UNIVERSAL STAINLESS
& ALLOY PRODUCTS, INC.

To our Stockholders,

Let me begin my report with recognition and gratitude. The past two years have presented unprecedented challenges to our Company, our industry and the global economy stemming from the COVID-19 pandemic. I am gratified to report that our team worked relentlessly and successfully to overcome those challenges. Our progress in 2021 and our confidence in the future are directly the result of their tireless efforts and dedication.

The rise in our backlog in 2021 shows the progress of our recovery and is the basis of our optimism for 2022. At the close of 2020, our backlog before surcharges had fallen to $48 million. By the end of 2021, it had nearly tripled, reaching a record $135 million, with progressive improvement each quarter of the year.

The main driver was emerging recovery in demand in aerospace, our largest market at 59% of 2021 sales. As vaccines became available and COVID began to ease, commercial air travel rebounded. Airlines resumed taking deliveries of new airplanes and placed new orders, which in turn set the stage for increased aircraft build rates in 2022 and 2023. So did the return to service of the Boeing 737-MAX and strong demand for freighters, business jets and military aircraft. For Universal, a tangible indicator of the developing aerospace recovery was a 19% sequential increase in our 2021 fourth quarter premium alloy sales, which are mainly for aerospace applications. At year end, premium alloys constituted more than 20% of our backlog.

Sequential sales growth in each of our end markets in the fourth quarter brought total net sales for 2021 to $155.9 million versus $179.7 million in 2020, which did not experience the brunt of COVID until mid-year. We expect sequential sales growth to continue in each quarter of 2022.

The heavy equipment market was our second largest market in 2021 at 22% of sales, which grew 52% from 2020 as recovery in industrial manufacturing drove metal fabrication demand, as did a high level of automotive retooling and new model development especially for electric vehicles.

Our oil & gas sales increased 16% in 2021 and represented 10% of sales, making oil & gas our third largest market in 2021. The turnaround in the prices and prospects for oil & gas over the past year was striking, with crude oil prices up 74% in 2021 and natural gas prices up 82%.

Full year sales to the general industrial and power generation end markets were below 2020, declining 30% and 33%, respectively, but increased sequentially in the fourth quarter. Our general industrial sales go mainly to the semiconductor and medical markets, and our power generation market sales mainly reflect maintenance demand. We expect additional volume opportunities for both end markets in 2022.

Our gross profit improved in each consecutive quarter of 2021. The profitability improvements were achieved despite challenges including chronic supply chain issues affecting all manufacturers, such as transportation and freight delays, parts shortages, price inflation on materials and supplies, and labor shortages worsened by a spike in workforce absences due to the emergence of the Omicron variant in late November.

We ended the year on a positive financial footing to pursue our operating and growth objectives in 2022. Total debt at year end 2021 was $69.2 million, which included the extinguishment of $10 million of debt with the full forgiveness of our Paycheck Protection Program note. Additionally, we amended and restated our five-year $120 million asset-based credit agreement on favorable terms and also repaid the $15 million seller note associated with the acquisition of our North Jackson facility.

We executed our capital spending plan, including strategic initiatives to expand our capacity in premium alloys and improve the efficiency of our premium melt operations. An advanced vacuum arc re-melting (VAR) furnace added in our North Jackson facility has been installed, commissioned, and integrated into operations. A new 18-ton vacuum induction melting (VIM) crucible is in the final stage of commissioning. As part of our strategic plan for 2022, our Board has authorized the acquisition of two additional VAR furnaces to further support our growth and efficiency, and expand our product applications.

We are entering 2022 with great optimism for our growth prospects and with continuing gratitude to our employees, customers, stockholders and Board for their ongoing support.

Sincerely,

Dennis M. Oates
Chairman, President and Chief Executive Officer

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, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 001-39467

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	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, par value $0.001 per share	USAP	The Nasdaq Stock Market, LLC
Preferred Stock Purchase Rights		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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant on June 30, 2021, based on the closing price of $19.50 per share on that date, was approximately $86,250,000. 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 1, 2022, there were 8,938,091 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 2021 Annual Meeting of Stockholders.

INDEX

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 variations 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 and original equipment manufacturers ("OEMs"). 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 business segment.

We produce a wide variety of specialty steel grades using several manufacturing processes including vacuum induction melting ("VIM"), vacuum-arc remelting ("VAR"), elecro-slag remelting ("ESR") and argon oxygen decarburization ("AOD"). At our Bridgeville and North Jackson facilities, we produce specialty steel products in the form of semi-finished and finished long products (ingots, 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 and rod. 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.

We make strategic investments in our business and capabilities over time to support our growth initiatives and improve the efficiency of our production operations. This includes the installation of a new vacuum arc remelt furnace and an 18-ton crucible for our vacuum induction melting operation at our North Jackson facility in 2021. These investments will expand our premium alloy production capabilities and reduce our costs.

INDUSTRY OVERVIEW

The specialty steel industry is a 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, 2021, 2020 and 2019, approximately 60-70% 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 chrome, vanadium 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.

RAW MATERIALS AND SUPPLIES

We depend on the delivery of key raw materials for our day-to-day melting operations. These key raw materials are carbon and stainless scrap metal and alloys, primarily consisting of nickel, chrome, molybdenum, vanadium 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 primarily originate in North America, Australia, 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 35% of the cost of products sold in 2021, 2020 and 2019. 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 substantially all our major raw materials, including iron, nickel, molybdenum, vanadium, and chrome, increased in 2021 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 apply a raw material surcharge in our pricing to align our pricing with fluctuations in commodity costs. Short lead time orders embed the surcharge into the price at the time of order entry. Longer lead time orders apply the raw material surcharge in effect at the time of shipment to better align the selling price with commodity costs. Surcharges are published on our website, and can fluctuate by month in line with commodity cost changes. Over time, our surcharge will effectively offset changes in raw material costs; however, during a period of rising or falling prices the timing will cause variation between reporting periods.

CUSTOMERS

Our largest customer in 2021 accounted for approximately 19%, 23% and 27% of our net sales for the years ended December 31, 2021, 2020 and 2019, respectively. One additional customer accounting for approximately 10% of our sales during 2021.

International sales approximated 7% of our annual net sales in 2021, 2020 and 2019.

BACKLOG

Our backlog of orders (excluding surcharges) on hand as of December 31, 2021 was approximately $134.5 million compared to approximately $48.0 million at December 31, 2020. We expect substantially all of the backlog orders as of December 31, 2021 to be filled during 2022. 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.

HUMAN CAPITAL MANAGEMENT

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, 2021, 2020 and 2019, we had 558, 566 and 795 employees, respectively, of which 421, 430 and 611, 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 2020	September 2025

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. In addition, 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.

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 Amended and Restated 1996 Employee Stock Purchase Plan, as amended (the “Plan”), the Company is authorized to issue up to 400,000 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, 2021, we have issued 295,709 shares of common stock since the Plan’s inception.

Employee Safety

COVID-19 emerged near the beginning of 2020, bringing significant uncertainty in our end markets. Recognizing the potential for disruption in our operations, we began to deploy safety protocols and processes beginning in the March 2020 timeframe to help keep our employees safe while continuing to serve our customer base. The safety protocols in place have been in line with state and CDC recommendations and Occupational Safety and Health Administration ("OSHA") requirements such as face coverings, physical distancing, temperature checks, work from home where applicable, enhanced cleaning, encouraging self-health checks, contact tracing and quarantining, as applicable.

The safety of our employees is a paramount concern in managing our operations. We strive to minimize workplace injuries as much as possible and to provide a safe, open and accountable work environment for our employees. During 2021, the Company experienced the second fewest OSHA recordable cases in its history.

We encourage employees to provide feedback, ask questions and report concerns related to ethics or safety violations. We take employee concerns seriously and evaluate appropriate actions in response.

Employee Inclusion

We are an Equal Opportunity Employer. All qualified applicants for positions with the Company receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status. We strive to provide an equitable and inclusive environment for all our employees. We are committed to achieving representation across all levels of our workforce that reflects the diversity of the communities in which we live and work.

GOVERNMENT REGULATIONS

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. In the ordinary course of business, we are also subject to government regulations including those enforced by OSHA.

EXECUTIVE OFFICERS

The following table sets forth, as of February 17, 2022, certain information with respect to the executive officers of the Company:

Name (Age)	Executive Officer Since	Position
Dennis M. Oates (69)	2008	Chairman, President and Chief Executive Officer
Christopher M. Zimmer (48)	2010	Executive Vice President and Chief Commercial Officer
Graham McIntosh, Ph.D. (59)	2015	Executive Vice President and Chief Technology Officer
John J. Arminas (50)	2020	Vice President, General Counsel and Corporate Secretary
Wendel L. Crosby (50)	2021	Vice President of Manufacturing

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 2014. Mr. Zimmer served as Vice President of Sales and Marketing from 2008 to 2014. Mr. Zimmer previously served as Vice President of Sales and Marketing for Schmoltz+Bickenbach USA from 1995 to 2008. He previously 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 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 to 2001, where he began his career.

John J. Arminas was appointed Vice President, General Counsel and Corporate Secretary for the Company effective April 2020. Mr. Arminas also served as the Company's Corporate Counsel from 2013 until April 2020. Prior to his tenure at the Company, Mr. Arminas served as an attorney for the Law Firm of Goldberg, Kamin & Garvin from 2004 to 2013.

Wendel L. Crosby has been Vice President of Manufacturing of the Company since April 2019. Mr. Crosby also served as General Manager for the Company's Dunkirk and Titusville facilities from 2014 until 2019. Prior to his tenure at the Company, Mr. Crosby served as Area Operations Manager for Precision Castparts Corp. from 2012 to 2014. Prior to that, Mr. Crosby served as the Director of Finishing for Columbus Steel Castings from 2010 to 2012. Mr. Crosby also served as Finishing Value Stream Manager from 2004 to 2011 and Program Manager from 2007 to 2010 for Columbus Steel Castings. Mr. Crosby is a former member of the United States Army and is a combat war veteran.

