016, the Company did not realize any changes to the fair value of these assets due to the non-occurrence of events or circumstances that could negatively impact their recoverability.

Note 14 — Derivative Financial Instruments

We are exposed to market risk from changes in foreign currency exchange rates, short-term interest rates and price fluctuations of certain material commodities such as copper. Market risks for changes in interest rates relate primarily to our debt obligations under our Amended Credit Agreement. Foreign currency exchange risks are attributable to sales to foreign customers and purchases from foreign suppliers not denominated in a location's functional currency, foreign plant operations, intercompany indebtedness, intercompany investments and include exposures to the European Euro, Mexican Peso, Canadian Dollar, Hungarian Forint, Macedonian Denar, Ukrainian Hryvnia, Japanese Yen, Chinese Renminbi, Korean Won and Vietnamese Dong.

The Company regularly enters into derivative contracts with the objective of managing its financial and operational exposure arising from these risks by offsetting gains and losses on the underlying exposures with gains and losses on the financial instruments used to hedge them. The maximum length of time over which we hedge our exposure to foreign currency exchange risks is one year. We had foreign currency derivative contracts with a notional value of $29,273 and $29,538 outstanding at December 31, 2017 and 2016, respectively.

The maximum length of time over which we hedge our exposure to price fluctuations in material commodities is two years. We had copper commodity swap contracts with a notional value of $404 and $407 outstanding at December 31, 2017 and 2016, respectively.

We do not enter into derivative financial instruments for speculative or trading purposes. Our hedging relationships are formally documented at the inception of the hedge, and hedges must be highly effective in offsetting changes to future cash flows on hedged transactions both at the inception of a hedge and on an ongoing basis to be designated for hedge accounting treatment. For derivative contracts which can be classified as a cash flow hedge, the effective portion of the change in the fair value of the derivative is recorded to accumulated other comprehensive loss in the consolidated balance sheet. When the underlying hedge transaction is realized, the gain or loss included in accumulated other comprehensive loss is recorded in earnings in the consolidated statement of income on the same line as the gain or loss on the hedged item attributable to the hedged risk. We record the ineffective portion of foreign currency hedging instruments, if any, to foreign currency gain (loss) in the consolidated statements of income. See Note 16 for the amount of unrealized loss associated with copper commodity derivatives reported in accumulated other comprehensive income as of December 31, 2016 that was reclassified into earnings during 2017. Though we continuously monitor the hedging program, derivative positions and hedging strategies, foreign currency forward exchange agreements have not always been designated as hedging instruments for accounting purposes.

The Company uses an income approach to value derivative instruments, analyzing quoted market prices to calculate the forward values and then discounts such forward values to the present value using benchmark rates at commonly quoted intervals for the instrument's full term.

In December 2015, Gentherm GmbH ("Gentherm Germany"), a subsidiary of Gentherm Incorporated (the "Company") entered into an agreement settling all claims against UniCredit Bank AG pertaining to a 10 year currency related swap ("CRS") entered into a by Gentherm Germany in March 2008. Prior to the settlement, a lawsuit filed by Gentherm GmbH in 2011 was pending appeal at the Higher Regional Court in Munich, Germany. As a result of the settlement, the CRS and its related liability to Gentherm have been terminated and Gentherm's remaining interest in an offsetting derivative contract designed to limit the market risk of payments due under the CRS was sold. Gentherm realized a one-time, pre-tax gain of $9,949 in the fourth quarter of 2015. Gentherm made a final cash settlement payment of $7,593 during the fourth quarter of 2015.

Note 14 — Derivative Financial Instruments (Continued)

Information related to the recurring fair value measurement of derivative financial instruments in our consolidated balance sheet as of December 31, 2017 is as follows:

	Hedge Designation	Fair Value Hierarchy	Asset Derivatives		Liability Derivatives		Net Asset/ (Liabilities)
			Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	
Foreign currency derivatives	Cash flow hedge	Level 2	Current assets	$ 141	Current liabilities	$ (1,050)	$ (909)
Commodity derivatives	Cash flow hedge	Level 2	Current assets	$ 72			$ 72

Information related to the recurring fair value measurement of derivative financial instruments in our consolidated balance sheet as of December 31, 2016 is as follows:

