UNIVERSAL STAINLESS & ALLOY PRODUCTS INC
Form 10-K
February 20, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission File Number 000-25032

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization)	25-1724540 (IRS Employer Identification No.)
600 MAYER STREET, BRIDGEVILLE, PA 15017 (Address of principal executive offices, including zip code)	(412) 257-7600 (Registrant’s telephone number, including area code)

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

Title of each class	Name of exchange on which registered
Common Stock, par value $0.001 per share	The NASDAQ Stock Market, LLC

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of 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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant on June 30, 2018, based on the closing price of $23.67 per share on that date, was approximately $200,440,897. For the purposes of this disclosure only, the registrant has assumed that its directors and executive officers, are the affiliates of the registrant. The registrant has made no determination that such persons are "affiliates" within the meaning of Rule 405 under the Securities Act of 1933.

As of February 18, 2019, there were 8,766,737 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE Part III of this Form 10-K incorporates by reference portions of the Company's definitive Proxy Statement for the 2018 Annual Meeting of Stockholders.

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PART I

CAUTIONARY STATEMENT FOR PURPOSES OF THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

The statements contained in this Annual Report on Form 10-K (“Form 10-K”) of Universal Stainless & Alloy Products, Inc. and its wholly-owned subsidiaries (collectively, “we,” “us,” “our,” or the “Company”), including, but not limited to, the statements contained in Item 1, “Business,” and Item 7, “Management's Discussion and Analysis of the Financial Condition and Results of Operations,” along with statements contained in other reports that we have filed with the Securities and Exchange Commission (the “SEC”), external documents and oral presentations, which are not historical facts are considered to be "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Act of 1934, as amended. These statements which may be expressed in a variety of ways, including the use of forward looking terminology such as “believe,” “expect,” “seek,” “intend,” “may,” “will,” “should,” “could,” “potential,” “continue,” “estimate,” “plan,” or “anticipate,” or the negatives thereof, other va thereon or compatible terminology, relate to, among other things, statements regarding future growth, cost savings, expanded production capacity, broader product lines, greater capacity to meet customer quality reliability, price and delivery needs, enhanced competitive posture, and the effect of new accounting pronouncements. We do not undertake any obligation to publicly update any forward-looking statements.

These forward-looking statements, and any forward looking statements contained in other public disclosures of the Company which make reference to the cautionary factors contained in this Form 10-K, are based on assumptions that involve risks and uncertainties and are subject to change based on the considerations described below. We discuss many of these risks and uncertainties in greater detail in Item 1A, “Risk Factors,” of this Form 10-K. These and other risks and uncertainties may cause our actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by such forward-looking statements.

ITEM 1. BUSINESS

Universal Stainless & Alloy Products, Inc., which was incorporated in 1994, and its wholly-owned subsidiaries, manufacture and market semi-finished and finished specialty steel products, including stainless steel, nickel alloys, tool steel and certain other premium alloyed steels. Our manufacturing process involves melting, remelting, heat treating, hot and cold rolling, forging, machining and cold drawing of semi-finished and finished specialty steels. Our products are sold to service centers, forgers, rerollers, original equipment manufacturers (“OEMs”) and wire redrawers. Our customers further process our products for use in a variety of industries, including the aerospace, power generation, oil and gas, heavy equipment and general industrial markets. We also perform conversion services on materials supplied by customers.

We operate in four locations: Bridgeville and Titusville, Pennsylvania; Dunkirk, New York; and North Jackson, Ohio. Our corporate headquarters is located at our Bridgeville location. We operate these four manufacturing locations as one reportable business segment.

We produce a wide variety of specialty steel grades using several manufacturing processes including argon oxygen decarburization (“AOD”), electro-slag remelted (“ESR”), vacuum induction melting (“VIM”) and vacuum-arc remelted (“VAR”). At our Bridgeville and North Jackson facilities, we produce specialty steel products in the form of semi-finished and finished long products (ingots, blooms, billets and bars). In addition, the Bridgeville facility produces flat rolled products (slabs and plates). Semi-finished long products are primarily used by our Dunkirk facility and certain customers to produce finished bar, rod, and wire products. Finished bar products that we manufacture are primarily used by OEMs and by service center customers for distribution to a variety of end

users. We also produce customized shapes primarily for OEMs that are cold rolled from purchased coiled strip, flat bar or extruded bar at our precision rolled products department, located at our Titusville facility.

INDUSTRY OVERVIEW

The specialty steel industry is a relatively small but distinct segment of the overall steel industry. Specialty steels include stainless steels, nickel alloys, tool steels, electrical steels, high-temperature alloys, magnetic alloys and electronic alloys. Specialty steels are made with a high alloy content, suitable for use in environments that demand exceptional hardness, toughness, strength and resistance to heat, corrosion or abrasion, or combinations thereof. Specialty steels generally must conform to more demanding customer specifications for consistency, straightness and surface finish than carbon steels. For the years ended December 31, 2018, 2017 and 2016, approximately 69% of our net sales were derived from stainless steel products.

We primarily manufacture our products within the following product lines and, generally, in response to customer orders:

Stainless Steel. Stainless steel, which represents the largest part of the specialty steel market, contains elements such as nickel, chrome and molybdenum that give it the unique qualities of high strength, good wear characteristics, natural attractiveness, ease of maintenance and resistance to corrosion and heat. Stainless steel is used, among other applications, in the aerospace, oil and gas, power generation and automotive industries, as well as in the manufacturing of equipment for food handling, health and medical, chemical processing and pollution control.

High-Strength Low Alloy Steel. High-strength low alloy steel is a relative term that refers to those steels that maintain alloying elements that range in versatility. The alloy elements of nickel, chrome and molybdenum in such steels typically exceeds the alloy element of carbon steels but not that of high-temperature alloy steel. High-strength low alloy steels are manufactured for use generally in the aerospace industry.

Tool Steel. Tool steels contain elements of nickel, chrome and molybdenum to produce specific hardness characteristics that enable tool steels to form, cut, shape and shear other materials in the manufacturing process. Heating and cooling at precise rates in the heat-treating process bring out these hardness characteristics. Tool steels are utilized in the manufacturing of metals, plastics, paper and aluminum extrusions, pharmaceuticals, electronics and optics.

High-Temperature Alloy Steel. These steels are designed to meet critical requirements of heat resistance and structural integrity. They generally have very high nickel content relative to other types of specialty steels. High-temperature alloy steels are manufactured for use generally in the aerospace industry.

Our net sales by principal product line were as follows:

For the years ended December 31, (dollars in thousands)	2018	2017	2016
Stainless steel	$ 176,955	$ 139,603	$ 112,118
High-strength low alloy steel	21,617	15,693	13,180
Tool steel	40,308	32,279	19,179
High-temperature alloy steel	11,467	12,435	6,057
Conversion services and other sales	5,580	2,633	3,900
Total net sales	$ 255,927	$ 202,643	$ 154,434

RAW MATERIALS

We depend on the delivery of key raw materials for our day-to-day operations. These key raw materials are carbon and stainless scrap metal and alloys, primarily consisting of nickel, chrome, molybdenum, and copper. Scrap metal is primarily generated by industrial sources and is purchased through a number of scrap brokers and processors. We also recycle scrap metal generated from our own production operations as a source of metal for our melt shops. Alloys are generally purchased from domestic agents and originate in the United States, Australia, Canada, China, Russia, South America and South Africa.

Our Bridgeville and North Jackson facilities currently supply semi-finished specialty steel products as starting materials to our other operating facilities. Semi-finished specialty steel starting materials, which we cannot produce at a competitive cost, are purchased from other suppliers. We generally purchase these starting materials from steel strip coil suppliers, extruders, flat rolled producers and service centers. We believe that adequate supplies of starting material will continue to be available.

The cost of raw materials represents approximately 40% of the cost of products sold in 2018, and approximately 35% and 30%, respectively, of the cost of products sold in 2017 and 2016. Raw material costs can be impacted by significant price changes. Raw material prices vary based on numerous factors, including quality, and are subject to frequent market fluctuations. The average price of several of our major raw materials, including nickel, molybdenum and carbon scrap, increased in 2018 compared to the prior year. Future raw material prices cannot be predicted with any degree of certainty. We do not maintain any fixed-price long-term agreements with any of our raw material suppliers.

We maintain a sales price surcharge mechanism on certain of our products to match sales prices to raw material price changes. For certain products, the surcharge is calculated at the time of order entry, based on current raw material prices or prices at the time of shipment. For certain finished products, the surcharge is calculated based on the monthly average raw material prices two months prior to the promised ship date.

CUSTOMERS

Our largest customer in 2018, Reliance Steel & Aluminum Co., accounted for approximately 18%, 17% and 20% of our net sales for the years ended December 31, 2018, 2017 and 2016, respectively. No other customer accounted for more than 10% of our net sales during those years. International sales approximated 8% of annual net sales in 2018, and 9% in 2017 and 2016.

BACKLOG

Our backlog of orders (excluding surcharges) on hand as of December 31, 2018 was approximately $126.2 million compared to approximately $77.7 million at December 31, 2017. We believe that this 63% increase in our backlog is largely a result of increased demand for our products due to an improved market as well as market share gains. We expect substantially all of the backlog orders as of December 31, 2018 to be filled during 2019. Our backlog may not be indicative of actual sales because certain surcharges are not determinable until the order is shipped to the customer and, therefore, should not be used as a direct measure of future revenue. However, we expect that our actual sales will be higher than the backlog once the actual surcharges are determined.

COMPETITION

Competition in our markets is based upon product quality, delivery capability, customer service, customer approval and price. Maintaining high standards of product quality, while responding quickly to customer needs and keeping production costs at competitive levels, is essential to our ability to compete in these markets.

We believe that there are several companies that manufacture one or more similar specialty steel products that are significant competitors. There are a few smaller producing companies and material converters that are also considered to be competitors.

High import penetration of specialty steel products, especially stainless and tool steels, also impacts the competitive nature within the United States. Unfair pricing practices by foreign producers have resulted in high import penetration into the U.S. markets in which we participate.

EMPLOYEE RELATIONS

We consider the maintenance of good relations with our employees to be important to the successful conduct of our business. We have profit-sharing plans for certain salaried and hourly employees and for all of our employees represented by United Steelworkers (the “USW”) and have equity ownership programs for all of our eligible employees, in an effort to forge an alliance between our employees’ interests and those of our stockholders. At December 31, 2018, 2017 and 2016, we had 781, 703, and 645 employees, respectively, of which 607, 564, and 508, respectively, were USW members.

Collective Bargaining Agreements

Our Bridgeville, Titusville, Dunkirk and North Jackson facilities recognize the USW as the exclusive representative for their hourly employees with respect to the terms and conditions of their employment. The following collective bargaining agreements are currently in place:

Facility	Commencement Date	Expiration Date
Bridgeville	September 2018	August 2023
North Jackson	July 2018	June 2024
Dunkirk	November 2017	October 2022
Titusville	October 2015	September 2020

We believe a critical component of our collective bargaining agreements is the inclusion of a profit sharing plan.

Employee Benefit Plans

We maintain a 401(k) retirement plan for our hourly and salaried employees. Pursuant to the 401(k) plan, participants may elect to make pre-tax and after-tax contributions, subject to certain limitations imposed under the Internal Revenue Code of 1986, as amended. In addition, we make periodic contributions to the 401(k) plan for the hourly employees employed at the North Jackson, Dunkirk and Titusville facilities, based on service. Prior to the collective bargaining agreement reached with North Jackson hourly employees in 2018, contributions were based upon the employee's age and wage rate for hourly employees at the North Jackson facility.

We make periodic contributions for the salaried employees at all locations based upon their service and their individual contribution to the 401(k) retirement plan. Prior to the North Jackson collective bargaining agreement, we make periodic contributions based upon the employee's age, annual salary, and their individual contributions for salaried employees at the North Jackson facility.

We participate in the Steelworkers Pension Trust (the "Trust"), a multi-employer defined-benefit pension plan that is open to all hourly and salaried employees associated with the Bridgeville facility. We make periodic contributions to the Trust based on hours worked at a fixed rate for each hourly employee and a fixed monthly contribution on behalf of each salaried employee.

We also provide group life and health insurance plans for our hourly and salary employees.

Employee Stock Purchase Plan

Under the 1996 Employee Stock Purchase Plan, as amended (the "Plan"), the Company is authorized to issue up to 300,000 shares of common stock to its full-time employees, nearly all of whom are eligible to participate. Under the terms of the Plan, employees can choose as of January 1 and July 1 of each year to have up to 10% of their total earnings withheld to purchase up to 100 shares of our common stock each six-month period. The purchase price of the stock is 85% of the lower of its beginning-of-the-period or end-of-the-period market prices. At December 31, 2018, we have issued 219,991 shares of common stock since the Plan's inception.

ENVIRONMENTAL

We are subject to federal, state and local environmental laws and regulations (collectively, "Environmental Laws"), including those governing discharges of pollutants into the air and water, and the generation, handling and disposal of

hazardous and non-hazardous substances. We monitor our compliance with applicable Environmental Laws and, accordingly, believe that we are currently in compliance with all laws and regulations in all material respects. We are subject periodically to environmental compliance reviews by various regulatory offices. We may be liable for the remediation of contamination associated with generation, handling and disposal activities. Environmental costs could be incurred, which may be significant, related to environmental compliance, at any time or from time to time in the future.

EXECUTIVE OFFICERS

The following table sets forth, as of February 20, 2019, certain information with respect to the executive officers of the Company:

Name (Age)	Executive Officer Since	Position
Dennis M. Oates (66)	2008	Chairman, President and Chief Executive Officer
Christopher M. Zimmer (45)	2010	Executive Vice President and Chief Commercial Officer
Graham McIntosh, Ph.D. (56)	2015	Executive Vice President and Chief Technology Officer
Paul A. McGrath (67)	1996	Vice President of Administration, General Counsel and Secretary
Christopher T. Scanlon (43)	2018	Vice President of Finance, Chief Financial Officer and Treasurer
Alyssa H. Snider (40)	2018	Vice President and Chief Human Resources Officer

Dennis M. Oates has been President and Chief Executive Officer of the Company since 2008. Mr. Oates was named to the Company's Board of Directors in 2007. Mr. Oates previously served as Senior Vice President of the Specialty Alloys Operations of Carpenter Technology Corporation from 2003 to 2007. Mr. Oates also served as President and Chief Executive Officer of TW Metals, Inc. from 1998 to 2003. In May 2010, the Board of Directors elected Mr. Oates to the additional position of Chairman.

Christopher M. Zimmer has been Executive Vice President and Chief Commercial Officer since July 2014. Mr. Zimmer served as Vice President of Sales and Marketing from 2008 to July 2014. Mr. Zimmer previously served as Vice President of Sales and Marketing for Schmoltz+Bickenbach USA from 1995 to 2008. He held positions of increasing responsibility including inside sales, Commercial Manager—stainless bar, General Manager—nickel alloy products, and National Sales Manager.

Graham McIntosh, Ph.D. has been Executive Vice President and Chief Technology Officer since May 2018. Dr. McIntosh also served as the Company's Vice President and Chief Technology Officer from November 2013 until May 2018. Dr. McIntosh previously served as Director of Global Technology Initiatives for Carpenter Technology Corporation where he joined in 2008. Dr. McIntosh also served as Vice President of Technology and Director of Quality for Firth Rixson Viking from 2001 to 2008, and also held several management and technical positions at Wyman-Gordon Livingston from 1987-2001, where he began his career.

Paul A. McGrath has been Vice President of Administration of the Company since 2007, General Counsel since 1995 and was appointed Secretary in 1996. Mr. McGrath served as Vice President of Operations from 2001 to 2006. Previously, he was employed by Westinghouse Electric Corporation for approximately 24 years in various management positions.

Christopher T. Scanlon has been Vice President of Finance, Chief Financial Officer and Treasurer since April 2018. Mr. Scanlon previously served as Controller and Chief Accounting Officer for L.B. Foster Company, a leading manufacturer and distributor of products and services for transportation and energy infrastructure, where he joined in 2012. Mr. Scanlon also served as Division Controller for Education Management Corporation from 2009 to 2012, and also held positions of increasing responsibilities with Bayer Corporation, the U.S. operations of the German-based Bayer AG, and Respironics, Inc.

Alyssa H. Snider has been Vice President and Chief Human Resource Officer since November 2018. Ms. Snider previously served as Americas HR Talent Strategy Advisor, Manufacturing for Shell Oil Company, a global group of

energy and petrochemical companies, where she joined in June 2002. She held positions of increasing responsibility including HR Analyst and Business Partner, HR Manager of Capital Projects in the U.S. and Organizational Effectiveness Consultant.