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.

Macroeconomic Risks

Our business and operations, and the operations of our customers and suppliers, have been and are expected to continue to be adversely impacted by the COVID-19 pandemic.

The outbreak of COVID-19 was declared by the World Health Organization to be a "pandemic" and spread across the world, including the United States and many countries where the Company sells its products or sources raw materials.

Our operations and financial performance have been negatively impacted by the COVID-19 pandemic that has caused, and is expected to continue to cause, a global slowdown of economic activity, disruptions in global supply chains and significant volatility and disruption of financial markets. Because the severity, magnitude and duration of the COVID-19 pandemic and its economic consequences are unknown, its impact on our operations and financial performance cannot be fully determined. Further, the ultimate impact of the COVID-19 pandemic on our operations and financial performance depends on many factors that are not within our control, including, but not limited to, governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic (including restrictions on travel and transport and workforce pressures); the impact of the pandemic and actions taken in response on global and regional economies, travel and economic activity; general economic uncertainty in key global markets and financial market volatility; global economic conditions and levels of economic growth; commodity prices; vaccination activities; and the pace of recovery when the COVID-19 pandemic subsides.

Notwithstanding our continued operations, we have experienced, and expect to continue experiencing, lower demand and volume for our products, including delivery and shipping delays and deferrals directly and indirectly to the COVID-19 pandemic that have adversely impacted, and are expected to continue to adversely impact, our business. For example, a significant portion of our sales result from products sold to customers in the commercial aerospace industry. In 2020 and 2021, several commercial aerospace companies announced and executed cost-cutting and other measures in response to declining demand stemming from the COVID-19 pandemic, including measures to reduce inventory and/or downward adjustments to their production rates. Likewise, the COVID-19 pandemic has exacerbated declines in consumer activity and supply issues in the oil & gas end market. Although our order backlog increased in 2021, economic and global supply chain and disruption continues, which continues to have a significant adverse impact on our business operations, financial performance and results of operations.

As the impact of the COVID-19 pandemic on the economy and our operations evolves, we will continue to assess our liquidity position in relation to our anticipated future liquidity needs. Under the terms of our Credit Agreement (as defined below), our borrowing availability is based on eligible accounts receivable and inventory, which have been impacted and will continue to be impacted by the challenging economic environment we have faced during the COVID-19 pandemic. Also, a continued worldwide disruption could materially affect our future access to our sources of liquidity, financial condition, capitalization and capital investments. In the event of a sustained market deterioration, we may need additional liquidity, which would require us to evaluate available alternatives and take appropriate actions. Additionally, a prolonged period of generating lower cash from operations could adversely affect our financial condition and the achievement of our strategic objectives. Conditions in the financial and credit markets also may limit the availability of funding or increase the cost of funding, which could adversely affect our business, financial position and results of operations.

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, including health epidemics, 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 United States-Mexico-Canada Agreement, 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.

Commercial Risks

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

Our five largest customers in the aggregate accounted for approximately 47% of our net sales for each of the years ended December 31, 2021 and 2020, and 54% of our net sales for the year ended December 31, 2019. 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, production schedules 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 is derived from the aerospace industry.

Approximately 60% of our sales represented products sold to customers in the aerospace market in 2021. 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.

A prolonged downturn in the aerospace industry would adversely affect the demand for our 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. The continued market uncertainty regarding impacts of COVID-19 on the aerospace business, has and could continue to adversely impact our results.

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 develop, commercialize and sell 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 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 United Kingdom's withdrawal from membership in 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 7% of annual net sales in 2021, 2020 and 2019, an immaterial portion of which is denominated in foreign currencies.

Financial Risks

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 Credit Agreement uses the London Interbank Offering Rate ("LIBOR") as a benchmark for establishing the interest rate on a substantial portion of our debt. LIBOR is the subject of recent national, international and other regulatory guidance and proposals for reform. In July 2017, the United Kingdom's Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that it intends to phase out LIBOR. In March 2021, the FCA announced that all LIBOR settings will either cease to be provided by any administrator or no longer be representative: (a) immediately after December 31, 2021, in the case of the one-week and two-month U.S. dollar settings; and (b) immediately after June 30, 2023, in the case of the remaining U.S. dollar settings. The United States Federal Reserve has also advised banks to cease entering into new contracts that use USD LIBOR as a reference rate. The Alternative Reference Rate Committee, a committee convened by the Federal Reserve that includes major market participants, has identified the Secured Overnight Financing Rate ("SOFR"), a new index calculated by short-term repurchase agreements, backed by Treasury securities, as its preferred alternative rate for LIBOR. At this time, it is not possible to predict how markets will respond to SOFR or other alternative reference rates as the transition away from the LIBOR benchmarks is anticipated in coming years. Accordingly, the outcome of these reforms is uncertain, and any changes in the methods by which LIBOR is determined or regulatory activity related to LIBOR's phaseout could cause LIBOR to perform differently than in the past or cease to exist. The consequences of these developments cannot be entirely predicted but could include an increase in the cost of our borrowings under our Credit Agreement. In addition, we may, in the future, hedge against interest rate fluctuations by using any of various hedging instruments. These instruments may be used to selectively manage risks, but there can be no assurance that we will be fully protected against material interest rate fluctuations.

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 $105.0 million senior secured revolving credit facility and a $15.0 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, 2021, we were in compliance with the applicable covenants in our Credit Agreement.

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 European Union and other countries where we do business have 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 ability to recognize tax benefits on our existing net operating loss positions may be limited.

We have generated meaningful net operating loss carryforwards, tax credit carryforwards and other tax attributes (collectively, the "Tax Benefits"), which potentially can be utilized in certain circumstances to reduce our future income tax obligations. As of December 31, 2021, we had estimated U.S. federal net operating losses of approximately $29.2 million, state net operating losses of approximately $10.8 million, U.S. federal tax credit carryforwards of approximately $6.4 million and state tax credit carryforwards of approximately $0.4 million. Our ability to use our Tax Benefits would be substantially limited if we were to experience an "ownership change," as defined under Section 382 of the Internal Revenue Code (the "Tax Code"). In general, a corporation would experience an ownership change if the percentage of the corporation's stock owned by one or more "5% shareholders," as defined under Section 382 of the Tax Code, increases by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. On August 24, 2020, our Board of Directors adopted a Tax Benefits Preservation Plan (the "Rights Agreement") designed to protect the availability of our Tax Benefits and the Rights Agreement was ratified by our shareholders on May 5, 2021. The Rights Agreement contains an ownership trigger threshold of 4.95% and reduces the likelihood that changes in our investor base would limit our future use of our Tax Benefits, which would significantly impair the value of such Tax Benefits. However, there is no guarantee that the Rights Agreement will be effective in protecting our Tax Benefits. Further, if we continue to be unable to generate sufficient taxable income, these Tax Benefits may expire unutilized, and we may not be able to recognize the benefits that could arise from such Tax Benefits.

Human Capital Risks

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, 2021, we had 421 employees, out of a total of 558, who were covered under collective bargaining agreements with the USW expiring at various dates in 2022 to 2025. 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.

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

We participate in 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. The trustees of the Trust have provided us with the latest data available for the Trust year ended December 31, 2020. 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. Changes to any of these factors could negatively impact our future results of operations and cash flows to a material extent.

Operational Risks

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.

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, vanadium, molybdenum, manganese and copper, for our melting operation. A 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 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 !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 in a given period.

Our production processes also require consumable operating supplies. 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.

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 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.

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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We own our Bridgeville, Pennsylvania facility, which consists of approximately 800,000 square feet of floor space and our executive offices on approximately 77 acres. The Bridgeville facility contains melting, remelting, conditioning, rolling, annealing, testing 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.

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 its round and shape bar finishing and testing equipment.

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 14, 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, 2021, a total of 8,938,091 shares of common stock, par value $0.001 per share, were issued and held by 91 holders of record. There were no shares of the issued common stock held in treasury at December 31, 2021. Our common stock trades under the symbol "USAP" on the Nasdaq Global Select Market.

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. Accordingly, we do not expect to pay a cash dividend on our common stock in the near future.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable

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 and original equipment manufacturers. 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.

Our aerospace end market accounted for approximately 60% our total net sales and will continue to be a major driver of our future results, although the COVID-19 pandemic negatively impacted sales in 2021. Sales decreased in our aerospace, power generation, and general industrial end markets in 2021 compared with 2020, while sales increased in the oil & gas and heavy equipment end markets.

Total Company backlog at the end of 2021 was $134.5 million, a new record level and significantly up from $48.0 million at the end of 2020. Premium alloys sales were approximately 17% of total sales during 2021, and these premium products represented more than 20% of the backlog at the end of the year.

Our 2021 gross margin was 5.1% of net sales, significantly improved from a negative gross margin in 2020. The negative margin in 2020 was primarily due to the impacts of the COVID-19 pandemic, including direct charges recorded to the income statement as a result of low activity levels. Although low activity levels and other headwinds depressed 2021 results as well, the improvement in gross margin reflects the benefits of lower plant spending, improvements in our production costs, and general increases in activity levels at our facilities in 2021 compared with 2020.

During 2021, we used $18.0 million of cash in our operations, primarily from increasing our inventory levels in support of our record backlog. We also used $11.1 million on capital expenditures, a significant portion of which was spent for strategic projects related to expansion of our vacuum induction melting and vacuum arc remelting capabilities to support our growth in premium products. These investments in our inventory and premium product manufacturing equipment support our business goals of further sales growth and profitability improvement in 2022.

We received forgiveness of our $10.0 million Paycheck Protection Program loan in 2021 and borrowed on our revolving credit facility to pay off our notes issued in 2013 as part of the North Jackson acquisition, effectively cutting the interest rate in half for $15.0 million of our debt.