	Hedge Designation	Fair Value Hierarchy	Asset Derivatives		Liability Derivatives		Net Asset/ (Liabilities)
			Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	
Foreign currency derivatives	Cash flow hedge	Level 2			Current liabilities	$(1,395)	$ (1,395)
Commodity derivatives	Cash flow hedge	Level 2	Current assets	$ 18			$ 18

Information related to the effect of derivative instrument`s on our consolidated statements of income is as follows:

	Location	Year Ended December 31, 2017	Year Ended December 31, 2016
Foreign currency derivatives	Product Revenues	$ (3)	$ —
	Cost of sales	2,209	(608)
	Selling, general and administrative	(216)	139
	Other comprehensive (loss) income	302	(1,395)
	Foreign currency gain	(112)	102
Total foreign currency derivatives		$ 2,180	$ (1,762)
Commodity derivatives	Cost of sales	$ 202	$ (666)
	Other comprehensive income (loss)	$ 54	$ 743
Total commodity derivatives		$ 256	$ 77

We did not incur any hedge ineffectiveness during the years ended December 31, 2017 and 2016.

Note 15 — New Accounting Pronouncements

Derivatives and Hedging

In August, 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." ASU 2017-12 expands the number and type of nonfinancial and interest rate risk components an entity has the ability to designate as the hedged risk in a qualifying hedging relationship. ASU 2017-12 requires entities to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedge item is reported. This approach simplifies the financial statement reporting for qualifying hedging relationships by eliminating the requirement to separately report the portion of the hedge deemed to be ineffective. For cash flow hedges, the entire change in the fair value of the hedging instrument included in the assessment of hedge effectiveness is recorded in other comprehensive income and reclassified to earnings when the hedged item affects earnings. Furthermore, income statement effects from fair value and cash flow hedges are to be presented in tabular disclosure.

ASU 2017-12 is effective for annual and any interim periods beginning after December 15, 2018. Early adoption of the amendments in this update are permitted. For cash flow hedges existing at the date of adoption, an entity should apply a cumulative catch-up adjustment related to eliminating the separate measurement of ineffectiveness to accumulative other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year that an entity adopts the amendments in this update. We are currently in the process of determining the impact the implementation of ASU 2017-12 will have on the Company's financial statements.

Share-Based Payment Awards

In May, 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting." ASU 2017-09 clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting, in accordance with Topic 718. An entity should account for the effect of a modification unless all of the following are met:

1) The fair value of the modified award is the same as the fair value of the original award immediately before the original award is modified. If the modification does not affect any of the inputs of the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification.

2) The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified.

3) The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified.

ASU 2017-09 is effective for annual and any interim periods beginning after December 15, 2017. Early adoption of the amendments in this update is permitted. The amendments in ASU 2017-09 should be applied on a prospective basis and in the initial period of adoption, entities must disclose the nature of and reason for the change in accounting principle. The Company has not historically made changes to the terms or conditions of shared-based payment awards and does not expect adoption of ASU 2017-09 to have a material impact the consolidated financial statements when it is adopted in the first quarter of 2018.

Note 15 — New Accounting Pronouncements (Continued)

Goodwill Impairment

In January, 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." ASU 2017-04 modified the concept of impairment of goodwill to be a condition that exists when the carrying value of a reporting unit that includes goodwill exceeds its fair value. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, limited to the total amount of goodwill allocated to that reporting unit. Entities no longer will determine goodwill impairment by calculating the implied fair value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities as if the reporting unit had been acquired in a business combination.

ASU 2017-04 is effective for annual and any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption of the amendments in this update is permitted. The amendments in ASU 2017-04 must be applied on a prospective basis and in the initial period of adoption, entities must disclose the nature of and reason for the change in accounting principle. The Company expects adoption of ASU 2017-04 will reduce the complexity of evaluating goodwill for impairment.

Income Taxes

In October, 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." ASU 2016-16 modifies the current prohibition to recognize deferred income taxes from differences between the tax basis of assets in the buyer's tax jurisdiction and their cost resulting from an intra-entity transfer from one tax-paying component to another tax-paying component of the same consolidated group. Under current GAAP, deferred income taxes for intra-entity asset transfers are not recognized until the asset is sold to an outside party. ASU 2016-16 allows entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs.