PATENTS AND TRADEMARKS

We do not consider our business to be materially dependent on patent or trademark protection, and believe we own or maintain effective licenses covering all the intellectual property used in our business. We benefit from our proprietary rights relating to designs, engineering and manufacturing processes and procedures. We seek to protect our proprietary information by use of confidentiality and non-competition agreements with certain employees.

AVAILABLE INFORMATION

Our common stock is listed on the NASDAQ Global Select Market under the “USAP” ticker symbol. Copies of our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as well as proxy and information statements that we file with the SEC, are available free of charge on our website at www.univstainless.com as soon as reasonably practicable after such reports are filed with the SEC. The contents of our website are not part of this Form 10-K. Copies of these documents will be available to any shareholder upon request. Requests should be directed in writing to Investor Relations at 600 Mayer Street, Bridgeville, PA 15017. The SEC maintains an Internet site at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers, like us, that file electronically with the SEC.

ITEM 1A. RISK FACTORS

We wish to caution each reader of this Form 10-K to consider the following factors and other factors discussed herein and in other past reports, including but not limited to prior year Form 10-K and Form 10-Q reports filed with the SEC. Our business and results of operations could be materially affected by any of the following risks. The factors discussed herein are not exhaustive. Therefore, the factors contained herein should be read together with other reports that we file with the SEC from time to time, which may supplement, modify, supersede, or update the factors listed in this document.

A substantial amount of our sales are derived from a limited number of customers.

Our five largest customers in the aggregate accounted for approximately 43% of our net sales for the year ended December 31, 2018, 41% of our net sales for the year ended December 31, 2017 and 42% for the year ended 2016. The accounts receivable balance from these five customers comprised approximately 37% of total accounts receivable at December 31, 2018. An adverse change in, or termination of, the relationship with one or more of our customers or market segments could have a material adverse effect on our results of operations.

Our business is very competitive, and increased competition could reduce our sales.

We compete with domestic and foreign producers of specialty steel products. In addition, many of the finished products sold by our customers are in direct competition with finished products manufactured by foreign sources, which may affect the demand for those customers’ products. Any competitive factors that adversely affect the market for finished products manufactured by us or our customers could indirectly adversely affect the demand for our semi-finished products. Additionally, our products compete with products fashioned from alternative materials such as aluminum, composites and plastics, the production of which includes domestic and foreign enterprises. Competition in our field is intense and is expected to continue to be so in the foreseeable future. A majority of our business is not covered under long term supply contracts. There can be no assurance that we will be able to compete successfully in the future.

The demand for our products may be cyclical

Demand for our products from our customers can be cyclical in nature and sensitive to various factors, including demand and other conditions in each of our end markets, fluctuations in inventory levels throughout the supply chain, and general macroeconomic conditions. A significant adverse change in demand for any reason could have a material adverse effect on our results of operations.

A substantial amount of our sales are derived from the aerospace industry.

Approximately 58% of our sales and 44% of our tons shipped represented products sold to customers in the aerospace market in 2018. The aerospace market is historically cyclical due to both external and internal market factors. These factors include general economic conditions, supply chain fluctuations, diminished credit availability, airline profitability, demand for air travel, age of fleets, varying fuel and labor costs, price competition, new technology development and international and domestic political conditions such as military conflict and the threat of terrorism. The length and degree of cyclical fluctuation can be influenced by any one or a combination of these factors and therefore are difficult to predict with certainty. While the aerospace industry is currently experiencing growth, a downturn in the aerospace industry would adversely affect the demand for products and/or the prices at which we are able to sell our products, and our results of operations, business and financial condition could be materially adversely affected.

Our business may be harmed by failure to develop, commercialize, market and sell new applications and new products.

We believe that our alloys and metallurgical manufacturing expertise provide us with a competitive advantage over other high-performance alloy producers. Our ability to maintain this competitive advantage depends on our ability to continue to offer products that have equal or better performance characteristics than competing products at competitive prices. Our future growth will depend, in part, on our ability to address the increasingly demanding needs of our customers by enhancing the properties of our existing alloys, by timely developing new applications for our existing products, and by timely developing, commercializing, marketing and selling new products. If we are not successful in these efforts, or if our new products and product enhancements do not adequately meet the requirements of the marketplace and achieve market acceptance, our business could be adversely affected.

Our business requires continuing efforts to obtain new customer approvals on existing products and applications, which is a stringent, difficult process subject to each customer’s varying approval methodology and preferences. If we are not successful in these efforts, our business could be adversely affected.

We are dependent on the availability and price of raw materials and operating supplies.

We purchase carbon and stainless scrap metal and alloy additives, principally nickel, chrome, molybdenum, manganese and copper, for our melting operation. A substantial portion of the alloy additives is available only from foreign sources, some of which are located in countries that may be subject to unstable political and economic conditions. Those conditions might disrupt supplies or affect the prices of the raw materials. We maintain sales price surcharges on certain of our products to help offset the impact of raw material price fluctuations.

We do not maintain long-term fixed-price supply agreements with any of our raw material suppliers. If our supply of raw materials were interrupted, we might not be able to obtain sufficient quantities of raw materials, or obtain sufficient quantities of such materials at satisfactory prices, which, in either case, could adversely affect our results of operations. In addition, significant volatility in the price of our principal raw materials could adversely affect our financial results and there can be no assurance that the raw material surcharge mechanism employed by us will completely offset immediate changes in our raw material costs.

Our production processes require consumable operating supplies, such as electrodes, which have increased in price significantly compared to prior years. Significant volatility in the price of our consumable operating supplies could adversely affect our financial results.

Our business requires substantial amounts of energy.

The manufacturing of specialty steel is an energy-intensive process and requires the ready availability of substantial amounts of electricity and natural gas, for which we negotiate competitive supply agreements. While we believe that our energy agreements allow us to compete effectively within the specialty steel industry, the potential for increased costs exists during periods of high demand or supply disruptions. We have a sales price surcharge to help offset the cost fluctuations.

We are subject to risks associated with global economic and market factors.

Our results of operations are affected directly by the level of business activity of our customers and our suppliers, which in turn is affected by global economic and market factors impacting the industries and markets that we participate in. We are susceptible to macroeconomic downturns in the United States and abroad that may affect the general economic climate, our performance and the demand of our customers. We may face significant challenges if conditions in the financial markets deteriorate. There can be no assurance that global economic and market conditions will not adversely impact our results of operations, cash flow or financial position in the future.

Existing free trade laws and regulations, such as the North American Free Trade Agreement and its anticipated successor agreement, the United States-Mexico-Canada Agreement, which is still subject to approval, provide certain beneficial duties and tariffs for qualifying imports and exports, subject to compliance with the applicable classification and other requirements. Changes in laws or policies governing the terms of foreign trade, and in particularly increased trade restrictions, tariffs or taxes on imports from countries where we sell products or purchase materials could have a material adverse effect on our business and financial results. Given the uncertainty regarding the scope and duration of current, proposed, or future imposed tariffs, we can provide no assurance that any strategies we implement to mitigate the impact of such tariffs on the Company will be successful.

Our business depends largely on our ability to attract and retain key personnel.

We depend on the continued service, availability and ability to attract skilled personnel, including members of our executive management team, other management positions, and metallurgists, along with maintenance and production positions. Our inability to attract and retain such people may adversely impact our ability to fill existing roles and support growth. Attraction and retention of qualified personnel remains challenging as the labor market remains tight.

Further, the loss of key personnel could adversely affect our ability to perform until suitable replacements can be found.

Our business may be harmed by strikes or work stoppages.

At December 31, 2018, we had 607 employees, out of a total of 781, who were covered under collective bargaining agreements with the USW expiring at various dates in 2020 to 2024. There can be no assurance that we will be successful in timely concluding collective bargaining agreements with the USW to succeed the agreements that expire, in which case, we may experience strikes or work stoppages that may have a material adverse impact on our results of operations.

Our business may be harmed by failures on critical manufacturing equipment.

Our manufacturing processes are dependent upon certain critical pieces of specialty steel making equipment, including our 50-ton electric-arc furnace and AOD vessel, our ESR, VIM and VAR furnaces, our radial hydraulic forge and our universal rolling mill. In the event a critical piece of equipment should become inoperative as a result of unexpected equipment failure, there can be no assurance that our operations would not be substantially curtailed, which may have a negative effect on our financial results.

Our business may be harmed if we are unable to meet our debt service requirements or the covenants in our credit agreement, or if interest rates increase.

We have debt upon which we are required to make scheduled interest and principal payments, and we may incur additional debt in the future. A significant portion of our debt bears interest at variable rates that may increase in the future. A significant increase in interest rates or disruption in the global financial markets may affect our ability to obtain financing or to refinance existing debt on acceptable terms, if at all, and could increase the cost of our borrowings. Our ability to satisfy our debt obligations will depend upon our future operating performance, which will be affected by prevailing economic conditions in the markets that we serve and financial, business and other factors, many of which are beyond our control. If we are unable to generate sufficient cash to service our debt or if interest rates increase, our results of operations and financial condition could be adversely affected. Our credit agreement, which provides for a $110.0 million senior secured revolving credit facility and a $10.0 million senior secured term loan facility, also requires us to comply with certain covenants. Failure to comply with the covenants contained in the credit agreement could result in a default, which, if not waived by our lenders, could substantially increase our borrowing costs and result in acceleration of our debt. As of December 31, 2018, we were in compliance with the covenants in our credit agreement.

We believe that our international sales and purchases are associated with various risks.

We conduct business with suppliers and customers in foreign countries which exposes us to risks associated with international business activities, including effects of the implementation of the United Kingdom's referendum to withdraw membership from the European Union (referred to as "Brexit"). We could be significantly impacted by these risks, which include the potential for volatile economic and labor conditions, political instability, collecting accounts receivable and exchange rate fluctuations (which may affect sales revenue to international customers and the margins on international sales when converted into U.S. dollars). International sales approximated 8% of annual net sales in 2018, and 9% in 2017 and 2016.

If we are unable to protect our information technology infrastructure against service interruptions, data corruption, cyber-based attacks or network security breaches, our operations could be disrupted.

We rely on information technology networks and systems to manage and support a variety of business activities, including procurement and supply chain, engineering support, and manufacturing. Our information technology systems, some of which are managed by third-parties, may be susceptible to the inability to continue to receive software updates and contractual vendor support, damage, disruptions or shutdown due to failures during the process of upgrading or replacing software, databases or components thereof, power outages, hardware failures, computer viruses, attacks by computer hackers, telecommunications failures, user errors or catastrophic events. In addition, security breaches could result in unauthorized disclosures of confidential information. If our information technology systems suffer severe damage, disruption or shutdown and our business continuity plans do not effectively resolve the issues in a timely manner, our manufacturing process could be disrupted resulting in late deliveries or even no deliveries if there is a total shutdown.

Changes in tax rules and regulations, or interpretations thereof, may adversely affect our effective tax rates.

We are a U.S. based company with customers and suppliers in foreign countries. We import various raw materials used in our production processes and we export goods to our foreign customers. The United States, the European Commission, countries in the EU and other countries where we do business have been implemented and may consider further changes in relevant tax, border tax, accounting and other laws, regulations and interpretations, that may unfavorably impact our effective tax rate or result in other costs to us.

Our business subjects us to risk of litigation claims, as a routine matter, and this risk increases the potential for a loss that might not be covered by insurance.

Litigation claims may relate to the conduct of our business, including claims relating to product liability, commercial disputes, employment actions, employee benefits, compliance with domestic and federal laws and personal injury. Due to the uncertainties of litigation, we might not prevail on claims made against us in the lawsuits that we currently face, and additional claims may be made against us in the future. The outcome of litigation cannot be predicted with certainty, and some of these lawsuits, claims or proceedings may be determined adversely to us. The resolution in any reporting period of one or more of these matters could have a material adverse effect on our business.

Costs related to our participation in a multi-employer pension plan could increase significantly.

We participate in the Steelworkers Pension Trust (the "Trust"), a multi-employer defined-benefit pension plan. We make contributions to the Trust with respect to all hourly and salaried employees associated with our Bridgeville facility. Our contributions to the Trust are based on hours worked at a fixed rate for each hourly employee, as determined by the collective bargaining agreement, which expires in August 2023, and a fixed monthly contribution on behalf of each covered salaried employee. The trustees of the Trust have provided us with the latest data available for the Trust year ended December 31, 2017. As of that date, the Trust is not fully funded. Our contribution rates could increase if the Trust is required to adopt a funding improvement plan or a rehabilitation plan as a result of funding deficiencies in excess of specified levels, which may be due to poor performance of Trust investments or other factors, or as a result of future wage and benefit agreements. In addition, if we choose to stop participating in the Trust, our contributions to the Trust decline or the Trust is terminated, we may be required to pay the Trust an amount based on the underfunded status of the Trust, referred to as a withdrawal liability. In the event that our contribution rates increase or if we must pay withdrawal liability because we stop participating in the Trust, our contributions decline or the Trust is terminated, our future results of operations and cash flows may be negatively impacted to a material extent.

Our business is subject to stringent environmental, health and safety regulations which may result in significant liabilities and/or costs to maintain compliance.

Our operations and properties are subject to extensive and varied federal, state, local and international laws and regulations relating to public health, the environment, pollution, and occupational safety and health. We have used, and currently use and manufacture, substances that are considered hazardous or toxic under worker safety and health laws and regulations. We take measures to control or eliminate the continuing risk associated with the environmental, health and safety issues, however we could incur substantial fines and civil or criminal sanctions, cleanup costs, compliance investments and third-party property or injury claims as a result of violations, or non-compliance related to these regulations affecting our facilities and operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS
None.

ITEM 2. PROPERTIES
We own our Bridgeville, Pennsylvania facility, which consists of approximately 760,000 square feet of floor space and our executive offices on approximately 74 acres. The Bridgeville facility contains melting, remelting, conditioning, rolling, annealing and various other processing equipment. Substantially all products shipped from the Bridgeville facility are processed through its melt shop and universal rolling mill operations.

We own our North Jackson, Ohio facility, which consists of approximately 257,000 square feet of floor space on approximately 110 acres. The North Jackson facility contains melting, remelting, forging, annealing and various other processing operations. Our obligations under our credit agreement, which is more fully described under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources," are collateralized by a first lien on our real property in North Jackson, Ohio. Also, our obligations under the Notes, also more fully described under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources," are collateralized by a second lien on our North Jackson, Ohio real property.

We own our Dunkirk, New York facility, which consists of approximately 680,000 square feet of floor space on approximately 81 acres. The Dunkirk facility processes semi-finished billet and bar stock through one or more of its five rolling mills, a high temperature annealing facility and/or a round or shape bar finishing facility.

We own our Titusville, Pennsylvania facility, which consists of seven buildings on approximately 10 acres, including two principal buildings of approximately 265,000 square feet in total area. The Titusville facility contains five VAR furnaces and various rolling and finishing equipment.

Specialty steel production is a capital-intensive industry. We believe that our facilities and equipment are suitable for our present manufacturing needs. We believe, however, that we will continue to require capital from time to time to add new equipment and to repair or replace our existing equipment to remain competitive and to enable us to manufacture quality products and provide delivery and other support service assurances to our customers.

ITEM 3. LEGAL PROCEEDINGS
Information regarding the Company's legal proceedings and other commitments and contingencies is set forth in Part II, Item 8, Financial Statements and Supplementary Data, Note 13, which is incorporated by reference into this Item 3.

ITEM 4. MINE SAFETY DISCLOSURES
Not applicable.

PART II

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

At December 31, 2018, a total of 8,752,490 shares of common stock, par value $0.001 per share, were issued and held by 94 holders of record. There were 292,855 shares of the issued common stock held in treasury at December 31, 2018.

On May 25, 2018, the Company completed an underwritten, public offering involving the issuance and sale by the Company of 1,224,490 shares of common stock at a public offering price of $24.50 per share. In addition, the Company granted the underwriters a 30-day option to purchase up to an additional 183,673 shares of common stock. On June 1, 2018, the underwriters exercised the option in full, and an additional 183,673 shares of common stock were issued and sold on June 5, 2018. The public offering resulted in gross proceeds to the Company of approximately $34.5 million, or $32.2 million net of the underwriting discount and other offering fees and expenses. We used the net proceeds from the public offering to repay amounts outstanding under the Company's revolving credit facility.

PERFORMANCE GRAPH

The performance graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on the equity securities of the NASDAQ Composite Index and a peer group selected by us. The peer group consists of domestic specialty steel producers: Allegheny Technologies Incorporated; Materion Corporation; Carpenter Technology Corporation; and Haynes International, Inc. The graph assumes an investment of $100 on December 31, 2013 reinvestment of dividends, if any, on the date of dividend payment and the peer group is weighted by each company's market capitalization. The performance graph represents past performance and should not be considered to be an indication of future performance.