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.

COVID-19 Pandemic

While the Company's four plants have continued to operate throughout 2020 and 2021, COVID-19 related challenges negatively impacted the efficiency of our operations. These challenges are expected to continue in the first quarter of 2022 and may continue thereafter. These factors may have additional significant impacts on the Company's backlog, end markets, overall operations, cash flows and financial results.

The scope and nature of these impacts, most of which are beyond the Company's control, continue to evolve, and the outcome is uncertain. The ultimate extent of the effects of the COVID-19 pandemic on the Company, and the end markets we serve, remains highly uncertain and will depend on future developments and, as such, effects could exist for an extended period, even after the pandemic may end.

Results of Operations

2021 Results Compared to 2020

For the years ended December 31, *(dollars in thousands, except per shipped ton information)*	**2021**		**2020**			
	Amount	**Percentage of net sales**	**Amount**	**Percentage of net sales**	**Dollar / ton variance**	**Percentage variance**
Total net sales	$ 155,934	100.0	$ 179,731	100.0	$ (23,797)	(13.2)
Cost of products sold	147,963	94.9	182,387	101.5	(34,424)	(18.9)
Gross margin	7,971	5.1	(2,656)	(1.5)	10,627	400.1
Selling, general and administrative expenses	20,243	13.0	19,752	11.0	491	2.5
Operating loss	(12,272)	(7.9)	(22,408)	(12.5)	10,136	45.2
Interest expense	1,989	1.3	2,784	1.5	(795)	(28.6)
Deferred financing amortization	225	0.1	225	0.1	-	-
Gain on extinguishment of debt	(10,000)	(6.4)	-	-	(10,000)	NM
Other (income), net	(445)	(0.3)	(1,123)	(0.6)	678	60.4
Loss before income taxes	(4,041)	(2.6)	(24,294)	(13.5)	20,253	83.4
Benefit from income taxes	(3,283)	(2.1)	(5,247)	(2.9)	1,964	37.4
Net (loss) income	$ (758)	(0.5) %	$ (19,047)	(10.6) %	$ 18,289	96.0 %
Tons shipped	27,343		30,821		(3,478)	(11.3)%
Sales dollars per shipped ton	$ 5,703		$ 5,831		$ (128)	(2.2)%

Market Segment Information:

For the years ended December 31, *(dollars in thousands)*	**2021**		**2020**			
	Amount	**Percentage of net sales**	**Amount**	**Percentage of net sales**	**Dollar variance**	**Percentage variance**
Net sales:						
Service centers	$ 110,404	70.8 %	$ 126,122	70.2 %	$ (15,718)	(12.5)%
Original equipment manufacturers	15,011	9.6	20,783	11.5	(5,772)	(27.8)
Rerollers	17,058	11.0	15,928	8.9	1,130	7.1
Forgers	11,835	7.6	14,244	7.9	(2,410)	(16.9)
Conversion services and other sales	1,626	1.0	2,654	1.5	(1,028)	(38.7)
Total net sales	$ 155,934	100.0 %	$ 179,731	100.0 %	$ (23,797)	(13.2)%

Melt Type Information:

For the years ended December 31, *(dollars in thousands)*	**2021**		**2020**			
	Amount	**Percentage of net sales**	**Amount**	**Percentage of net sales**	**Dollar variance**	**Percentage variance**
Net sales:						
Specialty alloys	$ 127,885	82.0 %	$ 141,838	78.9 %	$ (13,953)	(9.8)%
Premium alloys	26,423	17.0	35,239	19.6	(8,816)	(25.0)
Conversion services and other sales	1,626	1.0	2,654	1.5	(1,028)	(38.7)
Total net sales	$ 155,934	100.0 %	$ 179,731	100.0 %	$ (23,797)	(13.2)%

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)*	**2021** Amount	**2021** Percentage of net sales	**2020** Amount	**2020** Percentage of net sales	**Dollar variance**	**Percentage variance**
Net sales:						
Aerospace	$ 91,546	58.7 %	$ 121,900	67.8 %	$ (30,354)	(24.9)%
Power generation	4,634	3.0	6,879	3.8	(2,245)	(32.6)
Oil and gas	15,106	9.7	13,065	7.3	2,041	15.6
Heavy equipment	34,010	21.8	22,400	12.5	11,610	51.8
General industrial, conversion services and other sales	10,637	6.8	15,487	8.6	(4,850)	(31.3)
Total net sales	$ 155,934	100.0 %	$ 179,731	100.0 %	$ (23,797)	(13.2)%

Net sales:

Net sales for the year ended December 31, 2021 decreased $23.8 million, or 13.2%, compared to 2020. The decrease in our sales is primarily due to a decrease in consolidated tons shipped driven by lower business activity as a result of significant challenges facing all our end markets caused primarily by the COVID-19 pandemic. The most significant impact on our business has been the slowdown in the global commercial airline industry, which is the largest driver of the decline in sales for our aerospace end market. The average total sales dollars per shipped ton also decreased due to a lower mix of premium products in 2021 compared with the prior year.

Gross margin:

Our 2021 gross margin was 5.1% of net sales, improved from a negative 1.5% gross margin in 2020. The negative margin in 2020 was primarily due to the impacts of the COVID-19 pandemic, including direct charges recorded to the Cost of products sold as a result of low activity levels. Although low activity levels continued in 2021, the improvement in gross margin reflects lower plant spending, improvements in our production costs, and increases in activity levels at our facilities during 2021 compared with the second half of 2020.

Selling, general and administrative expenses:

Our selling, general and administrative ("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 $0.5 million in 2021 due primarily to an increase in accruals for incentive compensation.

Interest expense and deferred financing amortization:

Our interest expense was $2.0 million in 2021 compared to $2.8 million in 2020 due to lower total average debt balances for the majority of the current year, lower interest rates on our variable rate debt, and payoff of the higher-interest rate notes in the first quarter of 2021.

Gain on extinguishment of debt

2021 included a book gain of $10.0 million recorded upon receipt of forgiveness of the Company's PPP Term Note (as defined below).

Other income:

Other income was $0.4 million in 2021 compared to $1.1 million in 2020. The decrease is related to lower insurance recoveries during the current year.

Benefit from income taxes:

The 2021 income tax benefit is $3.3 million compared to an income tax benefit of $5.2 million in 2020. The difference is primarily due to a lower taxable loss in 2021 compared to the prior year.

Net loss:

We had a net loss of $0.8 million in 2021 compared to a net loss of $19.0 million in 2020. The decrease in the net loss reflects our better gross margin in the current year, plus the $10.0 million gain recorded on forgiveness of our PPP Term Note.

2020 Results Compared to 2019

For the years ended December 31, *(dollars in thousands, except per shipped ton information)*	**2020**		**2019**			
	Amount	**Percentage of net sales**	**Amount**	**Percentage of net sales**	**Dollar / ton variance**	**Percentage variance**
Total net sales	179,731	100.0	243,007	100.0	(63,276)	(26.0)
Cost of products sold	182,387	101.5	215,369	88.6	(32,982)	(15.3)
Gross margin	(2,656)	(1.5)	27,638	11.4	(30,294)	(109.6)
Selling, general and administrative expenses	19,752	11.0	20,347	8.4	(595)	(2.9)
Operating (loss) income	(22,408)	(12.5)	7,291	3.0	(29,699)	(407.3)
Interest expense	2,784	1.5	3,765	1.5	(981)	(26.1)
Deferred financing amortization	225	0.1	227	0.1	(2)	(0.9)
Other (income), net	(1,123)	(0.6)	(474)	(0.2)	(649)	136.9
(Loss) income before income taxes	(24,294)	(13.5)	3,773	1.6	(28,067)	(743.9)
Benefit from income taxes	(5,247)	(2.9)	(502)	(0.2)	4,745	945.2
Net loss	$ (19,047)	(10.6) %	$ 4,275	1.8 %	$ (23,322)	(545.5) %
Tons shipped	30,821		41,462		(10,641)	(25.7) %
Sales dollars per shipped ton	$ 5,831		$ 5,861		$ (30)	(0.5) %

Market Segment Information:

For the years ended December 31, *(dollars in thousands)*	**2020**		**2019**			
	Amount	**Percentage of net sales**	**Amount**	**Percentage of net sales**	**Dollar variance**	**Percentage variance**
Net sales:						
Service centers	$ 126,122	70.2 %	$ 166,327	68.4 %	$ (40,205)	(24.2) %
Original equipment manufacturers	20,783	11.5	24,731	10.2	(3,948)	(16.0)
Rerollers	15,928	8.9	27,236	11.2	(11,308)	(41.5)
Forgers	14,244	7.9	20,444	8.4	(6,200)	(30.3)
Conversion services and other sales	2,654	1.5	4,269	1.8	(1,615)	(37.8)
Total net sales	$ 179,731	100.0 %	$ 243,007	100.0 %	$ (63,276)	(26.0) %

Melt Type Information:

For the years ended December 31, *(dollars in thousands)*	2020		2019			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Specialty alloys	$ 141,838	78.9 %	$ 201,120	82.7 %	$ (59,282)	(29.5) %
Premium alloys	35,239	19.6	37,618	15.5	(2,379)	(6.3)
Conversion services and other sales	2,654	1.5	4,269	1.8	(1,615)	(37.8)
Total net sales	$ 179,731	100.0 %	$ 243,007	100.0 %	$ (63,276)	(26.0) %

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)*	2020		2019			
	Amount	Percentage of net sales	Amount	Percentage of net sales	Dollar variance	Percentage variance
Net sales:						
Aerospace	$ 121,900	67.8 %	$ 170,445	70.1 %	$ (48,545)	(28.5) %
Power generation	6,879	3.8	11,530	4.7	(4,651)	(40.3)
Oil and gas	13,065	7.3	25,023	10.3	(11,958)	(47.8)
Heavy equipment	22,400	12.5	22,725	9.4	(325)	(1.4)
General industrial, conversion services and other sales	15,487	8.6	13,284	5.5	2,203	16.6
Total net sales	$ 179,731	100.0 %	$ 243,007	100.0 %	$ (63,276)	(26.0) %

Net sales:

Net sales for the year ended December 31, 2020 decreased $63.3 million, or 26.0%, compared to 2019. The decrease in our sales was primarily due to a decrease in consolidated tons shipped driven by lower business activity as a result of significant challenges facing all our end markets caused primarily by the COVID-19 pandemic. The most significant impact on our business was the slowdown in the global commercial airline industry, which was the largest driver of the decline in sales for our aerospace end market.