ASU 2016-16 is effective for fiscal years and interim periods beginning after December 15, 2017. For entities that issue interim financial statements and whose current fiscal year end date is December 31, 2016, early adoption can be made during the three month period ending March 31, 2017. The amendments in ASU 2016-16 should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We have evaluated the impact the amendments in ASU 2016-16 will have on the Company's consolidated financial statements and determined that a favorable adjustment of approximately $27,771 will be recorded directly to retained earnings during the three month period ending March 31, 2018.

Statement of Cash Flows

In August, 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." ASU 2016-15 provides guidance on the classification of eight specific cash receipt and cash payment transactions in the statement of cash flows. The Company focused its evaluation on the following transactions to determine the effect ASU 2016-15 will have on the Company's Consolidated Statements of Cash Flows:

1) Debt extinguishment payments and debt prepayments are to be shown as cash outflows for financing activities. Presently, Gentherm classifies debt extinguishment payments within operating activities.
2) Payments made to settle contingent consideration liabilities not made soon after the acquisition date of a business combination should be recognized as cash outflows for financing activities up to the amount of the liability recognized at the acquisition date. Payments, or the portion of a payment, to settle contingent consideration liabilities that exceed the amount of the liability recognized at the acquisition date will be recognized as cash outflows for operating activities.
3) Cash receipts from the settlement of insurance claims, excluding those related to corporate-owned life insurance policies shall be classified on the basis of the related insurance coverage. For example, proceeds received to cover claims issued under product recall liability insurance would be classified as cash inflows from operating activities.

Note 15 — New Accounting Pronouncements (Continued)

4) Cash receipts from the settlement of corporate-owned life insurance policies shall be classified as cash inflows from investing activities.

For public companies, ASU 2016-15 is effective for fiscal years and interim periods beginning after December 15, 2017 and must be applied retrospectively to all periods presented. Early adoption of the amendments in this update is permitted. None of the cash receipt and cash payment transactions, including those that were not the focus of management's evaluation, addressed by the update are transactions that are typical or customary to Gentherm business. According, management does not expect the amendments in this update have a material impact to the Company. Gentherm will adopt the amendments in ASU 2016-15 during the three-month period ending March 31, 2018.

Stock Compensation

In March, 2016, the FASB issued ASU 2016-09, "Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." ASU 2016-09 involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under the new standard, income tax benefits and deficiencies are to be recognized as income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. An entity should also recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. ASU 2016-09 requires excess tax benefits to be classified along with other income tax cash flows as an operating activity and clarifies that cash paid by an employer when directly withholding shares for tax-withholding purposes should be classified as a financing activity.

ASU 2016-09 is effective for fiscal years and interim periods beginning after December 15, 2016. The Company adopted ASU 2016-09 the first quarter of 2017 and recognized a $1,496 adjustment to the beginning balance of retained earnings for previously unrecognized excess tax benefits on share-based payment awards. Amendments related to the presentation of employee taxes paid on the statements of cash flows when an employer withholds shares to meet the minimum statutory withholding requirement were applied retrospectively to all periods presented. Amendments requiring recognition of excess tax payments in the income statement and the classification of those excess tax benefits on the statement of cash flows were applied prospectively, beginning with the three month period ended March 31, 2017. Excess tax benefits on share-based payment awards in the statement of cash flows in prior years have not been adjusted.

Leases

In February, 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." ASU 2016-02 requires lessees to recognize on their balance sheet a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term. Payments to be made in optional periods should be included in the measurement of lease assets and liabilities if the lessee is reasonably certain it will exercise an option to extend the lease or not exercise an option to terminate the lease. While ASU 2016-02 continues to differentiate between finance or capital leases and operating leases, the principal change from current lease accounting guidance is that lease assets and liabilities arising from operating leases should be recognized on the balance sheet.

ASU 2016-02 is effective for fiscal years and interim periods beginning after December 15, 2018. Early adoption of the amendments in this update are permitted. Lessees are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach which includes a number of practical expedients, including the ability to use hindsight in evaluating lessee options to extend or terminate a lease. An entity that elects to apply the practical expedients will be required to recognize a right-of-use asset and lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payment that were tracked and disclosed under previous GAAP. We are currently in the process of determining the impact the implementation of ASU 2016-02 will have on the Company's financial statements.

Note 15 — New Accounting Pronouncements (Continued)

Revenue from Contracts with Customers.