Comparison of 5-Year Cumulative Total Shareholder Return among Universal Stainless & Alloy Products, Inc., the NASDAQ Composite Index and a Peer Group

	For the years ended December 31,					
Company/Peer/Market	2013	2014	2015	2016	2017	2018
Universal Stainless & Alloy Products, Inc.	$ 100.00	$ 69.74	$ 25.76	$ 37.47	$ 59.40	$ 44.95
Peer Group	$ 100.00	$ 92.30	$ 47.12	$ 62.30	$ 84.46	$ 70.51
NASDAQ Composite Index	$ 100.00	$ 114.75	$ 122.74	$ 133.62	$ 173.22	$ 168.30

PREFERRED STOCK

Our Certificate of Incorporation provides that we may, by vote of our Board of Directors, issue up to 1,980,000 shares of preferred stock. The preferred stock may have rights, preferences, privileges and restrictions thereon, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or designation of such series, without further vote or action by the stockholders. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common stock, including the loss of voting control to others. We have no outstanding preferred stock and have no current plans to issue any of the authorized preferred stock.

DIVIDENDS

We have never paid a cash dividend on our common stock. Our credit agreement does not permit the payment of cash dividends on our common stock.

ITEM 6. SELECTED FINANCIAL DATA

For the years ended December 31, (dollars in thousands, except per share amounts)	2018	2017	2016	2015	2014
Summary of operations:					
Net sales	$ 255,927	$ 202,643	$ 154,434	$ 180,660	$ 205,560
Goodwill impairment	$ -	$ -	$ -	$ 20,268	$ -
Operating income (loss)	$ 16,070	$ 4,237	$ (3,969)	$ (30,079)	$ 10,900
Net income (loss)	$ 10,662	$ 7,610	$ (5,347)	$ (20,672)	$ 4,050
Financial position at year-end:					
Cash	$ 3,696	$ 207	$ 75	$ 112	$ 142
Working capital	$ 115,654	$ 101,316	$ 84,397	$ 85,006	$ 98,069
Property, plant and equipment, net	$ 177,844	$ 174,444	$ 182,398	$ 193,505	$ 199,795
Total assets [1]	$ 353,320	$ 321,231	$ 296,045	$ 297,302	$ 352,845
Long-term debt [1]	$ 42,839	$ 75,006	$ 67,998	$ 72,884	$ 81,846
Stockholders' equity	$ 237,011	$ 191,668	$ 181,220	$ 184,977	$ 203,630
Common share data:					
Net income (loss) per common share - Basic [2]	$ 1.31	$ 1.05	$ (0.74)	$ (2.92)	$ 0.58
Net income (loss) per common share - Diluted [2]	$ 1.28	$ 1.03	$ (0.74)	$ (2.92)	$ 0.57

[1] Total assets and Long-term debt have been adjusted for certain prior periods to reflect the reclassification of deferred financing costs from Other long-term assets to a reduction of debt, consistent with the current period presentation due to the adoption of ASC 2015-3, "Simplifying the Presentation of Debt Issuance Costs".

[2] Includes approximately 1.2 million shares issued on May 25, 2018 and 0.2 million shares issued on June 1, 2018 in conjunction with the Company's underwritten, public offering of common stock. The public offering's impact on the weighted average number of shares for the year ended December 31, 2018 is approximately 0.8 million shares.

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

The following Management Discussion and Analysis ("MD&A") is intended to help the reader understand the consolidated results of operations and financial condition of Universal Stainless & Alloy Products, Inc. and its wholly-owned subsidiaries (collectively, "we," "us," "our," or the "Company"). This MD&A should be read in conjunction with our consolidated financial statements and accompanying notes included in this Form 10-K. When reviewing the discussion, you should keep in mind the substantial risks and uncertainties that characterize our business. In particular, we encourage you to review the risk and uncertainties described under Item 1A "Risk Factors," of this Form 10-K. These risks and uncertainties could cause actual results to differ materially from those forecasted in forward-looking statements or implied by past results and trends. Forward-looking statements are statements that attempt to project or anticipate future developments in our business; we encourage you to review the discussion of forward-looking statements under "Cautionary Statement for Purposes of the "Safe Harbor" Provisions of the Private Securities Litigation Reform Act of 1995," at the beginning of this report. These statements, like all statements in this report, speak only as of the date of this report (unless another date is indicated), and we undertake no obligation to update or revise the statements in light of future developments. Unless otherwise specified, any reference to a "year" is to the year ended December 31.

Overview

We manufacture and market semi-finished and finished specialty steel products, including stainless steel, nickel alloys, tool steel and certain other alloyed steels. Our manufacturing process involves melting, remelting, heat treating, hot and cold rolling, forging, machining and cold drawing of semi-finished and finished specialty steels. Our products are sold to service centers, forgers, rerollers, original equipment manufacturers and wire redrawers. Our customers further process our products for use in a variety of industries, including the aerospace, power generation, oil and gas and general industrial markets. We also perform conversion services on materials supplied by customers.

Our end markets continued to strengthen throughout 2018. Nearly all of our end markets were up in 2018 compared with 2017, and total net sales increased more than 26% to a record $255.9 million. Our largest end market, aerospace, increased 33% to $148.9 million or 58% of total net sales. The growth in aerospace was due to strong customer demand, driven by increasing airplane production and growing backlog among the market leaders. Sales in each quarter of 2018 were higher than the comparable 2017 period. Backlog at the end of 2018 was $126.2 million, a record level and an increase of 63% compared to the end of 2017. We received three new customer approvals that are critical to our continued growth in the aerospace end market, and we added three new products in 2018, with an additional 15 new products in the development process. New product introductions are essential as we continue our transition to a higher value product mix.

Our 2018 gross margin was 14.8% of net sales, improved from 11.4% of net sales in 2017. This was due to increased sales volume combined with operational productivity enhancements and selling price increases. This represents the second consecutive year of gross margin expansion, after 2017 increased from 8.8% of net sales in 2016.

Selling, general and administrative ("SG&A") expenses increased by $2.9 million in 2018. The increase in SG&A was driven by higher employee related costs, including incentive compensation, associated with the increased business levels.

Overall, our operating income in 2018 was $16.1 million, compared to $4.2 million in 2017, reflecting overall improved operational results.

During 2018, we generated $16.6 million of cash from operating activities, and used $15.4 million on capital expenditures, a significant portion of which was strategic capital spending related to finished bar production at our Dunkirk facility.

Our financing activities provided net cash of $2.7 million. The Company completed an equity offering in the second quarter of 2018, which included the sale of 1.4 million shares of common stock and raised $32.2 million of net proceeds. The proceeds were used to pay down our revolving credit facility. We entered into a new credit agreement that provided a revolving credit facility of up to $110.0 million and a term loan facility of $10.0 million. We also entered into a New Markets Tax Credit ("NMTC") financing agreement, which provided low interest financing for our mid-size bar cell capital project at our Dunkirk, NY facility.

Our operating facilities are integrated, and therefore our chief operating decision maker ("CODM") views the Company as one business unit. Our CODM sets performance goals, assesses performance and makes decisions about resource allocations on a consolidated basis. As a result of these factors, as well as the nature of the financial information available which is reviewed by our CODM, we maintain one reportable segment.

Results of Operations

2018 Results Compared to 2017

For the years ended December 31, (dollars in thousands, except per shipped ton information)	2018		2017			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar / ton variance	Percentage variance
Net sales:						
Stainless steel	$ 176,955	69.2 %	$ 139,603	69.0 %	$ 37,352	26.8 %
High-strength low alloy steel	21,617	8.4	15,693	7.7	5,924	37.7
Tool steel	40,308	15.7	32,279	15.9	8,029	24.9
High-temperature alloy steel	11,467	4.5	12,435	6.1	(968)	(7.8)
Conversion services and other sales	5,580	2.2	2,633	1.3	2,947	111.9
Total net sales	255,927	100.0	202,643	100.0	53,284	26.3
Cost of products sold	218,111	85.2	179,609	88.6	38,502	21.4
Gross margin	37,816	14.8	23,034	11.4	14,782	64.2
Selling, general and administrative expenses	21,746	8.5	18,797	9.3	2,949	15.7
Operating income	16,070	6.3	4,237	2.1	11,833	279.3
Interest expense	4,047	1.6	4,022	2.0	25	0.6
Deferred financing amortization	255	0.1	255	0.1	-	-
Other income	(829)	(0.3)	(49)	-	(780)	NM
Income before income taxes	12,597	4.9	9	0.0	12,588	NM
Provision (benefit) from income taxes	1,935	0.8	(7,601)	(3.8)	9,536	125.5
Net income	$ 10,662	4.1 %	$ 7,610	3.8 %	$ 3,052	40.1 %
Tons shipped	44,554		39,246		5,308	13.5 %
Sales dollars per shipped ton	$ 5,744		$ 5,163		$ 581	11.3 %

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Market Segment Information:

For the years ended December 31, (dollars in thousands)	2018		2017			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Service centers	$ 180,165	70.4 %	$ 140,259	69.2 %	$ 39,906	28.5 %
Original equipment manufacturers	20,582	8.0	17,634	8.7	2,948	16.7
Rerollers	29,337	11.5	23,675	11.7	5,662	23.9
Forgers	20,263	7.9	18,442	9.1	1,821	9.9
Conversion services and other sales	5,580	2.2	2,633	1.3	2,947	111.9
Total net sales	$ 255,927	100.0 %	$ 202,643	100.0 %	$ 53,284	26.3 %

Melt Type Information:

For the years ended December 31, (dollars in thousands)	2018		2017			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Specialty alloys	$ 209,203	81.7 %	$ 172,715	85.2 %	$ 36,488	21.1 %
Premium alloys	41,144	16.1	27,295	13.5	13,849	50.7
Conversion services and other sales	5,580	2.2	2,633	1.3	2,947	111.9
Total net sales	$ 255,927	100.0 %	$ 202,643	100.0 %	$ 53,284	26.3 %

The majority of our products are sold to service centers rather than the ultimate end market customers. The end market information in this Annual Report is our estimate based upon our knowledge of our customers and the grade of material sold to them, which they will in-turn sell to the ultimate end market customer.

End Market Information:

For the years ended December 31, (dollars in thousands)	2018		2017			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						

Aerospace	$ 148,850	58.2	%	$ 111,795	55.2	%	$ 37,055	33.1	%
Power generation	9,278	3.6		16,592	8.2		(7,314)	(44.1)	
Oil and gas	31,493	12.3		19,069	9.4		12,424	65.2	
Heavy equipment	41,623	16.3		33,876	16.7		7,747	22.9	
General industrial, conversion services and other sales	24,683	9.6		21,311	10.5		3,372	15.8	
Total net sales	$ 255,927	100.0	%	$ 202,643	100.0	%	$ 53,284	26.3	%

Net sales:

Net sales for the year ended December 31, 2018 increased $53.3 million, or 26.3%, compared to 2017. The increase in our sales reflects a 13.5% increase in consolidated tons shipped, as demand for our products increased as a result of strengthening market conditions throughout 2018, and a 11.3% increase in sales dollars per shipped ton. The increase in sales dollars per shipped ton was driven by improved product mix, increased surcharges, and base price increases implemented during the year.

Our product sales to all of our end markets except Power Generation increased as shown in the above table. Our premium alloy sales reached a record level of $41.1 million, or 16.1% of total sales, for the year ended December 31, 2018, compared to $27.3 million, or 13.5% of total sales, for the year ended December 31, 2017. Our premium alloy sales are primarily for the aerospace end market.

Gross margin:

Our gross margin, as a percentage of net sales, increased to 14.8% in 2018 from 11.4% in 2017. The increase in gross margin is a result of better alignment of melt costs and surcharges for the majority of the current year, and the realization of manufacturing and productivity savings. Gross margin in 2018 was adversely impacted toward the end of the year by the misalignment of customer surcharges and melt costs.

Selling, general and administrative expenses:

Our SG&A expenses consist primarily of employee costs including salaries, incentive compensation, payroll taxes and benefit related costs, legal and accounting services, share compensation and insurance costs. Our SG&A expenses increased by $2.9 million for the year ended December 31, 2018 compared to 2017. The increase is driven by higher employee related costs, including incentive compensation, consistent with increased business activity during the year. As a percentage of sales, our SG&A expenses were 8.5% in 2018 compared to 9.3% in 2017.

Interest expense and deferred financing amortization:

Our interest costs on our debt was $4.0 million for the years ended December 31, 2018 and 2017. Although our debt levels were substantially reduced for the second half of the 2018, the variable interest rates charged on our Credit Agreement debt increased steadily throughout the year. The interest rate on our variable rate debt is determined by a LIBOR-based rate plus an applicable margin based upon achieving certain ratios.

Other income:

Other income was $0.8 million in 2018 compared to less than $0.1 million in 2017. This increase is due to a favorable legal settlement of $0.7 million received in the second quarter of 2018.

Provision (benefit) from income taxes:

The 2018 income tax provision is $1.9 million, compared to an income tax benefit of $7.6 million for 2017. The significant components of the current year tax provision include the Federal statutory rate of 21%, offset by the benefit of research and development tax credits. The prior year tax benefit reflects a one-time adjustment due to the tax rate reduction enacted through the Tax Cuts and Jobs Act in 2017 and a corresponding revaluation of our deferred taxes.

Net income:

We had net income of $10.7 million the year ended December 31, 2018, which reflects the increased demand for our products and successful execution of 2018 business plans. This compares to $7.6 million for 2017, all of which was generated by the one-time tax benefit discussed above.

2017 Results Compared to 2016

For the years ended December 31, (dollars in thousands, except per shipped ton information)	2017		2016			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar / ton variance	Percentage variance
Net sales:						
Stainless steel	$ 139,603	69.0 %	$ 112,118	72.7 %	$ 27,485	24.5 %
High-strength low alloy steel	15,693	7.7	13,180	8.5	2,513	19.1
Tool steel	32,279	15.9	19,179	12.4	13,100	68.3
High-temperature alloy steel	12,435	6.1	6,057	3.9	6,378	105.3
Conversion services and other sales	2,633	1.3	3,900	2.5	(1,267)	(32.5)
Total net sales	202,643	100.0	154,434	100.0	48,209	31.2
Cost of products sold	179,609	88.6	140,921	91.2	38,688	27.5
Gross margin	23,034	11.4	13,513	8.8	9,521	70.5
Selling, general and administrative expenses	18,797	9.3	17,482	11.3	1,315	7.5
Operating income (loss)	4,237	2.1	(3,969)	(2.6)	8,206	206.8
Interest expense	4,022	2.0	3,659	2.4	363	9.9
Deferred financing amortization	255	0.1	1,015	0.7	(760)	(74.9)
Other (income) expense	(49)	-	230	0.1	(279)	121.3
Income (loss) before income taxes	9	0.0	(8,873)	(5.6)	8,882	100.1
Benefit from income taxes	(7,601)	(3.8)	(3,526)	(2.3)	4,075	115.6
Net income (loss)	$ 7,610	3.8 %	$ (5,347)	(3.5)%	$ 12,957	242.3 %
Tons shipped	39,246		31,372		7,874	25.1 %
Sales dollars per shipped ton	$ 5,163		$ 4,923		$ 240	4.9 %

Market Segment Information:

For the years ended December 31, (dollars in thousands)	2017		2016			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Service centers	$ 140,259	69.2 %	$ 108,582	70.3 %	$ 31,677	29.2 %
Forgers	18,442	9.1	13,441	8.7	5,001	37.2
Rerollers	23,675	11.7	12,481	8.1	11,194	89.7
Original equipment manufacturers	17,634	8.7	16,030	10.4	1,604	10.0
Conversion services and other sales	2,633	1.3	3,900	2.5	(1,267)	(32.5)
Total net sales	$ 202,643	100.0 %	$ 154,434	100.0 %	$ 48,209	31.2 %

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Melt Type Information:

For the years ended December 31, (dollars in thousands)	2017		2016			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Specialty alloys	$ 172,715	85.2 %	$ 136,178	88.2 %	$ 36,537	26.8 %
Premium alloys	27,295	13.5	14,356	9.3	12,939	90.1
Conversion services and other sales	2,633	1.3	3,900	2.5	(1,267)	(32.5)
Total net sales	$ 202,643	100.0 %	$ 154,434	100.0 %	$ 48,209	31.2 %

The majority of our products are sold to service centers rather than the ultimate end market customers. The end market information in this Annual Report is our estimate based upon our knowledge of our customers and the grade of material sold to them, which they will in-turn sell to the ultimate end market customer.