Gross margin:

Our 2020 gross margin was negative 1.5% of net sales, down from 11.4% of net sales in 2019. The decrease was primarily due to the impacts of the COVID-19 pandemic, including direct charges recorded to the income statement as a result of low activity levels in our production facilities, and an unfavorable change in product mix away from higher-margin finished products to semi-finished plate and billet products.

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 decreased by $0.6 million in 2020 due to cost reduction initiatives enacted in the second half of 2020 in response to our decrease in volume.

Interest expense and deferred financing amortization:

Our interest expense was $2.8 million in 2020 compared to $3.8 million in 2019 due in part to lower total debt balances year over year and due in part to lower interest rates on our variable rate debt. The interest rates on our variable rate debt under our Credit Agreement, which is described further below under "Liquidity and Capital Resources – Credit Facility," are primarily determined by a LIBOR-based rate plus an applicable margin, and the LIBOR rate was lower in 2020 compared to 2019.

Other income:

Other income was $1.1 million in 2020 compared to $0.5 million in 2019. The increase is related to increased insurance recoveries during 2020.

(Benefit) from income taxes:

The 2020 income tax benefit is $5.2 million compared to a 2019 income tax benefit of $0.5 million. The difference is primarily due to our 2020 pretax loss.

Net (loss) income:

We had a net loss of $19.0 million in 2020 compared to net income of $4.3 million in 2019 due to the significant decrease in sales volume and the direct charges due to lower plant activity in 2020.

Liquidity and Capital Resources

Historically, we have financed our operations through cash provided by operating activities and borrowings on our credit facilities. At December 31, 2021, we maintained approximately $24.0 million of remaining availability under our revolving credit facility. 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.

Net cash (used in) provided by operating activities

During 2021, we used $18.0 million of cash in our operating activities. Net loss adjusted for non-cash expenses generated $6.4 million, while we used $24.9 million growing our managed working capital, defined as net accounts receivable plus net inventory, minus accounts payable and other current liabilities. The primary component of working capital growth was the $31.0 of cash used to grow inventory in support of our record backlog.

During 2020, we generated $23.8 million of cash from our operating activities. Net loss adjusted for non-cash expenses used $3.4 million of cash while our managed working capital, defined as net accounts receivable plus net inventory, minus accounts payable and other current liabilities, generated $27.1 million of cash. The decrease in managed working capital is the direct result of our reduced spending and inventory management, and focused cash collections activities.

Net cash used in investing activities

Our capital spending was $11.1 million in 2021 compared to $9.2 million during 2020. The prior year capital spending was low due to spend reduction efforts, and the increase in 2021 was driven by our strategic projects to expand our premium melt capabilities, including the acquisition of a new vacuum arc remelting furnace and a larger vacuum induction melting crucible.

Net cash provided by (used in) financing activities

During 2021, our financing activities provided $29.0 million of cash. This primarily includes $46.1 million of proceeds from the facilities provided by our Credit Agreement, partly offset by payoff of the $15.0 million North Jackson acquisition notes.

The financing activities included the impacts of amending our Credit Agreement in the first quarter of 2021. Proceeds from the Term Loan (as defined below) and borrowings under our Revolving Credit Facility (as defined below) were used to pay the $15.0 million in notes that matured during the first quarter of 2021.

Raw materials and supplies

The cost of raw materials represents approximately 35% of the cost of products sold in 2021. The major raw materials used in our operations include nickel, molybdenum, vanadium, chrome, iron and carbon scrap. Additionally, our Bridgeville facility uses graphite electrodes as a consumable supply in the melting process. The average price of substantially all our major raw materials, including iron, nickel, molybdenum, vanadium, and chrome, increased in 2021 compared to the prior year.

We maintain sales price surcharge 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. Over time, our surcharge will effectively offset changes in raw material costs; however, during a period of rising or falling prices the timing will cause variation between reporting periods.

Credit Facility

On March 17, 2021, we entered into the Second Amended and Restated Revolving Credit, Term Loan and Security Agreement (the "Credit Agreement"), with PNC Bank, National Association ("PNC Bank"), as administrative agent and co-collateral agent, Bank of America, N.A., as co-collateral agent, the Lenders (as defined in the Credit Agreement) party thereto from time to time and PNC Capital Markets LLC, as sole lead arranger and sole bookrunner. The Credit Agreement replaces our prior Credit Agreement, and provides for a senior secured revolving credit facility in an aggregate principal amount not to exceed $105.0 million ("Revolving Credit Facility") and a senior secured term loan facility ("Term Loan") in the amount $15.0 million (together with the Revolving Credit Facility, the "Facilities").

The Company was in compliance with all applicable covenants throughout 2021 and at December 31, 2021.

The Facilities, which expire on March 17, 2026 (the "Expiration Date"), are collateralized by a first lien on 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. The Company must maintain undrawn availability under the Credit Agreement of at least $11.0 million. That requirement can be overcome if the Company maintains a fixed charge coverage ratio of not less than 1.10 to 1.0 measured on a rolling two-quarter basis and calculated in accordance with the terms of the Credit Agreement.

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 must pay quarterly installments of the principal of approximately $0.5 million, plus accrued and unpaid interest, on the first day of each fiscal quarter beginning on June 30, 2021. 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 2021. At December 31, 2021, the LIBOR based rate was 2.61% on our Revolving Credit Facility and 3.10% for the Term Loan.

We incurred $0.5 million in additional financing costs in conjunction with the execution of the Credit Agreement, which were recorded to the Consolidated Balance Sheet in the first quarter of 2021 and will be amortized to interest expense over the life of the Credit Agreement. We did not record any additional deferred financing costs to the Consolidated Balance Sheet during 2020.

At December 31, 2021 and 2020, we had net Credit Agreement related deferred financing costs of approximately $0.9 million and $0.5 million, respectively. We amortized $0.2 million of those deferred financing costs during each of the years ended December 31, 2021 and 2020.

Paycheck Protection Program Note

On April 16, 2020, the Company entered into a promissory note, dated April 15, 2020, with PNC Bank, National Association, evidencing an unsecured loan with a principal amount of $10.0 million made to the Company pursuant to the Paycheck Protection Program (the "PPP Term Note") under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The PPP Term Note is guaranteed by the United States Small Business Administration.

The PPP Term Note incurred interest at a fixed annual rate of 1.00%, with the first six months of interest deferred. According to the terms of the PPP Term Note, the Company would begin to make 18 equal monthly payments of principal and interest in November 2020 with the final payment due in April 2022. The Company did not make any principal or interest payments related to the PPP Term Note.

The proceeds could be used to maintain payroll or make certain covered interest payments, lease payments and utility payments. Under the terms of the CARES Act, the Company was eligible for forgiveness for all or a portion of loan granted under the PPP, with such forgiveness to be determined, subject to limitations, based on the use of the loan proceeds for payment of payroll costs and any payments of certain covered interest, lease and utility payments.

The Company applied for forgiveness of the PPP Term Note during the third quarter of 2020. In July 2021, PNC Bank notified the Company that forgiveness of the note was granted by the United States Small Business Administration. Accordingly, the PPP Term Note was forgiven in its entirety, including all related accrued interest. In the third quarter of 2021, we recognized forgiveness of the PPP Term Note and recorded a corresponding gain on extinguishment of debt in the Consolidated Statement of Operations for the period.

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 in the aggregate principal amount of $20.0 million (the "Notes"), each in favor of Gorbert Inc. ("Holder"). The Company's obligations under the Notes were collateralized by a second lien on the same assets of the Company that collateralize the obligations of the Company under the Facilities. 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 Notes were originally scheduled to mature on March 17, 2019. In 2019, the Company extended the maturity date to March 17, 2020 in accordance with the terms of the Notes. In 2020, the Company extended the maturity date to March 17, 2021 in accordance with the terms of the Notes. The Company made partial principal payments on the notes upon extension, and an aggregate principal amount of $15.0 million remained outstanding at the 2021 maturity date. On March 17, 2021, the Company paid the remaining principal balance and all applicable interest to settle the notes obligation.

The Notes had an applicable interest at a rate of 6.0% per year from August 17, 2017 until the time they were paid off. All accrued and unpaid interest was payable quarterly in arrears on September 18, December 18, March 18 and June 18 of each year.

Leases

The Company periodically enters into leases in its normal course of business. Operating lease liabilities and right-of-use assets are recorded to the consolidated balance sheet at the present value of minimum lease payments. The assets are included in Other long-term assets in the consolidated balance sheets and are amortized over the respective terms, which are five years or less. The long-term component of the lease liability is recorded in Other long-term liabilities, net and the current component is included in Other current liabilities.

The right-of-use assets and lease liabilities for finance leases 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. The long-term component of the lease liability is included in Long-term debt and the current component is included in Current portion of long-term debt.

The Company entered into three new agreements accounted for as operating leases during 2021 and did not enter into any new agreements accounted for as a finance lease agreement during 2021.