In May, 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-09, “Revenue from Contracts with Customers.” ASU 2014-09 was developed to enable financial statement users to better understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The update’s core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Companies are to use a five-step contract review model to ensure revenue gets recognized, measured and disclosed in accordance with this principle. The FASB issued several amendments to the new standard, including a one-year deferral of the original effective date, and new methods for identifying performance obligation aimed at reducing the cost and complexity or compliance.

This update permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). We have chosen to use the cumulative catch-up transition method.

Gentherm is substantially complete in performing the five-step contract review process for all existing contracts with customers, across all business units. While we continue to assess all potential impacts from the update, we currently believe the most significant impact relates to our accounting for options that give customers the right to purchase additional goods under long-term supply agreements in the future. Due to the complexity of certain of our automotive supply contracts, the actual revenue recognition treatment for customer purchase options will depend on contract-specific terms and could vary from other contracts that are similar in nature. An unfavorable adjustment will be recorded directly to retained earnings during the three month period ending March 31, 2018. Our current estimate for the adjustment approximates $3,600. We are not aware of any impacts to revenue from contracts with customers at Etratech as a result of our assessment of potential impacts from the update.

Note 16 – Reclassifications Out of Accumulated Other Comprehensive Income (Loss)

Reclassification adjustments and other activities impacting accumulated other comprehensive income (loss) during the year ended December 31, 2017, December 31, 2016 and December 31, 2015 are as follows:

	Defined Benefit Pension Plans	Foreign Currency Translation Adjustments	Commodity Hedge Derivatives	Foreign Currency Hedge Derivatives	Total
Balance at December 31, 2016	$ (2,550)	$ (65,762)	$ 241	$ (1,020)	$ (69,091)
Other comprehensive income (loss) before reclassifications	166	48,059	254	2,123	50,602
Income tax effect of other comprehensive income (loss) before reclassifications	(60)	148	(93)	(570)	(575)
Amounts reclassified from accumulated other comprehensive income (loss) into net income	78	—	(199)	(1,822)	(1,943)
Income taxes reclassified into net income	—	—	74	489	563
Net current period other comprehensive income (loss)	184	48,207	36	220	48,647
Balance at December 31, 2017	$ (2,366)	(17,555)	277	(800)	(20,444)

(a) The amounts reclassified from accumulated other comprehensive income (loss) are included in cost of sales. See Note 14 for information related to the effect of commodity and foreign currency derivative instrument`s on our consolidated statements of income.

	Defined Benefit Pension Plans	Foreign Currency Translation Adjustments	Commodity Hedge Derivatives	Foreign Currency Hedge Derivatives	Total
Balance at December 31, 2015	$ (2,060)	$ (49,381)	$ (229)	$ —	$ (51,670)
Other comprehensive income (loss) before reclassifications	(723)	(16,678)	154	(1,351)	(18,598)
Income tax effect of other comprehensive income (loss) before reclassifications	185	297	(57)	363	788
Amounts reclassified from accumulated other comprehensive income (loss) into net income	48	—	589 [a]	(44) [a]	593
Income taxes reclassified into net income	—	—	(216)	12	(204)
Net current period other comprehensive income (loss)	(490)	(16,381)	470	(1,020)	(17,421)
Balance at December 31, 2016	$ (2,550)	$ (65,762)	$ 241	$ (1,020)	$ (69,091)

(a) The amounts reclassified from accumulated other comprehensive income (loss) are included in cost of sales. See Note 14 for information related to the effect of commodity and foreign currency derivative instrument`s on our consolidated statements of income.

Note 16 – Reclassifications Out of Accumulated Other Comprehensive Income (Loss) – (Continued)

	Defined Benefit Pension Plans	Foreign Currency Translation Adjustments	Commodity Hedge Derivatives	Foreign Currency Hedge Derivatives	Total
Balance at December 31, 2014	$ (2,673)	$ (23,060)	$ —	$ (10)	$ (25,743)
Other comprehensive income (loss) before reclassifications	761	(25,904)	(849)	(1,746)	(27,738)
Income tax effect of other comprehensive income (loss) before reclassifications	(234)	(417)	543	473	365
Amounts reclassified from accumulated other comprehensive income (loss) into net income	86	—	124 [a]	1,756 [a]	1,966
Income taxes reclassified into net income	—	—	(47)	(473)	(520)
Net current period other comprehensive income (loss)	613	(26,321)	(229)	10	(25,927)
Balance at December 31, 2015	$ (2,060)	$ (49,381)	$ (229)	$ —	$ (51,670)

(a) The amounts reclassified from accumulated other comprehensive income (loss) are included in cost of sales. See Note 14 for information related to the effect of commodity and foreign currency derivative instrument`s on our consolidated statements of income.