End Market Information:

For the years ended December 31, (dollars in thousands)	2017		2016			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Aerospace	$ 111,795	55.2 %	$ 91,979	59.6 %	$ 19,816	21.5 %
Power generation	16,592	8.2	14,175	9.2	2,417	17.1
Oil and gas	19,069	9.4	12,392	8.0	6,677	53.9
Heavy equipment	33,876	16.7	20,109	13.0	13,767	68.5
General industrial, conversion services and other sales	21,311	10.5	15,779	10.2	5,532	35.1
Total net sales	$ 202,643	100.0 %	$ 154,434	100.0 %	$ 48,209	31.2 %

Net sales:

Net sales for the year ended December 31, 2017 increased $48.2 million, or 31.2%, as compared to the same period in 2016. The increase in our sales primarily reflects a 25.1% increase in consolidated tons shipped in 2017, compared to 2016, as demand for our products increased as a result of strengthening market conditions throughout 2017. In addition, a 4.9% increase in sales dollars per ton was primarily due to product mix and better surcharge alignment. Our product sales to all of our end markets increased as noted in the above table. Our premium alloy sales were $27.3 million, or 13.5% of total sales, for the year ended December 31, 2017, compared to $14.4 million, or 9.3% of total sales, for the year ended December 31, 2016. Our premium alloy sales are primarily for the aerospace end market.

Gross margin:

Our gross margin, as a percentage of net sales, increased to 11.4% in 2017 from 8.8% for 2016. The increase in gross margin is a result of better alignment of melt costs and surcharges, and the realization of manufacturing and productivity savings. Gross margin in 2017 was adversely impacted by temporarily higher and unplanned maintenance costs as well as by costly outsourcing, as the Company ramped up its business in response to continued strong levels of backlog at a time of a tightening labor market.

Selling, general and administrative expenses:

Our SG&A expenses consist primarily of employee costs, which include salaries, payroll taxes and benefit related costs, legal and accounting services, share compensation and insurance costs. Our SG&A expenses increased by $1.3 million in the year ended December 31, 2017 as compared to the year ended December 31, 2016. Approximately $1.0 million is due to increased employee costs, $0.2 million is due to higher share-based compensation expense, and $0.6 million of the increase is due to higher legal costs, reflecting external legal expenses related to a lawsuit against a supplier for unauthorized substitution of material and defense of a claim of non-compliant material. These increases in SG&A were partially offset by $0.6 million reduction in variable compensation. As a percentage of sales, our SG&A expenses were 9.3% and 11.3%, respectively, for the years ended December 31, 2017 and 2016, respectively.

Interest expense and deferred financing amortization:

Our interest costs on our debt increased to $4.0 million for the year ended December 31, 2017 from $3.7 million for the year ended December 31, 2016. Approximately $0.2 million of this increase is due to higher interest rates and approximately $0.1 million is due to increased borrowings. The interest rate on our variable rate debt is determined by a LIBOR-based rate plus an applicable margin based upon achieving certain ratios. Our deferred financing costs are associated with our credit facility and the Amended and Restated Convertible Notes (collectively, the “Notes”). Our deferred financing costs decreased to $0.7 million from $1.0 million for the years ended December 31, 2017 and 2016, respectively. The decrease in deferred financing costs is due to the 2016 write off of $0.8 million of deferred financing costs associated with our prior credit agreement when we entered into our new credit agreement in January 2016.

Other (income) expense:

Other income was less than $0.1 million in 2017 compared to approximately $0.2 million of expense for the same period of 2016. This change reflects foreign currency losses in 2016 of $0.2 million.

Benefit from income taxes:

The 2017 income tax benefit of $7.6 million reflects a one-time adjustment due to the tax rate reduction enacted through the Tax Cuts and Jobs Act, fractionally offset by state tax items and new share compensation accounting guidance for 2017.

Net income (loss):

We had net income of $7.6 million for the year ended December 31, 2017, reflecting the one-time tax benefit noted above, compared to a net loss of $5.3 million for the year ended December 31, 2016.

Liquidity and Capital Resources

Historically, we have financed our operations through cash provided by operating activities and borrowings on our credit facilities.

On May 25, 2018, the Company completed an underwritten, public offering involving the issuance and sale by the Company of 1,224,490 shares of common stock at a public offering price of $24.50 per share. In addition, the Company granted the underwriters a 30-day option to purchase up to an additional 183,673 shares of common stock. On June 1, 2018, the underwriters exercised the option in full, and an additional 183,673 shares of common stock were issued and sold on June 5, 2018. The public offering resulted in gross proceeds to the Company of approximately $34.5 million, or $32.2 million net of the underwriting discount and other offering fees and expenses. We used the net proceeds from the public offering to repay amounts outstanding under the Company’s credit facility.

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On March 9, 2018, the Company entered into a qualified NMTC financing program with PNC New Markets Investment Partners, LLC and Boston Community Capital, Inc. related to a new mid-size bar cell capital project at the Company's Dunkirk, NY facility. PNC New Markets Investment Partners, LLC made a capital contribution and the Company made a loan to Dunkirk Investment Fund, LLC ("Investment Fund") under the NMTC program. Through this financing transaction, the Company secured low interest financing and the potential for other future benefits related to its mid-size bar cell capital project.

In connection with the NMTC financing program, the Company loaned $6.7 million aggregate principal amount ("Leverage Loan") due in March 2048, to the Investment Fund. Additionally, PNC New Markets Investment Partners, LLC contributed $3.5 million to the Investment Fund, and as such, PNC New Markets Investment Partners, LLC is entitled to substantially all tax and other benefits derived from the NMTC. The Investment Fund then contributed the proceeds to a community development entity ("CDE"). The CDE then loaned the funds, on similar terms, as the Leverage Loan to Dunkirk Specialty Steel, LLC, a wholly-owned subsidiary of the Company. The CDE loan proceeds are restricted for use on the mid-size bar cell capital project. The Company determined that the Investment Fund and CDE are each a VIE; refer to Note 6 for further details.

The economic effect of the NMTC transactions described above is that the Company secured low cost financing for its mid-size bar cell project.

Net cash provided by operating activities

During 2018, we generated net cash from operating activities of $16.6 million. Our managed working capital, defined as net accounts receivable plus net inventory minus accounts payable, used $22.7 million of cash. Inventories increased by $20.4 million to support increased demand and increased business activity. Accounts receivable increased by $7.6 million due to increased sales in the fourth quarter of 2018 compared to the fourth quarter of the prior year. Accounts payable increased by $5.3 million due to increased business activity levels and timing of payments. Net income adjusted for non-cash expenses generated $32.8 million and all other operating activities generated $6.5 million of cash in 2018.

During 2017, we generated net cash from operating activities of $1.1 million. Our managed working capital, defined as net accounts receivable plus net inventory minus accounts payable, used $18.8 million of cash from operations. Inventories increased by $27.4 million primarily due to increased demand, accounts receivable increased by $5.6 million due to increased sales in the fourth quarter of 2017, compared to the fourth quarter of 2016, and accounts payable increased by $14.2 million due to increased activity levels in the fourth quarter of 2017, compared to the fourth quarter of 2016. Net income adjusted for non-cash expenses generated $20.3 million and all other operating activities used approximately $0.4 million of cash in 2017.

Net cash used in investing activities

Our capital spending was $15.4 million during 2018 and $8.0 million during 2017. The increase is due to strategic capital spending at our Dunkirk, NY facility to install a new mid-size bar finishing operation.

Net cash used in financing activities

During 2018, financing activities provided $2.7 million in cash. We generated $32.2 million of cash through net proceeds from the equity offering, which we used to repay amounts outstanding under the Company's credit facility. We decreased borrowings under our Credit Agreement, Notes and capital leases by $32.2 million, and entered into the new Credit Agreement during the year. Financing activities were also impacted by borrowings related to the mid-size bar cell capital project at our Dunkirk, NY facility. These borrowings were made in conjunction with utilization of the

NMTC financing program and higher working capital levels.

During 2017, financing activities provided $7.0 million in cash. We increased borrowings under the credit facility by $11.5 million, paid $5.1 million on the term loan and capital leases, and received $0.6 million in proceeds from the issuance of common stock.

We believe that our cash flows from continuing operations, as well as available borrowings under our credit facility, are adequate to satisfy our working capital, capital expenditure requirements, and other contractual obligations for the foreseeable future, including at least the next 12 months.

Raw materials

The cost of raw materials represents approximately 40% of the cost of products sold in 2018. The major raw materials used in our operations include nickel, chrome, molybdenum and carbon scrap. The average price per pound of nickel in 2018 was $5.95, which was 26% higher than in 2017. The average price per pound of molybdenum in 2018 was $11.96, which was 45% higher than in 2017. The average price per pound of carbon scrap in 2018 was $0.19, which was 12% higher than in 2017. The average price per pound of chrome decreased 6% compared to 2017 to $1.37.

We maintain sales price surcharge mechanisms on certain of our products, priced at time of order or shipment, to mitigate the risk of substantial raw material cost fluctuations. The market values for these raw materials and others continue to fluctuate based on supply and demand, market disruptions and other factors.

Capital Resources Including Off-Balance Sheet Arrangements

We do not maintain off-balance sheet arrangements, nor do we participate in non-exchange traded contracts requiring fair value accounting treatment, or material related-party transaction arrangements.

Credit Facility

On August 3, 2018, we entered into the First Amended and Restated Revolving Credit, Term Loan and Security Agreement (“Credit Agreement”) with PNC Bank, National Association, as administrative agent and co-collateral agent, Bank of America, N.A., as co-collateral agent, and PNC Capital Markets LLC, as sole lead arranger and sole bookrunner. The Credit Agreement amended the prior Revolving Credit, Term Loan and Security Agreement (“Prior Agreement”), and provides for a senior secured revolving credit facility not to exceed $110.0 million (“Revolving Credit Facility”) and a senior secured term loan facility (“Term Loan”) in the amount of $10.0 million (together with the Revolving Credit Facility, the “Facilities”).

The Facilities, which expire on August 3, 2023 (the ‘Expiration Date”), are collateralized by a first lien in substantially all of the assets of the Company and its subsidiaries, except that no real property is collateral under the Facilities other than Company’s real property in North Jackson, Ohio.

Availability under the Credit Agreement is based on eligible accounts receivable and inventory. Further, the Company must maintain undrawn availability under the Credit Agreement of at least an amount equal to payments due on the notes issued in connection with the acquisition of the North Jackson facility, as defined in the Credit Agreement, plus 12.5% of the maximum borrowing amount of $110.0 million (“Minimum Liquidity”). At December 31, 2018, the amount of payments due on the notes relevant to the Minimum Liquidity calculation was $2 million. This requirement exists until the Notes are paid in full, refinanced or extended.

The Company is required to pay a commitment fee of 0.25% based on the daily unused portion of the Revolving Credit Facility.

With respect to the Term Loan, the Company will pay quarterly installments of the principal of approximately $0.4 million, plus accrued and unpaid interest, on the first day of each fiscal quarter beginning on September 30, 2018. To the extent not previously paid, the Term Loan will become due and payable in full on the Expiration Date.

Amounts outstanding under the Facilities, at the Company’s option, will bear interest at either a base rate or a LIBOR based rate, in either case calculated in accordance with the terms of the Credit Agreement. Interest under the Credit Agreement is payable monthly. We elected to use the LIBOR based rate for the majority of our debt outstanding under the Facilities during 2018. At December 31, 2018, the LIBOR based rate was 3.85% on our Revolving Credit Facility and 4.35% for the Term Loan.

The Credit Agreement contains customary affirmative and negative covenants. If a triggering event occurs as defined in the Credit Agreement, the Company must maintain a fixed charge coverage ratio of not less than 1.10 to 1.0 measured on a rolling four quarter basis and calculated in accordance with the terms of the Credit Agreement.

$6.7 million was drawn on the Revolving Credit Facility to fund cash restricted for use related to the NMTC financing transaction. As of December 31, 2018, NMTC related restricted cash receipts totaling $8.0 million were applied to the Company’s Revolving Credit Facility.

For the year ended December 31, 2018, we recorded $0.4 million of additional Credit Agreement related deferred financing costs to the Consolidated Balance Sheet, and amortized $0.3 million. At December 31, 2018, we had Credit Agreement related net deferred financing costs of approximately $0.9 million. For the year ended December 31, 2017, we amortized $0.3 million of Credit Agreement related deferred financing costs. At December 31, 2017, we had Credit Agreement related net deferred financing costs of approximately $0.7 million.

Notes

In connection with the acquisition of the North Jackson facility in 2011, we issued $20.0 million in notes to the sellers of the facility as partial consideration in the transaction.

On January 21, 2016, the Company entered into Amended and Restated Notes (the “Notes”) in the aggregate principal amount of $20.0 million, each in favor of Gorbert Inc. (“Holder”). The Company’s obligations under the Notes are collateralized by a second lien on the same assets of the Company that collateralize the obligations of the Company under the Facilities.

The Notes were originally scheduled to mature on March 17, 2019. On March 30, 2018, the Company provided notification to Holder of its intent to extend the maturity date to March 17, 2020 in accordance with the terms of the Notes.

Upon the Company’s extension of the maturity date of the Notes to March 17, 2020, principal payments in the aggregate of $2.0 million will be required to be made in March 2019. In conjunction with the intended extension of the maturity date of the Notes, $2.0 million has been classified within current portion of long-term debt.

Additionally, the Company has the option to further extend the maturity date of the Notes to March 17, 2021. Extending the maturity date of the Notes to March 17, 2021 would require a principal payment in the aggregate amount of $2.0 million to be made in March 2020.

The Notes bore interest at a rate of 5.0% per year through and including August 17, 2017 and bear a rate of 6.0% per year from and after August 18, 2017. Through and including June 18, 2017, all accrued and unpaid interest was payable semi-annually in arrears on each June 18 and December 18. After June 18, 2017, all accrued and unpaid interest is payable quarterly in arrears on each September 18, December 18, March 18 and June 18.

The Holder had the right to elect at any time on or prior to August 17, 2017 to convert all or any portion of the outstanding principal amount of the Notes. The Holder’s conversion rights expired and are no longer subject to exercise.

Capital Leases

The Company enters into capital lease arrangements from time to time, and the capital assets and obligations are recorded at the present value of minimum lease payments. The assets are included in Property, Plant and Equipment, net on the Consolidated Balance Sheets, and are depreciated over the respective lease terms which range from three to five years. The long-term component of the capital lease obligations is included in Long-term debt and the current component is included in Current portion of long-term debt.

During 2017, the Company entered into capital lease agreements for which the net present value of the minimum lease payments, at inception, was $0.5 million. These amounts have been excluded from the Consolidated Statements of Cash Flows as they are non-cash.

Share-Based Activity

We granted stock options and issued shares of our common stock to officers, employees, and non-employee directors during 2018, 2017 and 2016 through our incentive compensation plans. Refer to Note 11 for further information.

Contractual Obligations

At December 31, 2018, we had the following contractual principal, interest and purchase obligations:

	Payments due by period			
(dollars in thousands)	Total	Less than 1 year	1-3 years	Thereafter
Long-term debt (A)	$ 54,206	$ 6,165	$ 25,521	$ 22,520
Purchase obligations - capital expenditures (B)	3,599	3,599	-	-
Purchase obligations - other (B)	19,231	14,399	4,474	358
Total contractual obligations	$ 77,036	$ 24,163	$ 29,995	$ 22,878

(A) Amounts include interest expense, which was estimated based upon the December 31, 2018 interest rate for our debt and assumes that debt will not be repaid until its maturity. The less than 1 year period includes a $2 million required principal payment on the Notes in 2019. The 1-3 years period includes the maturity of the remaining $17 million of the Notes.

(B) Purchase obligations include the value of all open purchase orders with established quantities and purchase prices as well as minimum purchase commitments and operating leases.

Contingent Items

Product Claims. We are subject to various claims and legal actions that arise in the normal course of conducting business. There were no material product claims outstanding at December 31, 2018.

Environmental Matters. We, as well as other steel companies, are subject to demanding environmental standards imposed by federal, state and local environmental laws and regulations. We are not aware of any environmental condition that currently exists at any of our facilities that are probable or reasonably possible of having a material impact on our results of operations or liquidity.

We are aware of energy usage concerns relating to climate change; however, we are not aware of any pending regulations that are expected to have a material impact on our results of operations or liquidity.

Legal Matters. From time to time, various lawsuits and claims have been or may be asserted against us relating to the conduct of our business, including routine litigation relating to commercial and employment matters. The ultimate cost and outcome of any litigation or claim cannot be predicted with certainty. Management believes, based on information presently available, that the likelihood that the ultimate outcome of any such pending matter will have a material adverse effect on its financial condition, or liquidity or a material impact to its results of operations is remote, although the resolution of one or more of these matters may have a material adverse effect on its results of operations for the period in which the resolution occurs.