Share-Based Activity

We granted stock options and restricted stock units, and issued shares of our common stock to officers, employees, and non-employee directors during 2021, 2020 and 2019 through our incentive compensation plans. Refer to Note 12 to our consolidated financial statements included in Item 8, "Financial Statements and Supplementary Data" for further information.

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, 2021.

Environmental Matters. We, as well as other specialty metal manufacturers, 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 to our consolidated financial statements included in Item 8, "Financial Statements and Supplementary Data."

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 necessary as of December 31, 2021, 2020 or 2019.

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 beginning in 2027. 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

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 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 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 will completely offset immediate changes in our raw material costs.

At December 31, 2021, we had $69.9 million of floating rate debt outstanding with an interest rates between 2.60% and 3.10%. 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. Exclusive of any interest rate hedges, 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 approximately $0.7 million.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Financial Statements

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, 2021, our internal control over financial reporting is effective.

The effectiveness of internal control over financial reporting as of December 31, 2021 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

Dennis M. Oates
Chairman, President and Chief Executive Officer

<u>REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>

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, 2021 and 2020, and the related consolidated statements of operations, comprehensive (loss) income, cash flows, and shareholders' equity for each of the years in the three-year period ended December 31, 2021, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021, 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 an opinion on the Company's consolidated financial statements and an opinion 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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Inventory

Critical Audit Matter Description

As discussed in Notes 1 and 3 to the consolidated financial statements, the Company's net inventory totaled approximately $141 million as of December 31, 2021 and is 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 over the production period for raw materials, including scrap, and supplies, direct labor and applied manufacturing overhead within the guidelines of normal operating capacity. The Company establishes reserves based upon assessments of slow-moving inventory, the results of quality control reviews, the determination of normal capacity levels in the manufacturing process, and whether the product is valued at the lower of cost or net realizable value.

We identified auditing the valuation of inventory as a critical audit matter. The production cycle for a unit of inventory generally lasts several months and involves the accumulation of different types of costs at various cost centers. The ultimate cost of a unit in inventory may be subject to reductions related to abnormal production levels, scrap valuation and recovery, achieving customer specifications, or changes in the market, customer needs, and commodity pricing. Additionally, for certain new products, there is limited historical data for which to evaluate recoverability of the cost of the unit. The complexity surrounding the production process and the high degree of estimation involved in assessing net realizable value results in significant auditor judgment around auditing the valuation of inventory.

How the Critical Audit Matter Was Addressed in the Audit

We evaluated and tested: the design and operating effectiveness of the Company's internal controls over the accumulation of inventory costs, the calculation to support estimated scrap values within the inventory costing model, management's assessment of normal capacity levels and calculation to establish an estimate of excess costs, the calculation of lower of cost or net realizable value reserves and the calculation of slow-moving inventory. Our audit procedures involved testing the assumptions significant to management's inventory valuation assessment including plant capacity levels, expected selling prices, demand forecasts, scrap values, and recovery percentages as well as the relevant underlying data.

/s/ Schneider Downs & Co., Inc.

Schneider Downs & Co., Inc.

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

Pittsburgh, Pennsylvania
February 17, 2022

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31,	**2021**	**2020**	**2019**
(dollars in thousands, except per share information)			
Net sales	$ 155,934	$ 179,731	$ 243,007
Cost of products sold	147,963	182,387	215,369
Gross margin	7,971	(2,656)	27,638
Selling, general and administrative expenses	20,243	19,752	20,347
Operating (loss) income	(12,272)	(22,408)	7,291
Interest expense	2,214	3,009	3,992
Gain on Extinguishment of Debt	(10,000)	-	-
Other (income), net	(445)	(1,123)	(474)
(Loss) income before income taxes	(4,041)	(24,294)	3,773
Benefit from income taxes	(3,283)	(5,247)	(502)
Net (loss) income	$ (758)	$ (19,047)	$ 4,275
Basic (loss) earnings per share	$ (0.09)	$ (2.16)	$ 0.49
Diluted (loss) earnings per share	$ (0.09)	$ (2.16)	$ 0.48
Weighted average shares of common stock outstanding:			
Basic	8,907,908	8,818,974	8,778,753
Diluted	8,907,908	8,818,974	8,873,719

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

For the years ended December 31,	**2021**	**2020**	**2019**
(dollars in thousands)			
Net (loss) income	$ (758)	$ (19,047)	$ 4,275
Other comprehensive (loss) income, net of tax:			
(Loss) reclassified into retained earnings from adoption of ASU 2018-02	-	-	(21)
Unrealized gain (loss) on derivatives, net of tax	85	(14)	(11)
Comprehensive (loss) income	$ (673)	$ (19,061)	$ 4,243

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

UNIVERSAL STAINLESS & ALLOY PRODUCTS, INC.

CONSOLIDATED BALANCE SHEETS

December 31,	**2021**	**2020**
(dollars in thousands)		
ASSETS		
Current assets:		
Cash	$ 118	$ 164
Accounts receivable (less allowance for doubtful accounts of $201 and $203, respectively)	21,192	18,101
Inventory, net	140,684	111,380
Other current assets	8,567	7,471
Total current assets	170,561	137,116
Property, plant and equipment, net	159,162	164,983
Other long-term assets	909	947
Total assets	$ 330,632	$ 303,046
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 24,000	$ 12,632
Accrued employment costs	4,303	1,826
Current portion of long-term debt	2,392	16,713
Other current liabilities	943	2,722
Total current liabilities	31,638	33,893
Long-term debt	66,852	33,471
Deferred income taxes	2,461	5,725
Other long-term liabilities	3,360	4,277
Total liabilities	104,311	77,366
Commitments and contingencies (Note 14)		
Stockholders' equity:		
Senior preferred stock, par value $0.001 per share; 1,980,000 shares authorized; zero shares issued and outstanding	-	-
Common stock, par value $0.001 per share; 20,000,000 shares authorized; 8,938,091 and 8,883,788 shares issued, respectively	9	9
Additional paid-in capital	95,590	94,276
Accumulated other comprehensive income (loss)	40	(45)
Retained earnings	130,682	131,440
Total stockholders' equity	226,321	225,680
Total liabilities and stockholders' equity	$ 330,632	$ 303,046

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,	**2021**	**2020**	**2019**
(dollars in thousands)			
Operating Activities:			
Net (loss) income	$ (758)	$ (19,047)	$ 4,275
Adjustments for non-cash items:			
Depreciation and amortization	19,300	19,449	19,133
Deferred income tax	(3,288)	(5,231)	(517)
Gain on extinguishment of debt	(10,000)	-	-
Share-based compensation expense	1,121	1,455	1,390
Changes in assets and liabilities:			
Accounts receivable, net	(3,091)	17,494	(2,977)
Inventory, net	(30,986)	34,326	(14,965)
Accounts payable	10,986	(25,282)	(1,412)
Accrued employment costs	2,477	(1,983)	(3,490)
Income taxes	(3)	243	84
Other	(3,727)	2,387	(5,930)
Net cash (used in) provided by operating activities	(17,969)	23,811	(4,409)
Investing Activities:			
Capital expenditures	(11,105)	(9,157)	(17,354)
Net cash used in investing activity	(11,105)	(9,157)	(17,354)
Financing Activities:			
Borrowings under revolving credit facility	134,120	115,876	174,907
Payments on revolving credit facility	(96,602)	(136,877)	(153,632)
Proceeds from term loan facility	8,571	-	-
Proceeds from Paycheck Protection Program Note	-	10,000	-
Payments on term loan facility, finance leases, and notes	(16,715)	(3,809)	(3,904)
Payments of financing costs	(539)	-	-
Issuance of common stock under share-based plans	193	150	471
Net cash provided by (used in) financing activities	29,028	(14,660)	17,842
Net decrease in cash and restricted cash	(46)	(6)	(3,921)
Cash at beginning of period	164	170	4,091
Cash at end of period	$ 118	$ 164	$ 170
Supplemental Disclosure of Cash Flow Information:			
Interest paid	$ 1,980	$ 2,885	$ 3,670
Income taxes paid (refunded), net	$ 7	$ (213)	$ 69

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 December 31, 2018	8,752,490	$ 9	$ 93,100	$ 146,191	$ 1	292,855	$ (2,290)
Common stock issuance under							
Employee Stock Purchase Plan	31,376	-	418	-	-	-	-
Exercise of stock options	5,325	-	53	-	-	-	-
Share-based compensation	10,245	-	1,411	-	-	1,424	(21)
Net loss on derivative instruments	-	-	-	-	(11)	-	-
Adoption of ASU 2018-02	-	-	-	21	(21)	-	-
Net income	-	-	-	4,275	-	-	-
Balance at December 31, 2019	8,799,436	9	94,982	150,487	(31)	294,279	(2,311)
Common stock issuance under							
Employee Stock Purchase Plan	21,940	-	150	-	-	-	-
Share-based compensation	62,412	-	1,455	-	-	-	-
Net loss on derivative instruments	-	-	-	-	(14)	-	-
Treasury Stock retirement	-	-	(2,311)	-	-	(294,279)	2,311
Net loss	-	-	-	(19,047)	-	-	-
Balance at December 31, 2020	8,883,788	9	94,276	131,440	(45)	-	-
Common stock issuance under							
Employee Stock Purchase Plan	22,382	-	146	-	-	-	-
Other Share-based plans	5,272	-	47	-	-	-	-
Share-based compensation	26,649	-	1,121	-	-	-	-
Net gain on derivative instruments	-	-	-	-	85	-	-
Net loss	-	-	-	(758)	-	-	-
Balance at December 31, 2021	8,938,091	$ 9	$ 95,590	$ 130,682	$ 40	-	$ -

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 2021, we had one customer which accounted for approximately 19% of our total net sales and 7% of our total accounts receivable balance, and a second customer which accounted for approximately 10% of our total net sales and 6% of our total accounts receivable balance. During 2020, we had one customer which accounted for approximately 23% of our total net sales and 8% of our total accounts receivable balance. The percent of accounts receivable made up by our largest customer is lower than the percent of sales primarily due to timing, as sales to that customer were lowest in the fourth quarter compared to each of the first three quarters. During 2019, we had one customer which accounted for approximately 27% of our total net sales and 9% of our total accounts receivable, and a second customer which accounted for approximately 11% of our total net sales and 17% of our total accounts receivable.