We expect all of the existing gains and losses related to foreign currency and commodity derivatives reported in accumulated other comprehensive income as of December 31, 2016 to be reclassified into earnings during the twelve month period ending December 31, 2017.

Note 17 — Cincinnati Sub-Zero Acquisition

CSZ develops, manufactures and sells patient temperature management systems and product testing equipment. The patient temperature management systems regulate the body temperature of medical patients during and after surgery. The product testing equipment simulates temperature, humidity, altitude and vibration conditions and is customized for use in a wide variety of industrial manufacturing applications.

Results of operations for CSZ are included in the Company’s consolidated condensed financial statements beginning April 1, 2016. CSZ contributed $51,540 in product revenues and a net loss of $1,092 for the nine month period ended December 31, 2016.

Note 17 – Cincinnati Sub-Zero Acquisition – (Continued)

Purchase Price Allocation

The purchase price of $73,593, net of cash acquired of $985, has been allocated to the values of assets acquired and liabilities assumed as of April 1, 2016. An appraisal by an independent third party valuation firm was completed to assist management in determining the fair value of acquired assets and assumed liabilities, including identifiable intangible assets. The fair values of acquired assets and assumed liabilities were determined using the cost approach that relied primarily internal sources of data to make assumptions that are not observable in the market (Level 3 inputs). The purchase price allocation was finalized during the fourth quarter of 2016. The allocation as of April 1, 2016 was as follows:

Accounts receivable	$	10,790
Inventory		16,284
Prepaid expenses and other assets		1,143
Property and equipment		12,919
Customer relationships		11,700
Technology		3,200
Trade name		6,370
Goodwill		24,622a
Assumed liabilities		(13,435)
Net assets acquired		73,593
Cash acquired		985
Purchase price	$	74,578

(a) The amount of recorded goodwill includes $2,000 of consideration owed to the seller for a tax gross up.

The gross contractual amount due of accounts receivable is $11,126 of which $336 is expected to be uncollectible.

The purchase price allocation includes an approximate $4,000 step-up in the underlying net book value of the inventory to its fair value. This inventory was sold to customers and expensed to cost of sales during the three month period ended June 30, 2016.

Supplemental Pro Forma Information

The unaudited pro forma combined historical results including the amounts of CSZ's revenue and earnings that would have been included in the Company's consolidated statements of income had the acquisition date been January 1, 2016 or January 1, 2015 are as follows:

	Three Months Ended December 31,	Twelve Months Ended December 31,	
	2015	2016	2015
Product revenues	$ 232,324	$ 933,505	$ 919,651
Net income	$ 27,272	$ 74,485	$ 94,833
Basic earnings per share	$ 0.75	$ 2.04	$ 2.63
Diluted earnings per share	$ 0.75	$ 2.04	$ 2.60

The pro forma information includes adjustments for the effect of the amortization of intangible assets recognized in the acquisition. This pro forma information is not indicative of future operating results.

Note 17 – Cincinnati Sub-Zero Acquisition – (Continued)

Goodwill

We recorded goodwill of approximately $24,622 arising from the acquisition. The acquired goodwill represents intangible assets that do not qualify for separate recognition. It is estimated that all of the goodwill recognized will be deductible for income tax purposes.

Intangible Assets

In conjunction with the acquisition, intangible assets of $21,270 were recorded. The Company’s estimate of the fair value of these assets at the time of the acquisition was determined with the assistance of an independent third-party valuation firm. As part of the estimated valuation, an estimated useful life for the assets was determined.