Critical Accounting Estimates

The Company’s revenues are primarily composed of sales of products. Revenue from the sale of products is recognized when the Company satisfies its performance obligation under a contract by transferring control of the promised product to its customer, which in most cases coincides with shipment of the related product. Certain sales qualify for over-time revenue recognition. Sales of certain specified product grades and shapes, and sales from conversion services, are recognized over-time. The Company’s identification of and accounting for these sales is discussed further in Note 2.

Management regularly monitors the ability to collect its unpaid sales invoices and the valuation of its receivables. The allowance for doubtful accounts includes specific reserves for the value of outstanding invoices issued to customers that are deemed potentially not collectible.

Inventories are stated at the lower of cost or net realizable value. The cost of inventory is principally determined by the weighted average cost method for material and operation costs. An inventory reserve is provided for material on hand for which management believes cost exceeds net realizable value. We reserve for slow-moving inventory and inventory that is being evaluated under our quality control process. The reserves are based upon management's expected method of disposition.

Property, Plant and Equipment ("PP&E") is stated at historical cost or fair value at acquisition less accumulated depreciation. Depreciation is computed by the straight-line method over the estimated useful lives of the assets for book purposes. Depreciation for income tax purposes is computed using accelerated methods. Upon disposal, assets and related accumulated depreciation are removed from the financial statements and differences between the net book value and proceeds from disposal are generally included in cost of goods sold in the consolidated statement of operations. PP&E is evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable in relation to the operating performance and future undiscounted cash flows of the underlying assets. Adjustments are made if the sum of expected future cash flows is less than book value. No impairment reserve was deemed necessary as of December 31, 2018, 2017 and 2016.

Deferred income taxes are provided for temporary differences between amounts of assets and liabilities for financial reporting purposes and the basis of such assets and liabilities as measured by tax laws and regulations. Our deferred tax assets include net operating loss carry forwards that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. These deferred tax assets will expire, if unused, at various times through 2031. Deferred tax liabilities primarily relate to book / tax depreciation differences. Management assesses the need to record a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized.

The calculation for our share-based compensation expense involves several assumptions. Management believes each assumption used in the valuation is reasonable because it considers the experience of the plan and reasonable expectations. Management estimates volatility based on historical data, future expectations and the expected term of the share-based compensation awards. The assumptions, however, involve inherent uncertainties. As a result, if other assumptions had been used, share-based compensation expense could have varied.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The majority of our customers and suppliers absorb fluctuations in foreign currency exchange rates. Prices for our raw materials and natural gas requirements are subject to frequent market fluctuations, and profit margins may decline in the event market prices increase. Selling price increases and surcharges are utilized to offset raw material and natural gas market price increases.

Raw material prices vary based on numerous factors, including quality, and are subject to frequent market fluctuations. Future raw material prices cannot be predicted with any degree of certainty. We do not maintain any fixed-price long-term agreements with any of our raw material suppliers.

We maintain a sales price surcharge mechanism on certain of our products to help offset the impact of raw material price fluctuations. For certain products, the surcharge is calculated at the time of order entry, based on current raw material prices or prices at the time of shipment. For certain finished products, the surcharge is calculated based on the monthly average raw material prices two months prior to the promised ship date. While the material surcharge mechanism is designed to offset modest fluctuations in raw material prices, it cannot immediately absorb significant spikes in raw material prices. A material change in raw material prices within a short period of time could have a material effect on our financial results and there can be no assurance that the raw material surcharge mechanism will completely offset immediate changes in our raw material costs.

At December 31, 2018, we had $27.8 million of floating rate debt outstanding with an interest rates between 3.85% and 4.35%. Since the interest rate on floating rate debt changes with the short-term market rate of interest, we are exposed to the risk that these interest rates may increase, raising our interest expense. A hypothetical 1.0% increase or decrease in our floating rate debt interest rates would unfavorably or favorably impact our annual pre-tax results by $0.3 million.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) under the Securities Exchange Act of 1934). Our internal control over financial reporting is designed to provide reasonable assurance to management and the board of directors regarding the preparation and fair presentation of published financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. We conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission (2013 Framework). Based on our assessment, we believe that, as of December 31, 2018, our internal control over financial reporting is effective.

The effectiveness of internal control over financial reporting as of December 31, 2018 has been audited by Schneider Downs & Co. Inc., an independent registered public accounting firm which also audited our consolidated financial statements. Schneider Downs' attestation report on the consolidated financial statements and management's maintenance of effective internal control over financial reporting is included under the heading "Report of Independent Registered Public Accounting Firm."

/s/ Dennis M. Oates	/s/ Christopher T. Scanlon
Dennis M. Oates	Christopher T. Scanlon
Chairman, President and Chief Executive Officer	Vice President of Finance, Chief Financial Officer and Treasurer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Universal Stainless & Alloy Products, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Universal Stainless & Alloy Products, Inc. (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income (loss), cash flows, and shareholders' equity for each of the three years in the period ended December 31, 2018, and the related notes and schedules (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework (2013) issued by COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 appearing under Item 8. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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/ Schneider Downs & Co., Inc.

Schneider Downs & Co., Inc.

We have served as the Company's auditor since 2003.

Pittsburgh, Pennsylvania

February 20, 2019

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31, (dollars in thousands, except per share information)	2018	2017	2016
Net sales	$ 255,927	$ 202,643	$ 154,434
Cost of products sold	218,111	179,609	140,921
Gross margin	37,816	23,034	13,513
Selling, general and administrative expenses	21,746	18,797	17,482
Operating income (loss)	16,070	4,237	(3,969)
Interest expense and other financing costs	4,302	4,277	4,674
Other (income) expense	(829)	(49)	230
Income (loss) before income taxes	12,597	9	(8,873)
Provision (benefit) for income taxes	1,935	(7,601)	(3,526)
Net income (loss)	$ 10,662	$ 7,610	$ (5,347)
Basic earnings (loss) per share	$ 1.31	$ 1.05	$ (0.74)
Diluted earnings (loss) per share	$ 1.28	$ 1.03	$ (0.74)
Weighted average shares of common stock outstanding:			
Basic	8,132,632	7,225,697	7,193,300
Diluted	8,347,692	7,374,805	7,193,300

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

For the years ended December 31, (dollars in thousands)	2018	2017	2016
Net income (loss)	$ 10,662	$ 7,610	$ (5,347)
Other comprehensive income (loss), net of tax:			
Unrealized gain (loss) on foreign currency contracts, net of tax	94	(114)	21
Comprehensive income (loss)	$ 10,756	$ 7,496	$ (5,326)

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

:UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED BALANCE SHEETS

December 31, (dollars in thousands)	2018	2017
ASSETS		
Current assets:		
Cash	$ 3,696	$ 207
Accounts receivable (less allowance for doubtful accounts of $295 and $456, respectively)	32,618	24,990
Inventory, net	134,738	116,663
Other current assets	3,756	4,404
Total current assets	174,808	146,264
Property, plant and equipment, net	177,844	174,444
Other long-term assets	668	523
Total assets	$ 353,320	$ 321,231
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 44,379	$ 34,898
Accrued employment costs	7,939	4,075
Current portion of long-term debt	3,907	4,707
Other current liabilities	2,929	1,268
Total current liabilities	59,154	44,948
Long-term debt	42,839	75,006
Deferred income taxes	11,481	9,605
Other long-term liabilities	2,835	4
Total liabilities	116,309	129,563
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Senior preferred stock, par value $0.001 per share; 1,980,000 shares authorized; 0 shares issued and outstanding	-	-
Common stock, par value $0.001 per share; 20,000,000 shares authorized; 9,045,345 and 7,550,642 shares issued, respectively	9	8
Additional paid-in capital	93,100	58,514
Other comprehensive income (loss)	1	(93)
Retained earnings	146,191	135,529
Treasury stock, at cost; 292,855 common shares held, respectively	(2,290)	(2,290)
Total stockholders' equity	237,011	191,668
Total liabilities and stockholders' equity	$ 353,320	$ 321,231

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, (dollars in thousands)	2018	2017	2016
Operating Activities:			
Net income (loss)	$ 10,662	$ 7,610	$ (5,347)
Adjustments for non-cash items:			
Depreciation and amortization	18,918	18,823	18,533
Deferred income tax	1,850	(7,593)	(3,525)
Write-off of deferred financing costs	-	-	768
Share-based compensation expense	1,442	1,564	1,405
Net gain on asset disposals	(9)	(70)	(340)
Changes in assets and liabilities:			
Accounts receivable, net	(7,628)	(5,567)	(1,754)
Inventory, net	(20,373)	(27,378)	(9,155)
Accounts payable	5,293	14,178	7,096
Accrued employment costs	3,865	272	547
Income taxes	(246)	77	200
Other, net	2,833	(811)	(22)
Net cash provided by operating activities	16,607	1,105	8,406
Investing Activities:			
Capital expenditures	(15,388)	(7,996)	(4,376)
Proceeds from sale of property, plant and equipment	10	70	1,571
Net cash used in investing activities	(15,378)	(7,926)	(2,805)
Financing Activities:			
Borrowings under revolving credit facility	368,910	350,314	241,152
Payments on revolving credit facility	(388,728)	(338,836)	(259,243)
Proceeds under New Markets Tax Credit financing, net	2,835	-	-
Borrowings under term loan facility	-	-	30,000
Payments on term loan facility, capital leases, and notes	(12,364)	(5,078)	(17,448)
Payments of financing costs	(1,109)	-	(750)
Proceeds from public offering, net of cash expenses	32,246	-	-
Proceeds from the exercise of stock options	865	553	651
Net cash provided by (used in) financing activities	2,655	6,953	(5,638)
Net increase (decrease) in cash and restricted cash	3,884	132	(37)
Cash and restricted cash at beginning of period	207	75	112
Cash and restricted cash at end of period	$ 4,091	$ 207	$ 75
Supplemental Disclosure of Cash Flow Information:			
Interest paid	$ 4,183	$ 4,027	$ 3,451
Income taxes paid (refunded), net	$ 102	$ (85)	$ (201)

The following table reconciles cash and restricted cash above to the Consolidated Balance Sheets

For the years ended December 31,	2018	2017	2016
Cash	$ 3,696	$ 207	$ 75
Restricted cash included in other long-term assets	395	-	-

Total cash and restricted cash	$ 4,091	$ 207	$ 75

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(dollars in thousands)	Common shares outstanding	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Treasury shares	Treasury stock
Balance at January 1, 2016	7,111,338	7	54,829	132,431	-	292,855	(2,290)
Common stock issuance under Employee Stock Purchase Plan	17,268	-	151	-	-	-	-
Capital investment	73,207	1	500	-	-	-	-
Tax impact on RSUs vested and options exercised or forfeited	-	-	(488)	-	-	-	-
Share-based compensation	13,486	-	1,405	-	-	-	-
Net gain on derivative instruments	-	-	-	-	21	-	-
Net loss	-	-	-	(5,347)	-	-	-
Balance at December 31, 2016	7,215,299	8	56,397	127,084	21	292,855	(2,290)
Common stock issuance under Employee Stock Purchase Plan	16,185	-	226	-	-	-	-
Exercise of stock options	22,125	-	327	-	-	-	-
Share-based compensation	4,178	-	1,564	-	-	-	-
Net loss on derivative instruments	-	-	-	-	(114)	-	-
Retroactive adoption of ASU 2016-09	-	-	-	835	-	-	-
Net income	-	-	-	7,610	-	-	-
Balance at December 31, 2017	7,257,787	8	58,514	135,529	(93)	292,855	(2,290)
Common stock issuance under Employee Stock Purchase Plan	7,922	-	149	-	-	-	-
Exercise of stock options	50,770	-	716	-	-	-	-
Public offering	1,408,163	1	32,246				
Share-based compensation	27,848	-	1,442	-	-	-	-
Capital investment	-	-	33				
Net gain on derivative instruments	-	-	-	-	94	-	-
Net income	-	-	-	10,662	-	-	-
Balance at December 31, 2018	8,752,490	$ 9	$ 93,100	$ 146,191	$ 1	292,855	$ (2,290)

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1: Significant Accounting Policies

Basis of Consolidation. The consolidated financial statements include the accounts of Universal Stainless & Alloy Products, Inc. and its wholly-owned subsidiaries and variable interest entities (collectively, “we,” “us,” “our,” or the “Company”). All intercompany accounts and transactions have been eliminated in consolidation. We have no interests in any unconsolidated entity.

Use of Estimates. The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. The estimates and assumptions used in these consolidated financial statements are based on known information available as of the balance sheet date. Actual results could differ from those estimates.

Concentration of Credit Risk. We limit our credit risk on accounts receivable by performing ongoing credit evaluations and, when necessary, require letters of credit, guarantees or cash collateral. During 2018, we had one customer which accounted for approximately 18% of our total net sales and 6% of our total accounts receivable balance. During 2017, we had one customer that accounted for approximately 17% of our total net sales and 3% of our total accounts receivable balance. During 2016, we had one customer that accounted for approximately 20% of our total net sales and 4% of our total accounts receivable balance.

Accounts Receivable and Allowance for Doubtful Accounts. Accounts receivable are presented net of the allowance for doubtful accounts on our consolidated balance sheets. We market our products to a diverse customer base, primarily throughout the United States. International sales approximated 8% of 2018 total net sales, and 9% of 2017 and 2016 total net sales. The allowance for doubtful accounts includes specific reserves for the value of outstanding invoices issued to customers that are deemed potentially not collectible. Receivables are charged-off to the allowance when they are deemed to be uncollectible. There was no bad debt expense recorded for the year ended December 31, 2018. Bad debt expense, net of recoveries, was $0.2 million for the years ended December 31, 2017 and 2016.

Inventories. Inventories are stated at the lower of cost or net realizable value with cost principally determined by the weighted average cost method. Such costs include the acquisition cost for raw materials and supplies, direct labor and applied manufacturing overhead within the guidelines of normal plant capacity. We reserve for slow-moving inventory and inventory that is being evaluated under our quality control process. The reserves are based upon management’s expected method of disposition. The net change in inventory reserves for the year ended December 31, 2018 was an increase of $0.4 million, primarily due to the aging of slow moving material. The net change in inventory reserves for the years ended December 31, 2017 and 2016 was a $0.7 million and a $0.5 million increase, respectively.

Included in inventory are operating materials consisting of forge dies and production molds and rolls that are consumed over their useful lives. During the years ended December 31, 2018, 2017 and 2016, we amortized these operating materials in the amount of $2.3 million, $2.1 million and $1.6 million, respectively. This expense is recorded as a component of cost of products sold on the consolidated statements of operations and included as a part of our total depreciation and amortization on the consolidated statements of cash flows.

Property, Plant and Equipment. Property, plant and equipment is recorded at cost or its fair value at acquisition date. No depreciation is recognized on assets until they are placed in service. Assets which have been retired or

disposed of are removed from cost and accumulated depreciation accounts, with the gain or loss generally reflected in cost of goods sold on the consolidated statements of operations.

Major equipment maintenance costs are capitalized as incurred and included in other current assets. These costs are amortized to cost of products sold within a twelve to thirty-six month period. Other maintenance costs are expensed as incurred. Costs of improvements and renewals are capitalized. Our maintenance expense for the years ended December 31, 2018, 2017 and 2016 was $18.3 million, $18.8 million and $15.7 million, respectively, which is included as a component of cost of products sold.

Depreciation is computed using the straight-line method based on the estimated useful lives of the related assets. The estimated useful lives of buildings and land improvements are between 10 and 39 years, and the estimated useful lives of machinery and equipment are between five and 20 years. Our total depreciation expense for the years ended December 31, 2018, 2017 and 2016 was $16.4 million, $16.5 million and $16.7 million, respectively, of which $15.9 million, $16.2 million and $16.3 million, respectively, was included as a component of cost of products sold while the remainder was included in selling, general and administrative expense.

Long-Lived Asset Impairment. Long-lived assets, including property, plant and equipment and intangible assets are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable in relation to the operating performance and future undiscounted cash flows of the underlying assets. Adjustments are made if the sum of expected future cash flows is less than the book value. Based on management's assessment of the carrying values of long-lived assets, no impairment reserve was necessary as of December 31, 2018, 2017 and 2016.

Deferred Financing Costs. Deferred financing costs are amortized up to the maturity date of the related financial instrument using the straight-line method, which approximates the effective interest method. Deferred financing cost amortization for the years ended December 31, 2018, 2017 and 2016 was $0.3 million, $0.3 million and $0.2 million, respectively, and is included as a component of interest expense and other financing costs on the consolidated statements of operations and included as part of total depreciation and amortization on the consolidated statements of cash flows. In the first quarter of 2016, the Company wrote off $0.8 million of deferred financing costs related to the prior credit facility due to entering into an updated credit agreement on January 21, 2016. These costs are included as a component of interest expense and other financing costs on the consolidated statements of operations and are broken out separately on the consolidated statement of cash flows. During 2018, the Company recorded $0.7 million of additional deferred financing costs related to the New Markets Tax Credits financing effective March 9, 2018, and $0.4 million of additional deferred financing costs related to the First Amended and Restated Revolving Credit, Term Loan and Security Agreement ("Credit Agreement") effective August 3, 2018. At December 31, 2018 and 2017, we had $1.6 million and $0.7 million, respectively, of unamortized deferred financing costs included on our consolidated balance sheets as a reduction of debt.