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 7% of total net sales in 2021, 2020 and 2019. 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 years ended December 31, 2021, 2020 and 2019.

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 operating 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, 2021 was an increase of $0.3 million. The net change for the year ended December 31, 2020 was an increase of $1.1 million, and the net change for the year ended December 31, 2019 was an increase of $0.2 million.

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, 2021, 2020 and 2019, we amortized these operating materials in the amount of $1.7 million, $1.7 million and $2.3 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.

We experienced low activity levels at our production facilities during 2021 and 2020 caused primarily by the impacts of the COVID-19 pandemic. As a result, $6.1 million of fixed overhead costs were not absorbed into inventory and charged directly to expense during 2021, and $8.3 million of fixed overhead costs were not absorbed into inventory charged directly to expense during 2020.

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 12 to 36 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, 2021, 2020 and 2019 was $16.7 million, $15.9 million and $19.7 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, 2021, 2020 and 2019 was $17.3 million, $17.5 million and $16.7 million, respectively, of which $16.8 million, $17.0 million and $16.1 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, 2021, 2020 and 2019.

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 each of the years ended December 31, 2021, 2020 and 2019 was $0.2 millionandis 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. At December 31, 2021 and 2020, we had $1.5 million and $1.2 million, respectively, of unamortized deferred financing costs included on our consolidated balance sheets as a reduction of debt.

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.

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.

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, 2021, 2020 and 2019.

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 (Loss) Income per Common Share. Net (loss) income per common share is computed by dividing net (loss) income by the weighted-average number of common shares outstanding during the period. Diluted net (loss) income per common share is computed by dividing net (loss) income by the weighted-average number of common shares outstanding plus all dilutive potential common shares outstanding during the period.

Treasury Stock. We account for treasury stock under the cost method and include such shares as a reduction of total stockholders' equity. During 2020, we retired all treasury stock previously acquired.

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 8 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 December 2019, the FASB issued ASU 2019-12, "Income Taxes - Simplifying the Accounting for Income Taxes (Topic 740)," which simplifies the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments in this ASU also improve consistency and simplify other areas of Topic 740 by clarifying and amending existing guidance. The amendments in this ASU will be applied using different approaches depending on what the specific amendment relates to and, for public entities, are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. An entity is permitted to early adopt the guidance, and we early adopted ASU 2019-12 as of January 1, 2020. The adoption did not have a material impact on our consolidated financial statements.

Recently Issued Accounting Pronouncements

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

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. Contract assets related to services performed, not yet billed of \$2.2 million and \$2.3 million are included in Accounts Receivable in the Consolidated Balance Sheets at December 31, 2021 and December 31, 2020, respectively.

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, and consequently we omit disclosure of the transaction price apportioned to remaining performance obligations on open orders.

The following summarizes our revenue by melt type:

		Twelve Months Ended December 31,		
		2021		2020
Net sales:				
Specialty alloys	$	127,885		141,838
Premium alloys (A)		26,423		35,239
Conversion services and other sales		1,626		2,654
Total net sales	$	155,934	$	179,731

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

Note 3: Inventory

The major classes of inventory are as follows:

December 31,		**2021**		**2020**
(dollars in thousands)				
Raw materials and starting stock	$	12,263	$	9,286
Semi-finished and finished steel products		122,396		94,928
Operating materials		10,620		11,502
Gross inventory		145,279		115,716
Inventory reserves		(4,595)		(4,336)
Total inventory, net	$	140,684	$	111,380

Note 4: Property, Plant and Equipment

Property, plant and equipment consists of the following:

December 31,		**2021**		**2020**
(dollars in thousands)				
Land and land improvements	$	8,066	$	7,847
Buildings		52,866		52,160
Machinery and equipment		301,271		291,134
Construction in progress		5,138		4,664
Gross property, plant and equipment		367,341		355,805
Accumulated depreciation		(208,179)		(190,822)
Property, plant and equipment, net	$	159,162	$	164,983

Note 5: Long-Term Debt

Long-term debt consists of the following:

December 31,		**2021**		**2020**
(dollars in thousands)				
Term loan	$	13,929	$	6,786
Revolving credit facility		55,997		18,479
Notes		-		15,000
Paycheck Protection Program Note		-		10,000
Finance leases		783		1,070
		70,709		51,335
Less: current portion of long-term debt		(2,392)		(16,713)
Less: deferred financing costs		(1,465)		(1,151)
Long-term debt	$	66,852	$	33,471

Credit Facility

On March 17, 2021, we entered into the Second Amended and Restated Revolving Credit, Term Loan and Security Agreement (the "Credit Agreement"), with PNC Bank, National Association ("PNC Bank"), as administrative agent and co-collateral agent, Bank of America, N.A., as co-collateral agent, the Lenders (as defined in the Credit Agreement) party thereto from time to time and PNC Capital Markets LLC, as sole lead arranger and sole bookrunner. The Credit Agreement replaces our prior Credit Agreement, and provides for a senior secured revolving credit facility in an aggregate principal amount not to exceed $105.0 million ("Revolving Credit Facility") and a senior secured term loan facility ("Term Loan") in the amount $15.0 million (together with the Revolving Credit Facility, the "Facilities").

The Company was in compliance with all applicable covenants throughout 2021 and at December 31, 2021.

The Facilities, which expire on March 17, 2026 (the "Expiration Date"), are collateralized by a first lien on 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. The Company must maintain undrawn availability under the Credit Agreement of at least $11.0 million. That requirement can be overcome if the Company maintains a fixed charge coverage ratio of not less than 1.10 to 1.0 measured on a rolling two-quarter basis and calculated in accordance with the terms of the Credit Agreement.

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 must pay quarterly installments of the principal of approximately $0.5 million, plus accrued and unpaid interest, on the first day of each fiscal quarter beginning on June 30, 2021. 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 2021. At December 31, 2021, the LIBOR based rate was 2.61% on our Revolving Credit Facility and 3.10% for the Term Loan.

We incurred $0.5 million in additional financing costs in conjunction with the execution of the Credit Agreement, which were recorded to the Consolidated Balance Sheet in the first quarter of 2021 and will be amortized to interest expense over the life of the Credit Agreement. We did not record any additional deferred financing costs to the Consolidated Balance Sheet during 2020.

At December 31, 2021 and 2020, we had net deferred financing costs related to the Credit Agreement of approximately $0.9 million and $0.5 million, respectively. We amortized $0.2 million of those deferred financing costs during each of the years ended December 31, 2021 and 2020.

The aggregate annual principal payments due under our Credit Agreement at December 31, 2021, are as follows:

(dollars in thousands)	
2022	$ 2,144
2023	2,144
2024	2,144
2025	2,144
2026	61,350
	$ 69,926

Paycheck Protection Program Term Note

On April 16, 2020, the Company entered into a promissory note, dated April 15, 2020, with PNC Bank, National Association, evidencing an unsecured loan with a principal amount of $10.0 million made to the Company pursuant to the Paycheck Protection Program (the "PPP Term Note") under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The PPP Term Note is guaranteed by the United States Small Business Administration.

The PPP Term Note incurred interest at a fixed annual rate of 1.00%, with the first six months of interest deferred. According to the terms of the PPP Term Note, the Company would begin to make 18 equal monthly payments of principal and interest in November 2020 with the final payment due in April 2022. The Company did not make any principal or interest payments related to the PPP Term Note.

The proceeds could be used to maintain payroll or make certain covered interest payments, lease payments and utility payments. Under the terms of the CARES Act, the Company was eligible for forgiveness for all or a portion of loan granted under the PPP, with such forgiveness to be determined, subject to limitations, based on the use of the loan proceeds for payment of payroll costs and any payments of certain covered interest, lease and utility payments.

The Company applied for forgiveness of the PPP Term Note during the third quarter of 2020. In July 2021, PNC Bank notified the Company that forgiveness of the note was granted by the United States Small Business Administration. Accordingly, the PPP Term Note was forgiven in its entirety, including all related accrued interest. In the third quarter of 2021, we recognized forgiveness of the PPP Term Note and recorded a corresponding gain on extinguishment of debt in the Consolidated Statement of Operations for the period.

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 in the aggregate principal amount of $20.0 million (the "Notes"), each in favor of Gorbert Inc. ("Holder"). The Company's obligations under the Notes were collateralized by a second lien on the same assets of the Company that collateralize the obligations of the Company under the Facilities. 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 Notes were originally scheduled to mature on March 17, 2019. In 2019, the Company extended the maturity date to March 17, 2020 in accordance with the terms of the Notes. In 2020, the Company extended the maturity date to March 17, 2021 in accordance with the terms of the Notes. The Company made partial principal payments on the notes upon extension, and an aggregate principal amount of $15.0 million remained outstanding at the 2021 maturity date. On March 17, 2021, the Company paid the remaining principal balance and all applicable interest to settle the notes obligation.

The Notes had an applicable interest at a rate of 6.0% per year from August 17, 2017 until the time they were paid off. All accrued and unpaid interest was payable quarterly in arrears on September 18, December 18, March 18 and June 18 of each year.

Note 6: Leases

The Company periodically enters into leases in its normal course of business. At December 31, 2021, the leases in effect were primarily related to mobile and other production equipment. The term of our leases is generally 60 months or less, and the leases do not have significant restrictions, covenants, or other nonstandard terms.