Intangible assets, net consisted of the following:

	December 31, 2016			
	Gross Value	Accumulated Amortization	Net Value	Useful Life
Customer relationships	$ 11,700	$ 585	$ 11,115	15 yrs
Technology	3,200	390	2,810	5 -7 yrs
Trade name	6,370	—	6,370	Indefinite
Total	$ 21,270	$ 975	$ 20,295	

Amortization expense of $325 and $975 for the three and twelve months ended December 31, 2016 was recorded as follows:

	Three Months Ended December 31, 2016	Twelve Months Ended December 31, 2016
Product revenues	$ 195	$ 585
Research and development expenses	130	390

Amortization expense for the prospective five years is as follows:

2017	$ 1,300
2018	$ 1,300
2019	$ 1,300
2020	$ 1,300
2021	$ 1,135

Property, Plant & Equipment

Property and equipment consist of the following:

Asset category	Useful life	Amount
Land	Indefinite	$ 1,630
Buildings	20 yrs	6,024
Machinery and equipment	5-7 yrs	3,718
Computer hardware and software	3-5 yrs	586
Assets under construction		961
		$ 12,919

GENTHERM INCORPORATED

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

For the Years Ended December 31, 2017, 2016 and 2015

(In thousands)

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions from Reserves	Balance at End of Period
Allowance for Doubtful Accounts					
Year Ended December 31, 2015	1,213	4,174	(373)	(4,059)	955
Year Ended December 31, 2016	955	1,469	(270)	(763)	1,391
Year Ended December 31, 2017	1,391	1,239	51	(1,708)	973
Allowance for Deferred Income Tax Assets					
Year Ended December 31, 2015	18,037	—	(2,436)	(2,183)	13,418
Year Ended December 31, 2016	13,418	5,706	180	—	19,304
Year Ended December 31, 2017	19,304	6,700	1,574	—	27,578
Reserve for Inventory					
Year Ended December 31, 2015	4,802	815	(249)	(1,060)	4,308
Year Ended December 31, 2016	4,308	876	(68)	(326)	4,790
Year Ended December 31, 2017	4,790	3,521	302	(726)	7,887

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.

GENTHERM INCORPORATED

By: /s/ Phillip Eyler
Phillip Eyler
Chief Executive Officer

Date: February 23, 2018

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

Signature	Capacity	Date
/s/ PHILLIP EYLER PHILLIP EYLER	Director, President and Chief Executive Officer (Principal Executive Officer)	February 23, 2018
/s/ BARRY G. STEELE BARRY G. STEELE	Vice President of Finance, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	February 23, 2018
* FRANCOIS CASTAING	Director, Chairman of the Board	February 23, 2018
* LEWIS BOOTH	Director	February 23, 2018
* DANIEL R. COKER	Director	February 23, 2018
* SOPHIE DESORMIERE	Director	February 23, 2018
* MAURICE GUNDERSON	Director	February 23, 2018
* YVONNE HAO	Director	February 23, 2018
* RONALD HUNDZINSKI	Director	February 23, 2018
* BYRON SHAW	Director	February 23, 2018

*By: /s/ Phillip Eyler
Phillip Eyler, Attorney-in-Fact

Exhibit 10.1

SUMMARY OF NON-EMPLOYEE DIRECTOR COMPENSATION

Non-employee directors of the Board receive a mix of cash and share-based compensation. Directors who are employees or officers of the Corporation do not receive any additional compensation for Board service. Cash compensation is paid in advance at the annual meeting of shareholders.

In addition to reimbursement for out-of-pocket expenses, including those incurred in attending Board and committee meetings, non-employee directors receive the following:

- an annual fee of $50,000 ($90,000 for the Chairman of the Board and $55,000 for the Lead Independent Director);
- an annual fee of $5,000 ($10,000 for the committee chair) for Audit, Compensation, Technology, and Corporate Governance Committee members;
- an annual fee of $1,000 ($5,000 for the committee chair) for Nominating Committee members; and
- $100,000 in restricted stock granted as of the date of the annual meeting of shareholders; such restricted stock vests on the first anniversary of the date of grant, subject to the applicable director’s continued service or retirement under the terms of the Corporation’s incentive equity plan.