Stockholders' Equity. We have never paid a cash dividend on our common stock. Our Credit Agreement does not permit the payment of cash dividends.

Revenue Recognition. The Company's revenues are primarily composed of sales of products. Revenue from the sale of products is recognized when the Company satisfies its performance obligations under a contract by transferring control of the promised product to its customer ("point-in-time"). Sales of certain specified product grades and shapes, and sales from conversion services, are recognized over-time. These sales qualify for over-time revenue recognition as the Company does not produce an asset with alternative use when completing its performance obligations with regard to these items, and maintains an enforceable right to payment in the event of contract termination. Over-time recognition is a change from prior accounting, which was point-in-time for the specified products and service completion for conversion services. Refer to the Recently Adopted Accounting Pronouncements section below.

Invoiced shipping and handling costs are also accounted for as revenue. Customer claims, which are not material, are accounted for primarily as a reduction to gross sales after the matter has been researched and an acceptable resolution has been reached.

The following table presents net sales by product line:

For the years ended December 31, (dollars in thousands)	2018	2017	2016

Stainless steel	$ 176,955	$ 139,603	$ 112,118
High-strength low alloy steel	21,617	15,693	13,180
Tool steel	40,308	32,279	19,179
High-temperature alloy steel	11,467	12,435	6,057
Conversion services and other sales	5,580	2,633	3,900
Total net sales	$ 255,927	$ 202,643	$ 154,434

Income Taxes. Deferred income taxes are provided for net operating losses, unused tax credits earned and the tax effect of temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements. We use the liability method to account for income taxes, which requires deferred taxes to be recorded at the statutory rate expected to be in effect when the taxes are paid. Valuation allowances are provided for a deferred tax asset when it is more likely than not that the asset will not be realized. Income tax penalties and interest are included in the provision for income tax expense.

We evaluate the tax positions taken or expected to be taken in our tax returns. A tax position should only be recognized in the financial statements if we determine that it is more-likely-than-not that the tax position will be sustained upon examination by the tax authorities, based upon the technical merits of the position. For those tax positions that should be recognized, the measurement of a tax position is determined as being the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. We believe there are no material uncertain tax positions at December 31, 2018, 2017 and 2016.

We recognize excess tax benefits as a result of the exercise of employee stock options within the consolidated statements of operations.

Share-based Compensation Plans. We recognize compensation expense based on the grant-date fair value of the awards. The fair value of the stock option grants is estimated on the date of grant using the Black-Scholes option-pricing model, and is recognized ratably over the service/vesting period of the award. The fair value of time-based restricted stock grants and restricted stock units is calculated using the market value of the stock on the date of issuance, and is recognized ratably over the service/vesting period of the award.

Net Income (Loss) per Common Share. Net income (loss) per common share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per common share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding plus all dilutive potential common shares outstanding during the period. Potentially dilutive impacts of shares issuable under our outstanding notes issued in connection with the acquisition of the North Jackson facility (collectively, the “Notes”) were excluded from the calculations in 2017 and 2016 as their inclusion would have been antidilutive. The conversion option expired in 2017 and is not applicable in 2018.

Treasury Stock. We account for treasury stock under the cost method and include such shares as a reduction of total stockholders’ equity.

Financial Instruments. Financial instruments held by us include cash, accounts receivable, and accounts payable and current and long-term debt. The carrying value of cash, accounts receivable and accounts payable is considered to be representative of fair value because of the short maturity of these instruments. Refer to Note 7 for fair value disclosures of our financial instruments.

Segment Reporting. Our operating facilities are integrated, and therefore our chief operating decision maker (“CODM”) views the Company as one business unit. Our CODM sets performance goals, assesses performance and makes decisions about resource allocations on a consolidated basis. As a result of these factors, as well as the nature of the financial information available which is reviewed by our CODM, we maintain one reportable segment.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, “Revenue from Contracts with Customers (Topic 606)” (“ASU 2014-09”), which supersedes the revenue recognition requirements in ASC 605, “Revenue Recognition.” ASU 2014-09 is based on the principle that revenue is

recognized to depict the transfer of 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. It also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue, cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. The Company adopted the provisions of ASU 2014-09 on January 1, 2018, using the modified retrospective approach. Revenue from the Company’s product sales continue to generally be recognized when products are shipped (i.e. point in time). As such, the adoption of ASU 2014-09 had no material effect on revenue, gross margin or operating income; however, the Company has now presented the disclosures required by this new standard, refer to Note 2.

In November 2016, the FASB issued ASU 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash,” or (“ASU 2016-18”). ASU 2016-18 is intended to clarify how entities present restricted cash in the statement of cash flows. The guidance requires entities to show the changes in the total of cash and cash equivalents and restricted cash in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash in the statement of cash flows. When cash and cash equivalents and restricted cash are presented in more than one line item on the balance sheet, the guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. ASU 2016-18 is effective for fiscal years beginning after December 15, 2017 and is to be applied retrospectively. We adopted ASU 2016-18 in the first quarter of 2018 and applied the guidance retrospectively to our prior period Consolidated Statements of Cash Flow.

Recently Issued Accounting Pronouncements

The Company considers the applicability and impact of all ASUs. Recently issued ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-2 “Leases (Topic 842)”. The ASU requires lessees to recognize most leases on their balance sheet as a right-of-use asset and a lease liability. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. The criteria for evaluating are similar to those applied in current leases accounting. This guidance is effective for annual and interim reporting periods beginning after December 15, 2018 with early adoption permitted. We will adopt this guidance in the first quarter of 2019 and do not expect the guidance to have a material impact on the financial statements.

In February 2018, the FASB issued ASU 2018-02, “Income Statement – Reporting Comprehensive Income,” that will permit companies the option to reclassify stranded tax effects caused by the newly-enacted U.S. Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings. Consequently, the amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act and will improve the usefulness of information reported to financial statement users. However, because the amendments only relate to the reclassification of the income tax effects of the Tax Cuts and Jobs Act, the underlying guidance that requires the effect of a change in tax laws or rates be included in income from continuing operations is not affected. Adoption of the ASU will be optional, and companies will need to disclose if it elects not to adopt the ASU. The ASU will be effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption will be permitted, including adoption in any interim period, for financial statements that have not yet been issued or made available for issuance. Entities will have the option to apply the amendments retrospectively or to record the reclassification as of the beginning of the period of adoption. We will adopt this guidance in the first quarter of 2019 and do not expect the guidance to have a material impact on the financial statements.

Note 2: Revenue Recognition

The Company’s revenues are primarily comprised of sales of products. Revenue is recognized when the Company satisfies its performance obligation under the contract by transferring the promised product to its customer that obtains control of the product. A performance obligation is a promise in a contract to transfer a distinct product to a customer. Most of the Company’s contracts have a single performance obligation, as the promise to transfer products or services is not separately identifiable from other promises in the contract and, therefore, not distinct.

Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products. As such, revenue is recorded net of returns, allowances, customer discounts, and incentives. The Company has elected to exclude amounts collected from customers for all sales and other similar taxes from revenues. Invoiced

shipping and handling costs are included in revenue.

The Company’s revenue is primarily from products transferred to customers at a point in time. The Company recognizes revenue at the point in time in which the customer obtains control of the product, which is generally when product title passes to the customer upon shipment.

The Company has evaluated the impact of the new revenue recognition standard on individual customer contracts. We have determined that there are certain customer agreements involving production of specified product grades and shapes that require revenue to be recognized over time, in advance of shipment, due to there being no alternative use for these grades and shapes without significant economic loss. Also, the Company maintains an enforceable right to payment including a normal profit margin from the customer in the event of contract termination. Over-time recognition is a change from prior accounting, which was point-in-time for these products.

The adoption of ASU 2014-09, using the modified retrospective approach, had no material effect on revenue, gross margin or operating income. Additionally, on January 1, 2018 the adoption had an immaterial impact on the Company's Consolidated Balance Sheet. As of December 31, 2018 the adoption created contract assets related to services performed, not yet billed. These amounts are included in Accounts Receivable in the Consolidated Balance Sheet. Contract assets recorded as of December 31, 2018 related to the adoption of ASU 2014-09 totaled $1.0 million.

The Company has elected the following practical expedients allowed under ASU 2014-09:

- Shipping activities are not considered to be separate performance obligations.
- Performance obligations are satisfied within one year from a given reporting date, consequently we omit disclosure of the transaction price apportioned to remaining performance obligations on open orders.

The following summarizes our revenue by melt type:

	Year ended December 31,	
Net sales:	2018	2017
Specialty alloys	$209,203	172,715
Premium alloys (A)	41,144	27,295
Conversion services and other sales	5,580	2,633
Total net sales	$255,927	$202,643

(A) Premium alloys represent all vacuum induction melted (VIM) products.

Note 3: Inventory

The major classes of inventory are as follows:

December 31,	2018	2017
(dollars in thousands)		
Raw materials and starting stock	$ 9,555	$ 8,527
Semi-finished and finished steel products	115,627	99,820
Operating materials	12,515	10,850
Gross inventory	137,697	119,197
Inventory reserves	(2,959)	(2,534)
Total inventory, net	$ 134,738	$ 116,663

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Note 4: Property, Plant and Equipment

Property, plant and equipment consists of the following:

December 31, (dollars in thousands)	2018	2017
Land and land improvements	$ 7,543	$ 7,377
Buildings	50,607	50,058
Machinery and equipment	269,034	252,010
Construction in progress	7,184	5,239
Gross property, plant and equipment	334,368	314,684
Accumulated depreciation	(156,524)	(140,240)
Property, plant and equipment, net	$ 177,844	$ 174,444

Note 5: Long-Term Debt

Long-term debt consists of the following:

December 31, (dollars in thousands)	2018	2017
Term loan	$ 9,643	$ 21,541
Revolving credit facility	18,204	38,024
Notes	19,000	19,000
Capital leases	1,502	1,897
	48,349	80,462
Less: current portion of long-term debt	(3,907)	(4,707)
Less: deferred financing costs	(1,603)	(749)
Long-term debt	$ 42,839	$ 75,006

Credit Facility

On August 3, 2018, we entered into the First Amended and Restated Revolving Credit, Term Loan and Security Agreement (“Credit Agreement”) with PNC Bank, National Association, as administrative agent and co-collateral agent, Bank of America, N.A., as co-collateral agent, and PNC Capital Markets LLC, as sole lead arranger and sole bookrunner. The Credit Agreement amended the prior Revolving Credit, Term Loan and Security Agreement (“Prior Agreement”), and provides for a senior secured revolving credit facility not to exceed $110.0 million (“Revolving Credit Facility”) and a senior secured term loan facility (“Term Loan”) in the amount of $10.0 million (together with the Revolving Credit Facility, the “Facilities”).

The Facilities, which expire on August 3, 2023 (the ‘Expiration Date”), are collateralized by a first lien in substantially all of the assets of the Company and its subsidiaries, except that no real property is collateral under the Facilities other than Company’s real property in North Jackson, Ohio.

Availability under the Credit Agreement is based on eligible accounts receivable and inventory. Further, the Company must maintain undrawn availability under the Credit Agreement of at least an amount equal to payments due on the notes issued in connection with the acquisition of the North Jackson facility, as defined in the Credit Agreement, plus 12.5% of the maximum borrowing amount of $110.0 million “(Minimum Liquidity”). At December 31, 2018, the amount of payments due on the notes relevant to the Minimum Liquidity calculation was $2.0 million. This requirement exists until the Notes are paid in full, refinanced or extended.

The Company is required to pay a commitment fee of 0.25% based on the daily unused portion of the Revolving Credit Facility.

With respect to the Term Loan, the Company will pay quarterly installments of the principal of approximately $0.4 million, plus accrued and unpaid interest, on the first day of each fiscal quarter beginning on September 30, 2018. To the extent not previously paid, the Term Loan will become due and payable in full on the Expiration Date.

Amounts outstanding under the Facilities, at the Company's option, will bear interest at either a base rate or a LIBOR based rate, in either case calculated in accordance with the terms of the Credit Agreement. Interest under the Credit Agreement is payable monthly. We elected to use the LIBOR based rate for the majority of the debt outstanding under the Facilities during 2018. At December 31, 2018, the LIBOR based rate was 3.85% on our Revolving Credit Facility and 4.35% for the Term Loan.

The Credit Agreement contains customary affirmative and negative covenants. If a triggering event occurs as defined in the Credit Agreement, the Company must maintain a fixed charge coverage ratio of not less than 1.10 to 1.0 measured on a rolling four quarter basis and calculated in accordance with the terms of the Credit Agreement.

$6.7 million was drawn on the Revolving Credit Facility to fund cash restricted for use related to the New Markets Tax Credit ("NMTC") Financing Transaction. As of December 31, 2018, NMTC related restricted cash receipts totaling $8.0 million were applied to the Company's Revolving Credit Facility, as described in Note 6.

For the year December 31, 2018, we recorded $0.4 million of additional Credit Agreement related deferred financing costs to the Consolidated Balance Sheet, and amortized $0.3 million. At December 31, 2018, we had Credit Agreement related net deferred financing costs of approximately $0.9 million. For the year ended December 31, 2017, we amortized $0.3 million of Credit Agreement related deferred financing costs. At December 31, 2017, we had Credit Agreement related net deferred financing costs of approximately $0.7 million.

The aggregate annual principal payments due under our Credit Agreement at December 31, 2018, are as follows:

(dollars in thousands)	
2019	$ 1,429
2020	1,429
2021	1,429
2022	1,429
2023	22,131
	$ 27,847

Notes

In connection with the acquisition of the North Jackson facility in 2011, we issued $20.0 million in notes to the sellers of the facility as partial consideration in the transaction.

On January 21, 2016, the Company entered into Amended and Restated Notes (the "Notes") in the aggregate principal amount of $20.0 million, each in favor of Gorbert Inc. (the "Holder"). The Company's obligations under the Notes are collateralized by a second lien on the same assets of the Company that collateralize the obligations of the Company under the Facilities.

The Notes were originally scheduled to mature on March 17, 2019. On March 30, 2018, the Company provided notification to the Holder of its intent to extend the maturity date to March 17, 2020 in accordance with the terms of the Notes.

Upon the Company's extension of the maturity date of the Notes to March 17, 2020, principal payments in the aggregate of $2.0 million will be required to be made in March 2019. In conjunction with the intended extension of the maturity date of the Notes, $2.0 million has been classified within current portion of long-term debt.

Additionally, the Company has the option to further extend the maturity date of the Notes to March 17, 2021. Extending the maturity date of the Notes to March 17, 2021 would require a principal payment in the aggregate amount of $2.0 million to be made in March 2020.

The Notes bore interest at a rate of 5.0% per year through and including August 17, 2017 and bear a rate of 6.0% per year from and after August 18, 2017. Through and including June 18, 2017, all accrued and unpaid interest was payable semi-annually in arrears on each June 18 and December 18. After June 18, 2017, all accrued and unpaid interest is payable quarterly in arrears on each September 18, December 18, March 18 and June 18.

The Holder had the right to elect at any time on or prior to August 17, 2017 to convert all or any portion of the outstanding principal amount of the Notes. The Holder’s conversion rights expired and are no longer subject to exercise.

Capital Leases

The Company enters into capital lease arrangements from time to time, and the capital assets and obligations are recorded at the present value of minimum lease payments. The assets are included in Property, Plant and Equipment, net on the Consolidated Balance Sheets, and are depreciated over the respective lease terms which range from three to five years. The long-term component of the capital lease obligations is included in Long-term debt and the current component is included in Current portion of long-term debt.

During 2017, the Company entered into capital lease agreements for which the net present value of the minimum lease payments, at inception, was $0.5 million. These amounts have been excluded from the Consolidated Statements of Cash Flows as they are non-cash.

As of December 31, 2018, future minimum lease payments applicable to capital leases were as follows:

2019	605
2020	583
2021	471
2022	56
2023	15
Total minimum capital lease payments	$ 1,730
Less amounts representing interest	(228)
Present value of net minimum capital lease payments	$ 1,502
Less current obligation	(478)
Total long-term capital lease obligation	$ 1,024

For the twelve months ended December 31, 2018 and 2017, the amortization of capital lease assets was $0.5 million and $0.4 million, respectively. Capital lease amortization is included in cost of products sold in the Consolidated Statement of Operations.