Right-of-use assets and lease liabilities are recorded at the present value of minimum lease payments. For our operating leases, the assets are included in Other long-term assets on the consolidated balance sheets and are amortized within operating income over the respective lease terms. The long-term component of the lease liability is included in Other long-term liabilities, net, and the current component is included in Other current liabilities. For our finance leases, 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 lease liability is included in Long-term debt and the current component is included in Current portion of long-term debt.

As of December 31, 2021, future minimum lease payments applicable to operating and finance leases were as follows:

	Operating Leases	Finance Leases
2022	$ 315	$ 313
2023	222	241
2024	126	224
2025	14	93
2026	7	-
Total minimum lease payments	$ 684	$ 871
Less amounts representing interest	(23)	(88)
Present value of minimum lease payments	$ 661	$ 783
Less current obligations	(310)	(249)
Total long-term lease obligations, net	$ 351	$ 534
Weighted-average remaining lease term	2.5 years	2.7 years

Right-of-use assets recorded to the consolidated balance sheet at December 31, 2021 were $0.7 million for operating leases and $0.5 million for finance leases. For the twelve months ended December 31, 2021, the amortization of finance lease assets was $0.2 million and was included in cost of products sold in the Consolidated Statements of Operations.

The Company elected the practical expedient allowed under Leases (Topic 842) to exclude leases with a term of 12 months or less from the calculation of our lease liabilities and right-of-use assets.

In determining the lease liability and corresponding right-of-use asset for each lease, the Company calculated the present value of future lease payments using the interest rate implicit in the lease, when available, or the Company's incremental borrowing rate. The incremental borrowing rate was determined with reference to the interest rate applicable under our senior secured revolving credit facility discussed in Note 5, as this facility is collateralized by a first lien on substantially all of the assets of the Company and its term is similar to the term of our leases.

Note 7: 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 financing 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.

As of December 31, 2021 and 2020, the Company recorded $2.8 million within Other long-term liabilities related to this transaction, which represents the funds contributed to the Investment Fund by PNC New Markets Investment Partners, LLC.

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, resulting in a gain of $2.8 million at that time. The value attributed to the put/call is negligible.

Direct costs incurred in structuring this financing transaction totaled $0.7 million. These costs were deferred and are 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.

Note 8: 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, 2021 and 2020 due to their short-term nature (Level 1). The fair value of the Term Loan and Revolver at December 31, 2021 and 2020 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 $15.0 million at December 31, 2020 (Level 2).

Note 9: 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.

The notional value of these contracts was $2.5 million at December 31, 2021 and $1.2 million at December 31, 2020. The contracts had a related unrealized gain recorded in accumulated other comprehensive income of less than $0.1 million at December 31, 2021 and a loss of less than $0.1 million at December 31, 2020.

Additionally, the Company entered into a forward interest rate swap contract during 2020 to fix the interest rate on a portion of its variable-rate debt from January 1, 2021 to June 30, 2023. The forward interest rate swap was designated as a cash flow hedge. The notional amount of the contract was $16 million at its inception and through December 31, 2021, and the notional amount will step down throughout the term. The contract had a related unrealized gain recorded in accumulated other comprehensive income of less than $0.1 million at December 31, 2021 and a loss of less than $0.1 million at December 31, 2020.

Note 10: Income Taxes

The income tax benefit attributable to continuing operations during the years ended December 31, 2021, 2020 and 2019 is as follows:

Components of the benefit from income taxes are as follows:

For the years ended December 31,	**2021**	**2020**	**2019**
(dollars in thousands)			
Current (benefit) provision			
Federal	$ -	$ (16)	$ (7)
State	5	-	22
Deferred benefit			
Federal	(3,375)	(5,154)	(279)
State	88	(77)	(238)
Benefit from income taxes	$ (3,283)	$ (5,247)	$ (502)

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

For the years ended December 31,	**2021**	**2020**	**2019**
Tax (benefit) provision at statutory tax rate	$ (848)	$ (5,102)	$ 792
State income taxes, net of federal tax benefit	(153)	(129)	38
Research and development tax credit	(814)	(372)	(1,233)
Valuation allowance	-	-	(193)
PPP loan forgiveness	(2,100)		
Deferred tax adjustment for stock option forfeitures	371	234	109
Other adjustments to deferred taxes	230	45	(68)
Other	31	77	53
Benefit from income taxes	$ (3,283)	$ (5,247)	$ (502)

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 operating 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.

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,	**2021**	**2020**
(dollars in thousands)		
Noncurrent deferred income taxes:		
Federal and state tax carryforwards	$ 13,358	$ 10,950
Inventory	1,310	1,409
Share-based compensation	1,745	1,919
Receivables	51	59
Accrued liabilities	168	271
Other	4	12
Total deferred tax assets	$ 16,636	$ 14,620
Deferred tax liabilities:		
Property, plant and equipment	$ 18,459	$ 19,672
Other	638	673
Total deferred tax liabilities	$ 19,097	$ 20,345
Total noncurrent deferred income taxes	$ 2,461	$ 5,725

We file a U.S. federal income tax return and various state income tax returns. For federal income tax purposes, we had $29.2 million and $22.1 million of net operating loss carryforwards at December 31, 2021 and 2020, respectively. The net operating loss carryforwards begin to expire in 2033. In addition, we have credit carryforwards associated with our research and development activities of $6.4 million and $5.6 million as of December 31, 2021 and 2020, respectively. The research and development credit carryforwards begin to expire in 2030.

We have state net operating loss carryforwards of $11.1 million at December 31, 2021 and $9.9 million at December 31, 2020, and the related valuation allowances were $2.8 million at each date. We have state credit carryforwards of $0.4 million at December 31, 2021 and December 31, 2020, respectively. 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 2017. We are subject to examination by most state tax jurisdictions for tax years after 2017.

Note 11: Net (Loss) Income Per Common Share

The computation of basic and diluted net income (loss) per common share for the years ended December 31, 2021, 2020 and 2019 is as follows:

For the years ended December 31,	**2021**	**2020**	**2019**
(dollars in thousands, except per share amounts)			
Numerator:			
Net (loss) income	$ (758)	$ (19,047)	$ 4,275
Denominator:			
Weighted average number of shares of common stock outstanding	8,907,908	8,818,974	8,778,753
Weighted average effect of dilutive share-based compensation	-	-	94,966
Diluted weighted average number of shares of common stock outstanding	8,907,908	8,818,974	8,873,719
Net (loss) income per common share:			
Basic earnings per share	$ (0.09)	$ (2.16)	$ 0.49
Diluted earnings per share	$ (0.09)	$ (2.16)	$ 0.48

There were 645,050, 776,025 and 593,975 options to purchase shares of common stock, at an average price of $21.00, $22.02 and $26.91 for the years ended December 31, 2021, 2020 and 2019, respectively, that were not included in the computation of diluted net (loss) income per common share because their respective exercise prices were greater than the average market price of our common stock.
In addition, the calculation of diluted net (loss) income per common share for the years ended December 31, 2021 and 2020, respectively, excluded 39,036 and 22,533 shares for the assumed exercise of stock options as a result of being in a net loss position.

Note 12: Share-Based Plans

At December 31, 2021, we had the following share-based compensation plans:

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

We maintain the Universal Stainless & Alloy Products, Inc. amended and restated 2017 Equity Incentive Plan (the "2017 Plan"), which was approved by our stockholders in May 2017 and subsequently amended and restated and approved by our stockholders in May 2021 (the "Amended and Restated 2017 Plan"). The Amended and Restated 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 its May 2017 inception, there were 568,357 shares authorized for issuance under the 2017 Plan.

When initially adopted in May 2017, the 2017 Plan replaced the Omnibus Incentive Plan ("OIP") which in turn replaced the 1994 Stock Incentive Plan ("SIP"). Any awards outstanding under the SIP and OIP will remain subject to and be paid under the SIP and OIP, respectively. No new awards will be granted under either the SIP or OIP. Any shares subject to outstanding awards under the OIP that cease to be subject to such issuance of stock after the adoption of the Amended and Restated 2017 Plan will increase the shares authorized under the Amended and Restated 2017 Plan. As of the adoption of the Amended and Restated 2017 Plan, any shares subject to outstanding award under the SIP that cease to be subject to such issuance of stock will increase the shares authorized under the Amended and Restated 2017 Plan. Further, as of May 5, 2021, 400,000 additional shares were approved and authorized for issuance under the Amended and Restated 2017 Plan. At December 31, 2021, there were 160,999 shares available for grant under the Amended and Restated 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, 2021 under the 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, 2021 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, 2020	244,756	$ 5.87	893,575	$ 20.00	
Stock options granted	109,200	4.27	109,200	9.48	
Stock options vested	(85,012)	7.10	-	-	
Stock options forfeited	(31,100)	7.05	(133,900)	26.82	
Outstanding at December 31, 2021	237,844	$ 4.60	868,875	$ 17.65	5.6
Exercisable at December 31, 2021			631,866	$ 20.47	4.3

There were no proceeds from stock option exercises during 2021 or 2020. Proceeds from stock option exercises totaled $0.1 million for the year ended December 31, 2019. Shares issued in connection with stock option exercises are issued from available authorized shares.

Based upon the closing stock price of $7.94 at December 31, 2021, the aggregate intrinsic value of outstanding stock options was $0.1 million, of which a nominal amount was related to options that were exercisable. 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. There were no stock options exercised for the year ended December 31, 2021. The aggregate intrinsic value of stock options exercised for the year ended December 31, 2020 was $0.1 million.

The total fair value of stock options awards vested during the year ended December 31, 2021 was approximately $0.7 million. The total fair value of stock option awards vested during each of the years ended December 31, 2020 and 2019 was approximately $0.8 million.

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 $0.5 million for the year ended December 31, 2021. Share-based compensation expense related to stock options totaled $0.8 million for each of the years ended December 31, 2020 and 2019, 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 $1.0 million at December 31, 2021, 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, 2021, 2020 and 2019 was $4.27, $2.99 and $6.71, respectively.