Exhibit 21

LIST OF SUBSIDIARIES

Name	Jurisdiction of Formation
Gentherm Holding (Malta) Ltd.	Malta
Gentherm Automotive Systems (Malta) Ltd.	Malta
Gentherm Automotive Technologies (Shanghai) Co. Ltd.	China
Gentherm Electronics (Shenzhen) Co. Ltd.	China
Gentherm Automotive Systems (China) Ltd.	China
Gentherm International Holdings (Hong Kong) Limited	China
Etratech Hong Kong Limited	China
Etratech Asia-Pacific Limited	China
Etratech Holdings Asia-Pacific Limited	China
Etratech Asia-Pacific Electronics (Shenzhen) Ltd.	China
Gentherm GmbH	Germany
Gentherm Technologies GmbH	Germany
Gentherm Enterprises GmbH	Germany
Gentherm Licensing GmbH	Germany
CSZ International GmbH	Germany
Gentherm Vietnam Co. Ltd.	Vietnam
Gentherm Japan Inc.	Japan
Gentherm Korea Inc.	South Korea
Gentherm Properties I, LLC	Michigan
Gentherm Properties II, LLC	Michigan
Gentherm Properties III, LLC	Michigan
Gentherm Equity, LLC	Michigan
Gentherm Licensing, L.P.	Michigan
Cincinnati Sub-Zero Products, LLC	Ohio
Gentherm (Texas), Inc.	Texas
Gentherm Hungary Kft	Hungary
Gentherm Ukraine TOV	Ukraine
Gentherm de Mexico S.A. de C.V	Mexico
Gentherm Canada ULC	Canada
Gentherm Global Power Technologies Inc.	Canada
Gentherm U.K. LTD.	United Kingdom
Gentherm Luxembourg I S.a.r.l.	Luxembourg
Gentherm Luxembourg II S.a.r.l	Luxembourg
Gentherm Macedonia DOOEL	Macedonia

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 23, 2018 with respect to the consolidated financial statements, financial statement schedule and internal control over financial reporting included in the Annual Report of Gentherm Incorporated and subsidiaries on Form 10-K for the year ended December 31, 2017. We consent to the incorporation by reference of said reports in the Registration Statements of Gentherm Incorporated and subsidiaries on Form S-3 (File No. 333-202561) and on Forms S-8 (File Nos. 333-139868, as amended, 333-164990, as amended, 333-176884, as amended, 333-181975, as amended, 333-189442 and 333-218155).

/s/ GRANT THORNTON LLP

Southfield, Michigan
February 23, 2018

Exhibit 24

POWER OF ATTORNEY

Each of the undersigned, being a Member of the Board of Directors of Gentherm Incorporated (the "Registrant"), hereby severally constitutes and appoints Phillip Eyler, the Registrant's Chief Executive Officer, with full powers of substitution and resubstitution, his true and lawful attorney, with full powers to sign for him, in his name, in the capacity indicated herein, (a) the annual report of the Registrant for the fiscal year ending December 31, 2017 on Form 10-K and (b) any and all amendments to such Form 10-K, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes said attorney might or could do in person, and hereby ratifying and confirming all that said attorney, or his substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney. This power of attorney may be executed in separate original or facsimile counterparts.

IN WITNESS WHEREOF, the undersigned have executed this instrument this 23rd day of February, 2018.

/s/ Francois J. Castaing
Francois J. Castaing

/s/ Lewis Booth
Lewis Booth

/s/ Daniel R. Coker
Daniel R. Coker

/s/ Sophie Desormière
Sophie Desormière

/s/ Maurice E.P Gunderson
Maurice E.P Gunderson

/s/ Yvonne Hao
Yvonne Hao

/s/ Ronald Hundzinski
Ronald Hundzinski

/s/ Byron T. Shaw II
Byron T. Shaw II

Exhibit 31.1

CERTIFICATION

I, Phillip Eyler, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2017 of Gentherm Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Phillip Eyler

Phillip Eyler
President & Chief Executive Officer
February 23, 2018

Exhibit 31.2

CERTIFICATION

I, Barry G. Steele, certify that:

1. I have reviewed this annual report on Form 10-K for the period ended December 31, 2017 of Gentherm Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Barry G. Steele

Barry G. Steele
Chief Financial Officer
February 23, 2018

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K for the period ended December 31, 2017 of Gentherm Incorporated (the “Company”) as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Phillip Eyler, President & 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:

(1).The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2).The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Phillip Eyler
Phillip Eyler
President & Chief Executive Officer
February 23, 2018

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the period ended December 31, 2017 of Gentherm Incorporated (the “Company”) as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Barry G. Steele, 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:

(1).The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2).The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Barry G. Steele
Barry G. Steele
Chief Financial Officer
February 23, 2018