Note 6: New Markets Tax Credit Financing Transaction

On March 9, 2018, the Company entered into a New Markets Tax Credit financing program with PNC New Markets Investment Partners, LLC and Boston Community Capital, Inc. related to a new mid-size bar cell capital project at the Company's Dunkirk, NY facility. PNC New Markets Investment Partners, LLC made a capital contribution and the Company made a loan to Dunkirk Investment Fund, LLC ("Investment Fund") under the qualified NMTC program. Through this financing transaction, the Company secured low interest financing and the potential for other future benefits related to its mid-size bar cell capital project.

In connection with the financing transaction, the Company loaned $6.7 million aggregate principal amount ("Leverage Loan") due in March 2048 to the Investment Fund. Additionally, PNC New Markets Investment Partners, LLC contributed $3.5 million to the Investment Fund, and as such, PNC New Markets Investment Partners, LLC is entitled to substantially all tax and other benefits derived from the NMTC. The Investment Fund then contributed the proceeds to a community development entity ("CDE"). The CDE then loaned the funds, on similar terms, as the Leverage Loan to Dunkirk Specialty Steel, LLC, a wholly-owned subsidiary of the Company. The CDE loan proceeds are restricted for use on the mid-size bar cell capital project.

The NMTC is subject to 100 percent recapture for a period of seven years as provided in the Internal Revenue Code. The Company is required to comply with various regulations and contractual provisions that apply to the NMTC arrangement. Non-compliance with applicable requirements could result in projected tax benefits not being realized and, therefore, require the Company to indemnify PNC New Markets Investment Partners, LLC for any loss or recapture of NMTCs related to the financing until the Company's obligation to deliver tax benefits is relieved. The Company does not anticipate any credit recaptures will be required in connection with this arrangement. This transaction also includes a put/call provision whereby the Company may be obligated or entitled to repurchase PNC New Markets Investment Partners, LLC's interest in the Investment Fund. The Company believes that PNC New Markets Investment Partners, LLC will exercise the put option in March 2025, at the end of the recapture period. The value attributed to the put/call is immaterial.

Direct costs incurred in structuring this financing transaction totaled $0.7 million. These costs were deferred and will be amortized over the term of the loans.

The Company has determined that the Investment Fund and CDE are each a VIE, and that it is the primary beneficiary of each VIE. This conclusion was reached based on the following:

- The ongoing activities of the VIE, collecting and remitting interest and fees, and NMTC compliance were all considered in the initial design and are not expected to significantly affect economic performance throughout the life of the VIE;
- Contractual arrangements obligate the Company to comply with NMTC rules and regulations and provide various other guarantees to the Investment Fund and CDE;
- PNC New Markets Investment Partners, LLC lacks a material interest in the underlying economics of the project; and
- The Company is obligated to absorb losses of the VIE.

Because the Company is the primary beneficiary of each VIE, these entities have been included in the Company's Consolidated Financial Statements.

As of December 31, 2018, the Company recorded $0.4 million as restricted cash within Other long-term assets and $2.8 million within Other long-term liabilities related to this transaction. This cash is restricted for use in bar cell capital purchases only. The other long-term liability represents funds contributed to the Investment Fund by PNC New Markets Investment Partners, LLC.

Note 7: Fair Value Measurements

The fair value hierarchy has three levels based on the inputs used to determine fair value, which are as follows:

Level 1 — Unadjusted quoted prices available in active markets for the identical assets or liabilities at the measurement date.

Level 2 — Unadjusted quoted prices in active markets for similar assets or liabilities, or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable for the asset or liability.

Level 3 — Unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management's estimates of market participant assumptions.

The fair value hierarchy requires the use of observable market data when available. In instances where the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement has been

determined based on the lowest level input significant to the fair value measurement in its entirety. Our assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

The carrying amounts of our cash, accounts receivable and accounts payable approximated fair value at December 31, 2018 and 2017 due to their short-term nature (Level 1). The fair value of the Term Loan and Revolver at December 31, 2018 and 2017 approximated the carrying amount as the interest rate is based upon floating short-term interest rates (Level 2). The fair value of the Notes was approximately $18.8 million at December 31, 2018 and 2017 (Level 2).

Note 8: Derivatives and Hedging

The Company invoices certain customers in foreign currencies. In order to mitigate the risks associated with fluctuations in exchange rates with the US Dollar, the Company enters into foreign exchange forward contracts for a portion of these sales and has designated these contracts as cash flow hedges.

At December 31, 2018, the notional value of these contracts was $7.4 million and the related unrealized gain recorded in accumulated other comprehensive income was less than $0.1 million. At December 31, 2017, the notional value of these contracts was $4.5 million and an unrealized loss of $0.1 million was recorded in accumulated other comprehensive loss.

Note 9: Income Taxes

The income tax benefit attributable to continuing operations during the years ended December 31, 2018, 2017 and 2016 is as follows:

Components of the benefit from income taxes are as follows:

For the years ended December 31, (dollars in thousands)	2018	2017	2016
Current (benefit) provision			
Federal	$ (1)	$ (28)	$ 8
State	86	21	5
Deferred provision (benefit)			
Federal	2,100	114	(3,501)
State	(250)	568	(38)
Benefit related to a change in enacted tax law	-	(8,276)	-
Provision (benefit) for income taxes	$ 1,935	$ (7,601)	$ (3,526)

The income tax provision (benefit) reconciled to taxes computed at the statutory federal rate is as follows:

For the years ended December 31,	2018	2017	2016

Tax provision (benefit) at statutory tax rate	$ 2,645	$ 3	$ (3,106)
State income taxes, net of federal impact	74	3	(39)
Research and development tax credit	(874)	(425)	(439)
Valuation allowance, net of federal impact	(167)	475	-
Impact of changes in enacted tax law	-	(8,276)	-
Adjustments to deferred taxes	277	506	4
Other, net	(20)	113	54
Provision (benefit) for income taxes	$ 1,935	$ (7,601)	$ (3,526)

We continue to record a full valuation allowance against our New York deferred tax assets due to the zero percent state income tax rate for qualified manufacturers. We continue to record a partial valuation allowance against our Pennsylvania net operation loss deferred tax asset due to annual usage limitations. We have determined that federal and other state deferred tax assets are expected to be realized and have not recorded any additional valuation allowances.

We recognized the tax effects of the Tax Cuts and Jobs Act (the "Tax Act") in the year ended December 31, 2017 and recorded $8.3 million in tax benefits, which relates almost entirely to the remeasurement of deferred tax liabilities to the reduced 21% corporate income tax rate.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our net deferred taxes related to continuing operations are as follows:

December 31, (dollars in thousands)	2018	2017
Noncurrent deferred income taxes:		
Federal and state tax carryforwards	$ 8,331	$ 12,894
Inventory	787	549
Share-based compensation	1,909	2,186
Receivables	239	194
Accrued liabilities	836	349
Other	5	32
Total deferred tax assets	$ 12,107	$ 16,204
Deferred tax liabilities:		
Property, plant and equipment	$ 22,951	$ 24,970
Other	637	839
Total deferred tax liabilities	$ 23,588	$ 25,809
Total noncurrent deferred income taxes	$ 11,481	$ 9,605

We file a U.S. federal income tax return and various state income tax returns. For federal income tax purposes, we had $18.7 million and $45.0 million of net operating loss carryforwards at December 31, 2018 and 2017, respectively. The net operating loss carryforwards begin to expire in 2031. In addition, we have credit carryforwards associated with our research and development activities of $4.0 million and $3.1 million as of December 31, 2018 and 2017, respectively. The research and development credit carryforwards begin to expire in 2030.

We have state net operating loss carryforwards of $8.8 million and $9.1 million, of which $5.2 million and $7.4 million, respectively, have a valuation allowance, and state credit carryforwards of $0.2 million at December 31, 2018 and 2017. The state net operating loss carryforwards begin to expire in 2031. The state credit carryforwards begin to expire in 2027.

We are routinely under audit by federal or state authorities. Our federal tax returns are subject to examination by the IRS for tax years after 2014. We are subject to examination by most state tax jurisdictions for tax years after 2014.

Note 10: Net Income (Loss) Per Common Share

The computation of basic and diluted net income (loss) per common share for the years ended December 31, 2018, 2017 and 2016 is as follows:

For the years ended December 31, (dollars in thousands, except per share amounts)	2018	2017	2016
Numerator:			
Net income (loss)	$ 10,662	$ 7,610	$ (5,347)
Denominator:			
Weighted average number of shares of common stock outstanding	8,132,632	7,225,697	7,193,300
Weighted average effect of dilutive stock options and other share-based compensation	215,060	149,108	-
Weighted average number of shares of common stock outstanding, as adjusted	8,347,692	7,374,805	7,193,300
Net income (loss) per common share:			
Basic earnings (loss) per share	$ 1.31	$ 1.05	$ (0.74)
Diluted earnings (loss) per share	$ 1.28	$ 1.03	$ (0.74)

On May 25, 2018, the Company completed an underwritten, public offering involving the issuance and sale by the Company of 1,224,490 shares of common stock at a public offering price of $24.50 per share. In addition, the Company granted the underwriters a 30-day option to purchase up to an additional 183,673 shares of common stock. On June 1, 2018, the underwriters exercised the option in full, and an additional 183,673 shares of common stock were issued and sold on June 5, 2018. The public offering resulted in gross proceeds to the Company of approximately $34.5 million, or $32.2 million net of the underwriting discount and other offering fees and expenses. We used the net proceeds from the public offering to repay amounts outstanding under the Company’s revolving credit facility. The public offering’s impact on the weighted average number of shares for the year ended December 31, 2018 is 0.8 million shares.

There were 323,250, 590,350, and 844,000 options to purchase shares of common stock, at an average price of $32.36, $30.63, and $27.13 for the years ended December 31, 2018, 2017 and 2016, respectively, that were not included in the computation of diluted net income per common share because their respective exercise prices were greater than the average market price of our common stock.

An adjustment for interest expense on convertible notes was excluded from the income per share calculation for the years ended December 31, 2017 and 2016 as it would have been antidilutive.

The calculations of diluted earnings per share for the years ended December 31, 2017 and 2016 exclude 268,351 shares and 408,459 shares, respectively, for the assumed conversion of the Notes as inclusion would have been antidilutive.

The calculation of diluted earnings per share for the year ended December 31, 2016 excludes 6,575 shares for outstanding options and restricted stock units under our share incentive plans, as the impact would have been antidilutive.

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Note 11: Share-Based Compensation

At December 31, 2018, we had the following share-based compensation plans:

Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan

We maintain the Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan (the "2017 Plan"), which was approved by our stockholders in May 2017. The 2017 Plan permits the issuance of stock options, restricted stock, restricted stock units, other share-based awards and performance awards to officers, employees, non-employee directors, and consultants and advisors to the Company. At inception, there were 568,357 shares authorized for issuance under the 2017 Plan.

When adopted, the 2017 Plan replaced the Omnibus Incentive Plan ("OIP"). Any awards outstanding under the OIP will remain subject to and be paid under the OIP. No new awards will be granted under the OIP. Any shares subject to outstanding awards under the OIP that cease to be subject to such awards after the adoption of the 2017 Plan will increase the shares authorized under the 2017 Plan. At December 31, 2018, there were 544,959 shares available for grant under the 2017 Plan.

Omnibus Incentive Plan

We maintain the OIP which was approved by our stockholders in May 2012. The OIP permitted the issuance of stock options, restricted stock, restricted stock units and other share-based awards to non-employee directors, other than those directors owning more than 5% of our outstanding common stock, consultants, officers and other key employees who were expected to contribute to our future growth and success. With the adoption of the 2017 Plan, no shares of common stock were available for grant at December 31, 2018 under OIP.

Stock Options

The price for options granted under the both the 2017 Plan and OIP is equal to the fair market value of the common stock at the date of grant. Options granted to non-employee directors vest over a three-year period, and options granted to employees vest over a four-year period. All options under both the 2017 Plan and OIP will expire no later than ten years after the grant date. Forfeited options may be reissued and are included in the amount available for grants.

A summary of stock option activity as of and for the year ended December 31, 2018 is presented below:

	Non-vested stock options outstanding		Stock options outstanding		
	Number of shares	Weighted-average grant-date fair value	Number of shares	Weighted-average exercise price	Weighted-average contractual term (years)
Outstanding at December 31, 2017	247,200	$ 7.94	884,050	$ 23.53	
Stock options granted	131,350	10.33	131,350	21.34	
Stock options exercised	-	-	(48,075)	14.89	
Stock options vested	(101,142)	8.28	-	-	
Stock options forfeited	(13,625)	7.27	(105,300)	32.69	
Outstanding at December 31, 2018	263,783	$ 9.04	862,025	$ 22.56	6.0
Exercisable at December 31, 2018			598,242	$ 24.38	4.6

Proceeds from stock option exercises totaled $0.7 million and $0.3 million for the years ended December 31, 2018 and 2017, respectively. There were no stock option exercises in 2016. Shares issued in connection with stock option exercises are issued from available authorized shares.

Based upon the closing stock price of $16.21 at December 31, 2018, the aggregate intrinsic value of outstanding and exercisable stock options was $1.0 million and $0.7 million, respectively. Intrinsic value of stock options is calculated as the amount by which the market price of our common stock exceeds the exercise price of the options. The aggregate intrinsic value of stock options exercised for the years ended December 31, 2018 and 2017 was $0.6 million and $0.1 million, respectively. The total fair value of stock option awards vested during the years ended December 31, 2018, 2017 and 2016 was $0.8 million, $1.2 million and $1.2 million, respectively.

Share-based compensation to employees and directors is recognized as compensation expense in the consolidated statements of operations based on the stock options fair value on the measurement date, which is the date of the grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods. The compensation expense recognized and its related tax effects are included in additional paid-in capital.

Share-based compensation expense related to stock options totaled $0.8 million, $1.2 million and $1.3 million for the years ended December 31, 2018, 2017 and 2016, respectively. Share-based compensation expense is recognized ratably over the requisite service period for all stock option awards. Unrecognized share-based compensation expense related to non-vested stock option awards totaled $2.2 million at December 31, 2018, and the weighted-average period over which this unrecognized expense was expected to be recognized was 2.8 years.

The fair value of our stock options granted is estimated on the measurement date, which is the date of grant. We use the Black-Scholes option-pricing model. Our determination of fair value of stock option awards on the date of grant is affected by our stock price as well as assumptions regarding our expected stock price volatility over the term of the awards, and actual and projected stock option exercise behaviors. The weighted-average grant-date fair value of stock options granted during the years ended December 31, 2018, 2017 and 2016 was $10.12, $9.60 and $5.85, respectively.

The assumptions used to determine the fair value of stock options granted are detailed in the table below:

	2018	2017	2016
Risk-free interest rate	2.63% to 3.10%	1.92% to 2.29%	1.42% to 2.39%
Dividend yield	0.0 %	0.0 %	0.0 %
Expected market price volatility	45% to 52%	45% to 53%	51% to 53%
Weighted-average expected market price volatility	49.1 %	47.4 %	51.0 %
Expected term	4.7 to 6.8 years	5.6 to 7.5 years	5.6 to 7.5 years

The risk-free interest rate was developed using the U.S. Treasury yield curve for periods equal to the expected life of the stock options at the grant date. No dividend yield was assumed because we do not pay cash dividends on common stock and currently have no plans to pay a dividend. Expected volatility is based on the long-term historical volatility (estimated over a period equal to the expected term of the stock options) of our common stock. In estimating the fair value of stock options under the Black-Scholes option-pricing model, separate groups of employees that have similar historical exercise behavior are considered separately. The expected term of options granted represents the period of time that options granted are expected to be outstanding.

Restricted Stock and Restricted Stock Units

A summary of restricted stock activity for the years ended December 31, 2018 and 2017 is presented below:

	Number of shares	Weighted-average grant-date fair value
Balance, December 31, 2016	95,000	$ 14.75
Restricted stock granted in May	6,780	18.00
Restricted stock granted in November	7,500	20.29
Restricted stock forfeited	(27,000)	14.96
Balance, December 31, 2017	82,280	15.45
Restricted stock granted in February	9,530	26.23
Restricted stock granted in May	5,136	24.20
Restricted stock vested in May	(2,260)	18.00
Restricted stock granted in November	10,666	19.46
Restricted stock vested in December	(25,000)	14.75
Balance, December 31, 2018	80,352	$ 17.97

Share-based compensation expense related to restricted stock totaled $0.5 million, $0.4 million, and $0.1 million for the years ended December 31, 2018, 2017 and 2016, respectively.