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

	2021	**2020**	**2019**
Risk-free interest rate	0.89% to 1.40%	0.37% to 0.94%	1.41% to 2.56%
Dividend yield	0.0%	0.0%	0.0%
Expected market price volatility	47% to 52%	46% to 51%	47% to 52%
Weighted-average expected market price volatility	49.0%	49.2%	49.4%
Expected term	4.6 to 6.5 years	4.6 to 6.5 years	4.6 to 6.5 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, 2021 and 2020 is presented below:

	Number of shares		Weighted-average grant-date fair value
Balance, December 31, 2019	100,192	$	16.89
Restricted stock granted in May	6,308		7.84
Restricted stock vested in May	(6,652)		18.11
Restricted stock granted in October	11,866		5.80
Restricted stock granted in November	139,500		6.42
Restricted stock vested in December	(44,000)		14.75
Restricted stock forfeited in 2020	(3,000)		16.06
Balance, December 31, 2020	204,214		9.25
Restricted stock granted in May	6,492		10.75
Restricted stock vested in May	(6,493)		14.81
Restricted stock granted in November	151,500		9.35
Restricted stock vested in October	(2,622)		5.80
Restricted stock vested in November	(6,500)		20.29
Restricted stock forfeited in 2021	(14,380)		8.37
Balance, December 31, 2021	332,211	$	9.06

Share-based compensation expense related to restricted stock totaled $0.5 million, $0.5 million, and $0.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

During the years ended December 31, 2021 and 2020, we granted 157,992 and 157,674 time-based restricted stock units, respectively, to certain employees and directors. 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, 2021, total unrecognized compensation cost related to non-vested time-based restricted stock units was $2.2 million. That cost is expected to be recognized over a weighted-average period of 3.4 years.

Employee Amended and Restated Stock Purchase Plan

Under the Amended and Restated 1996 Employee Stock Purchase Plan, as amended (the "Plan"), the Company is authorized to issue up to 400,000 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, 2021, we have issued 295,709 shares of common stock since the Plan's inception.

Tax Benefits Preservation Plan

On August 24, 2020, the Company's Board of Directors (the "Board") adopted the Tax Benefits Preservation Plan ("Rights Agreement"), which is a stockholder rights plan designed to reduce the risk that the Company's ability to use its net operating loss carryforwards and certain other tax attributes to reduce potential future income tax obligations would become subject to limitation by reason of the Company experiencing an "ownership change," as defined in Section 382 of the Internal Revenue Code of 1986. The Rights Agreement was ratified by the shareholders on an advisory, nonbinding basis at the May 2021 shareholder meeting.

Under the Rights Agreement, the Board declared a dividend of one right (a "Right") for each of the Company's issued and outstanding shares of common stock, par value $0.001 per share ("Common Stock"). The dividend will be paid to the stockholders of record at the close of business on September 3, 2020 (the "Record Date"). Each Right entitles the registered holder, subject to the terms of the Rights Agreement (as defined below), to purchase from the Company one one-thousandth of a share of the Company's Series A Junior Participating Preferred Stock, par value $0.001 per share (the "Series A Preferred Stock"), at a price of $35.00 (the "Exercise Price"), subject to certain adjustments. The fair value of the Rights was not significant.

The Rights will not be exercisable until the earlier to occur of (i) the close of business on the tenth business day after a public announcement or filing that a person or group of affiliated or associated persons has become an "Acquiring Person," which is defined as a person or group of affiliated or associated persons that, at any time after the date of the Rights Agreement, has acquired, or obtained the right to acquire, beneficial ownership of 4.95% or more of the Company's outstanding shares of Common Stock, subject to certain exceptions or (ii) the close of business on the tenth business day after the commencement of, or announcement of an intention to commence, a tender offer or exchange offer the consummation of which would result in any person becoming an Acquiring Person (the earlier of such dates being called the "Distribution Date").

The Rights, which are not exercisable until the Distribution Date, will expire at or prior to the earliest of (i) the close of business on August 24, 2023; (ii) the time at which the Rights are redeemed pursuant to the Rights Agreement; (iii) the time at which the Rights are exchanged pursuant to the Rights Agreement; (iv) the time at which the Rights are terminated upon the occurrence of certain mergers or other transactions approved in advance by the Board; and (v) the close of business on the date set by the Board following a determination by the Board that (x) the Rights Agreement is no longer necessary or desirable for the preservation of the Tax Benefits or (y) no Tax Benefits are available to be carried forward or are otherwise available.

There were no issuances of Series A Preferred Stock during the twelve months ended December 31, 2021 or 2020.

Note 13: 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, 2020. 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.

Pension fund	Trusts employer identification number / plan number	PPA zone status		Funding plan pending / implemented	Company contributions to the Trust *(dollars in thousands)*			Surcharge imposed
		2021	2020		2021	2020	2019	
Trust	23-6648508 / 499	Green	Green	No	$ 647	$ 711	$ 945	No

The total expense of all retirement plans for the years ended December 31, 2021, 2020 and 2019 was $1.5 million, $1.8 million and $2.1 million, respectively. No other post-retirement benefit plans exist.

Note 14: 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 specialty metal manufacturers, 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, 2021, our total purchase obligations were approximately $22.3 million, of which approximately $19.3 million will be due in 2022.

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 (in his capacity as the Company's principal executive, financial and accounting officer), performed an evaluation of the effectiveness of our disclosure controls and procedures. Based on that evaluation, our Chairman, President and Chief Executive Officer 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, 2021, 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.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

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 2022 Annual Meeting of Stockholders (the "Proxy Statement") to be sent to stockholders in connection with our 2022 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 2021 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, to the extent required to be included therein, is incorporated and made a part hereof by reference to the material appearing under the heading "Delinquent Section 16(a) Reports" 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, 2021 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	868,875	$ 17.65	265,290
Total	868,875	$ 17.65	265,290

(A) Includes 160,999 shares of common stock not issued under the Universal Stainless & Alloy Products, Inc. 2017 Equity Incentive Plan and 104,291 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, 2021, 2020 and 2019	Balance at beginning of year	Charged to costs and expenses	Deductions/ net charge-offs (A)	Balance at end of year
(dollars in thousands)				
Allowance for doubtful accounts:				
Year ended December 31, 2021	$ 203	-	2	$ 201
Year ended December 31, 2020	295	-	(92)	203
Year ended December 31, 2019	295	-	-	295
Valuation allowance for deferred income taxes:				
Year ended December 31, 2021	$ 2,105	-	-	$ 2,105
Year ended December 31, 2020	2,105	-	-	2,105
Year ended December 31, 2019	2,298	-	(193)	2,105

(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 Company’s 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 Company’s Current Report on Form 8-K filed December 15, 2014.
3.3	Certificate of Designations of Series A Junior Participating Preferred Stock of Universal Stainless & Alloy Products, Inc.	Incorporated herein by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed August 24, 2020.
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	Description of Registrant’s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	Incorporated herein by reference to Exhibit 4.3 to the Company’s Annual Report on Form 10-K for the year ended December 31, 2020.
4.3	Tax Benefits Preservation Plan, date as of August 24, 2020, by and between Universal Stainless & Alloy Products, Inc. and Continental Stock Transfer & Trust Company, as Rights Agent	Incorporated herein by reference to Exhibit 4.1 to the Company’s Current Report on Form 8-K filed August 24, 2020.
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 Company’s 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 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.*
10.5	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.*
10.6	Employment Agreement dated April 1, 2020, between the Company and John J. Arminas	Incorporated herein by reference to Exhibit 10.7 to the Company’s Annual Report on Form 10-K for the year ended December 31, 2020.*
10.7	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.*
10.8	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.*
10.9	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.*

EXHIBIT NUMBER	DESCRIPTION	
10.10	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.*
10.11	Second Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated as of March 17, 2021, 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 Company's Current Report on Form 8-K filed on March 17, 2021.
10.12	Universal Stainless & Alloy Products, Inc. Amended and Restated 1996 Employee Stock Purchase Plan.	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 7, 2021.*
10.13	Universal Stainless & Alloy Products, Inc. Amended and Restated 2017 Equity Incentive Plan.	Incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 7, 2021.*
10.14	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.
10.15	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.
10.16	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.
10.17	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.
10.18	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.
10.19	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.
10.20	Amendment to the Employment Agreement dated December 21, 2007 between the Company and Dennis M. Oates	Incorporated herein by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019.*
10.21	Amendment to the Employment Agreement dated April 21, 2008 between the Company and Christopher M. Zimmer	Incorporated herein by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019.*
10.22	Employment Agreement dated April 15, 2019, between the Company and Wendel L. Crosby	Filed herewith.*
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	Filed herewith.

EXHIBIT NUMBER	DESCRIPTION	
	of the Sarbanes-Oxley Act of 2002	
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, 2020, formatted in XBRL (Extensible Business Reporting Language) and furnished electronically herewith: (i) the Consolidated Balance Sheets as of December 31, 2020 and 2019 (ii) the Consolidated Statements of Operations for the years ended December 31, 2020, 2019 and 2018; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019 and 2018; (v) the Consolidated Statements of Shareholders' Equity for the years ended December 31, 2020, 2019 and 2018; and (vi) the Notes to Consolidated Financial Statements.	Filed herewith.
104	Cover Page Interactive Data File (formatted as inline XBRL).	Contained in Exhibit 101.

* - 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 17, 2022.

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 John Arminas, 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, Financial and Accounting Officer)	February 17, 2022
/s/ Christopher L. Ayers Christopher L. Ayers	Director	February 17, 2022
/s/ Judith L. Bacchus Judith L. Bacchus	Director	February 17, 2022
/s/ M. David Kornblatt M. David Kornblatt	Director	February 17, 2022
/s/ Udi Toledano Udi Toledano	Director	February 17, 2022