During the years ended December 31, 2018 and 2017, we granted 25,332 and 14,280 time-based restricted stock units to certain employees and directors, respectively. The restricted stock units typically vest over four years for employees and three years for directors. The fair value of the non-vested time-based restricted common stock awards was calculated using the market value of the stock on the date of issuance.

As of December 31, 2018, total unrecognized compensation cost related to non-vested time-based restricted stock units was $1.0 million. That cost is expected to be recognized over a weighted-average period of 2.4 years.

Employee Stock Purchase Plan

Under the 1996 Employee Stock Purchase Plan, as amended (the “Plan”), the Company is authorized to issue up to 300,000 shares of common stock to its full-time employees, nearly all of whom are eligible to participate. Under the terms of the Plan, employees can choose as of January 1 and July 1 of each year to have up to 10% of their total earnings withheld to purchase up to 100 shares of our common stock each six-month period. The purchase price of the stock is 85% of the lower of its beginning-of-the-period or end-of-the-period market prices. At December 31, 2018, we have issued 219,991 shares of common stock since the Plan’s inception.

Note 12: Retirement Plans

We have a defined contribution retirement plan ("401(k) plan") that covers substantially all employees. Pursuant to the 401(k) plan, participants may elect to make pre-tax and after-tax contributions, subject to certain limitations imposed under the Internal Revenue Code of 1986, as amended. In addition, we make periodic contributions to the 401(k) plan based on service for the North Jackson, Titusville and Dunkirk hourly employees. Prior to the North Jackson initial collective bargaining agreement, periodic contributions to the 401(k) plan were based on age for hourly employees at the North Jackson facility. We make periodic contributions for the salaried employees at all locations based upon their service and their individual contribution to the 401(k) plan.

We also participate in the Steelworkers Pension Trust (the "Trust"), a multi-employer defined-benefit pension plan that is open to all hourly and salary employees associated with the Bridgeville facility. We make periodic contributions to the Trust based on hours worked at a fixed rate for each hourly employee, as determined by the collective bargaining agreement, and a fixed monthly contribution on behalf of each salary employee. The trustees of the Trust have provided us with the latest data available for the Trust year ended December 31, 2017. As of that date, the Trust is not fully funded. We could be held liable to the Trust for our own obligations, as well as those of other employers, due to our participation in the Trust. Contribution rates could increase if the Trust is required to adopt a funding improvement plan or a rehabilitation plan, if the performance of the Trust assets do not meet expectations, or as a result of future collectively-bargained wage and benefit agreements. If we choose to stop participating in the Trust, we may be required to pay the Trust an amount based on the underfunded status of the Trust, referred to as a withdrawal liability.

The Pension Protection Act (PPA) defines a zone status for each trust. Trusts in the green zone are at least 80% funded, trusts in the yellow zone are at least 65% funded, and trusts in the red zone are generally less than 65% funded. The Trust recertified its zone status after using the extended amortization provisions as allowed by law. The Trust has not implemented a funding improvement or rehabilitation plan, nor are such plans pending. Our contributions to the Trust have not exceeded more than 5% of the total contributions to the Trust.

	Trusts employer identification	PPA zone status		Funding plan	Company contributions to the Trust			
Pension	number /			pending /	(dollars in thousands)			Surcharge
fund	plan number	2018	2017	implemented	2018	2017	2016	imposed
Trust	23-6648508 / 499	Green	Green	No	$ 880	$ 773	$ 681	No

The total expense of all retirement plans for the years ended December 31, 2018, 2017 and 2016 was $2.1 million, $1.8 million and $1.6 million, respectively. No other post-retirement benefit plans exist.

Note 13: Commitments and Contingencies

From time to time, various lawsuits and claims have been or may be asserted against us relating to the conduct of our business, including routine litigation relating to commercial and employment matters. The ultimate cost and outcome of any litigation or claim cannot be predicted with certainty. Management believes, based on information presently available, that the likelihood that the ultimate outcome of any such pending matter will have a material adverse effect on our financial condition, or liquidity or a material impact to our results of operations is remote, although the resolution of one or more of these matters may have a material adverse effect on our results of operations for the period in which the resolution occurs.

We, as well as other steel companies, are subject to demanding environmental standards imposed by federal, state and local environmental laws and regulations. We are not aware of any environmental condition that currently exists at any of our facilities that would cause a material adverse effect on our financial condition, results of operations or liquidity in a particular future quarter or year.

Our purchase obligations include the value of all open purchase orders with established quantities and purchase prices, as well as minimum purchase commitments, all made in the normal course of business. At December 31, 2018, our total purchase obligations were $22.8 million, of which $18.0 million will be due in 2019.

Note 14: Selected Quarterly Financial Data (unaudited)

(dollars in thousands, except per share amounts)	First quarter	Second quarter	Third quarter	Fourth quarter
2018 Data:				
Net sales	$ 63,737	$ 66,071	$ 69,056	$ 57,063
Gross margin	$ 9,272	$ 11,695	$ 10,425	$ 6,424
Operating income	$ 4,065	$ 5,846	$ 5,294	$ 865
Provision (benefit) for income taxes	$ 777	$ 1,139	$ 460	$ (441)
Net income	$ 2,125	$ 4,038	$ 3,916	$ 583
Net income per common share				
Basic	$ 0.29	$ 0.52	$ 0.45	$ 0.07
Diluted	$ 0.28	$ 0.50	$ 0.44	$ 0.07
2017 Data:				
Net sales	$ 48,875	$ 52,607	$ 50,887	$ 50,274
Gross margin	$ 4,245	$ 7,166	$ 5,464	$ 6,159
Operating (loss) income	$ (484)	$ 2,667	$ 1,016	$ 1,038
(Benefit) provision for income taxes	$ (262)	$ 369	$ 176	$ (7,884)
Net (loss) income	$ (1,219)	$ 1,228	$ (259)	$ 7,860
Net (loss) income per common share:				
Basic	$ (0.17)	$ 0.17	$ (0.04)	$ 1.09
Diluted	$ (0.17)	$ 0.17	$ (0.04)	$ 1.06

Net income (loss) per common share amounts for each quarter is required to be computed independently. As a result, their sum may not equal the total year earnings per share amounts.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our management, including our Chairman, President and Chief Executive Officer and our Vice President of Finance, Chief Financial Officer and Treasurer, performed an evaluation of the effectiveness of our disclosure controls and procedures. Based on that evaluation, our Chairman, President and Chief Executive Officer and our Vice President of Finance, Chief Financial Officer and Treasurer concluded that, as of the end of the fiscal year covered by this Annual Report on Form 10-K, our disclosure controls and procedures are effective. Management's Report on our internal control over financial reporting is included in Item 8 of this Annual Report on Form 10-K under the caption "Management's Report on Internal Control Over Financial Reporting" and is incorporated herein by reference. Our independent registered public accounting firm has issued a report on management's maintenance of effective internal control over financial reporting and is set forth in Item 8 of this Annual Report on Form 10-K under the caption "Report of Independent Registered Public Accounting Firm" and is incorporated herein by reference.

During the last fiscal quarter of the fiscal year ended December 31, 2018, there were no changes in our internal control over financial reporting which have materially affected, or are reasonably 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 concerning the directors of the Company is set forth in the Proxy Statement for the 2019 Annual Meeting of Stockholders (the "Proxy Statement") to be sent to stockholders in connection with our 2019 Annual Meeting of Stockholders, under the heading "Proposal No. 1—Election of Directors," which information is incorporated by reference. With the exception of the information specifically incorporated herein by reference, our Proxy Statement is not to be deemed filed as part of this report for the purposes of this Item.

In addition to the information set forth under the caption "Executive Officers" in Part I of this report, the information concerning our directors required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Nominees for Election as Directors" in our Proxy Statement, which will be filed with the SEC, pursuant to Regulation 14A, not later than 120 days after the end of the 2018 fiscal year. Information concerning the Audit Committee and its "audit committee financial expert" required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Committees of the Board of Directors" in the Proxy Statement. Information required by this item regarding compliance with Section 16(a) of the Exchange Act is incorporated and made a part hereof by reference to the material appearing under the heading "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement. Information concerning the executive officers of the Company is contained in Part I of this Annual Report on Form 10-K under the caption "Executive Officers."

We have adopted a Code of Business Conduct and Ethics that applies to all directors and employees, including its principal executive officer and principal financial officer. A copy is available through our website at http://www.univstainless.com. Information on our website is not part of this Annual Report on Form 10-K. We intend to timely disclose any amendment of or waiver under the Code of Business Conduct and Ethics on our website and will retain such information on our website as required by applicable SEC rules.

ITEM 11. EXECUTIVE COMPENSATION

The information concerning executive compensation is set forth in the Proxy Statement under the heading "Executive Compensation," which information is incorporated by reference. With the exception of the information specifically incorporated herein by reference, the Proxy Statement is not to be deemed filed as part of this report for the purposes of this Item.

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

The information concerning security ownership of certain beneficial owners and management is set forth in the Proxy Statement under the heading "Security Ownership of Certain Beneficial Owners and Management," which information is incorporated by reference. With the exception of the information specifically incorporated herein by reference, the Proxy Statement is not to be deemed filed as part of this report for the purposes of this Item.

Equity Compensation Plan Information:

Securities authorized for issuance under equity compensation plans at December 31, 2018 were as follows:

Plan Category	Number of shares to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of shares remaining available for future issuance under equity compensation plans (A)
Equity compensation plans approved by security holders	862,025	$ 22.56	624,968
Equity compensation plans not approved by security holders	-	-	-
Total	862,025	$ 22.56	624,968

(A) Includes 544,959 shares of common stock not issued under the Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan and 80,009 available under the 1996 Employee Stock Purchase Plan, as amended.

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

The information concerning certain relationships and related transactions, and director independence is set forth in the Proxy Statement under the heading “The Board of Directors,” which information is incorporated by reference. With the exception of the information specifically incorporated herein by reference, the Proxy Statement is not to be deemed filed as part of this report for the purposes of this Item.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information concerning principal accountant fees and services is set forth in the Proxy Statement under the heading “Principal Accountant Fees and Services,” which information is incorporated by reference. With the exception of the information specifically incorporated herein by reference, the Proxy Statement is not to be deemed filed as part of this report for the purposes of this Item.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as part of this Form 10-K:

1) Financial Statements

The list of financial statements required by this item is set forth in Item 8, “Financial Statements and Supplementary Data” and is incorporated herein by reference.

2) Consolidated Financial Statement Schedules

Schedule II – Valuation and Qualifying Accounts

For the Years Ended December 31, 2018, 2017 and 2016 (dollars in thousands)	Balance at beginning of year	Charged to costs and expenses	Deductions/ net charge-offs (A)	Balance at end of year
Allowance for doubtful accounts:				
Year ended December 31, 2018	$ 456	-	(161)	$ 295
Year ended December 31, 2017	309	159	(12)	456
Year ended December 31, 2016	249	163	(103)	309
Valuation allowance for deferred income taxes:				
Year ended December 31, 2018	$ 2,465	-	(167)	$ 2,298
Year ended December 31, 2017	1,553	912	-	2,465
Year ended December 31, 2016	1,582	-	(29)	1,553

(A) Credits to the allowance for doubtful accounts represent the write-off of bad debts net of recoveries. Credits to the valuation allowance for deferred income taxes represent adjustments to existing valuation allowances.

3) Exhibits

EXHIBIT NUMBER	DESCRIPTION	
3.1	Amended and Restated Certificate of Incorporation, as amended	Incorporated herein by reference to Exhibit 3.1 to the Annual Report on Form 10-K for the year ended December 31, 2017.
3.2	Second Amended and Restated By-laws of the Company	Incorporated herein by reference to Exhibit 3.1 to the Current Report on Form 8-K filed December 15, 2014.
4.1	Specimen Copy of Stock Certificate for shares of Common Stock	Incorporated herein by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the year ended December 31, 1998.
4.2	Form of Amended and Restated Note, dated January 21, 2016	Incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Universal Stainless & Alloy Products, Inc. on January 25, 2016
10.1	Stockholders Agreement dated as of August 1, 1994, by and among the Company and its existing stockholders	Incorporated herein by reference to Exhibit 10.1 to the Annual Report on Form 10-K for the year ended December 31, 2017.
10.2	Omnibus Incentive Plan	Incorporated herein by reference to Appendix B of the Company's Definitive Proxy Statement dated April 25, 2012.*
10.3	Employment Agreement dated December 21, 2007 between the Company and Dennis M. Oates	Incorporated herein by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007.*
10.4	Employment Agreement dated February 21, 2008 between the Company and Paul A. McGrath	Incorporated herein by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007.*
10.5	Employment Agreement dated April 21, 2008 between the Company and Christopher M. Zimmer	Incorporated herein by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended December 31, 2010.*
10.6	Employment Agreement dated August 5, 2015 between the Company and Graham McIntosh	Incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.*
10.7	Employment Agreement dated April 2, 2018, between the Company and Christopher T.	Incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter

	Scanlon	ended March 31, 2018.*
10.8	Employment Agreement dated November 5, 2018, between the Company and Alyssa H. Snider	Filed herewith.
10.9	Form of notice of grant of restricted stock award.	Incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.*

EXHIBIT NUMBER	DESCRIPTION	
10.10	Form of non-statutory stock option agreement.	Incorporated herein by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.*
10.11	Form of incentive stock option agreement.	Incorporated herein by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.*
10.12	Form of non-statutory stock option agreement for eligible directors.	Incorporated herein by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.*
10.13	First Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated as of August 3, 2018, by and among Universal Stainless & Alloy Products, Inc., the other borrowers party thereto, the guarantors party thereto from time to time, PNC Bank, National Association, as administrative agent and co-collateral agent, Bank of America, N.A., as co-collateral agent, the lenders party thereto from time to time and PNC Capital Markets LLC, as sole lead arranger and sole bookrunner.	Incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Universal Stainless & Alloy Products, Inc. on August 6, 2018.
10.14	Amendment to the Universal Stainless & Alloy Products, Inc. Employee Stock Purchase Plan, dated as of May 12, 2016.	Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Universal Stainless & Alloy Products, Inc. on May 13, 2016.
10.15	Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan.	Incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017.*
10.16	Form of Non-Employee Director Stock Option Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan)	Incorporated herein by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
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	Form of Non-Employee Director RSU Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan)	Incorporated herein by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
10.18	Form of Employee Stock Option Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan)	Incorporated herein by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
10.19	Form of Employee RSU Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan)	Incorporated herein by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.

EXHIBIT NUMBER	DESCRIPTION	
10.20	Form of Retention Stock Option Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan	Incorporated herein by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
10.21	Form of Retention RSU Award Agreement (Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan)	Incorporated herein by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
21.1	Subsidiaries of Registrant	Filed herewith.
23.1	Consent of Schneider Downs & Co., Inc.	Filed herewith.
24.1	Powers of Attorney	Included on the signature page herein.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.
101	The following financial information from this Annual Report on Form 10-K for the fiscal year ended December 31, 2018, formatted in XBRL (Extensible Business Reporting Language) and furnished electronically herewith: (i) the Consolidated Balance Sheets as of December 31, 2018 and 2017 (ii) the Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2014; (v) the Consolidated Statements of Shareholders' Equity for the years ended December 31, 2018, 2017 and 2016; and (vi) the Notes to Consolidated Financial Statements.	Filed herewith.

* -Reflects management contract or compensatory plan or arrangement to be filed as an exhibit pursuant to Item 15(b) of this Annual Report on Form 10-K.

ITEM 16. FORM 10-K SUMMARY

Not Applicable.

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 on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, on February 20, 2019.

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

By: /s/ Dennis M. Oates
Dennis M. Oates
Chairman, President and Chief Executive Officer

POWER OF ATTORNEY

Each of the officers and directors of Universal Stainless & Alloy Products, Inc., whose signature appears below in so signing also makes, constitutes and appoints Dennis M. Oates and Paul A. McGrath, and each of them acting alone, his true and lawful attorney-in-fact, with full power of substitution, for him in any and all capacities, to execute and cause to be filed with the SEC any and all amendment or amendments to this Report on Form 10-K, with exhibits thereto and other documents connected therewith and to perform any acts necessary to be done in order to file such documents, and hereby ratifies and confirms all that said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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	TITLE	DATE
/s/ Dennis M. Oates Dennis M. Oates	Chairman, President, Chief Executive Officer and Director (Principal Executive)	February 20, 2019
/s/ Christopher T. Scanlon Dennis M. Oates	Vice President of Finance, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 20, 2019
/s/ Christopher L. Ayers Christopher L. Ayers	Director	February 20, 2019
/s/ Judith L. Bacchus Judith L. Bacchus	Director	February 20, 2019
/s/ M. David Kornblatt M. David Kornblatt	Director	February 20, 2019
/s/ Udi Toledano Udi Toledano	Director	February 20, 2019

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