UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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, 2019

or

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

For the transition period from to

Commission File Number: 1-5415

A. M. CASTLE & CO.

(Exact name of registrant as specified in its charter)

Maryland	**36-0879160**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1420 Kensington Road, Suite 220, Oak Brook, Illinois	**60523**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (847) 455-7111

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

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

Title of each class	*Trading symbol(s)*	*Name of each exchange on which registered*
Common Stock, Par Value $0.01 Per Share	**CTAM**	**OTCQX Best Market**

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 15(d) of the Act.
Yes ☐ No ☒

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

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

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

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

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☒	Smaller Reporting Company	☒
		Emerging growth company	☐

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of June 28, 2019 (the last business day of the registrant’s most recently completed second fiscal quarter) was $1,584,996.

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.
☒ Yes ☐ No

The number of shares outstanding of the registrant’s common stock on February 24, 2020 was 3,649,658 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Documents Incorporated by Reference	Applicable Part of Form 10-K
This Annual Report on Form 10-K incorporates by reference portions of the registrant’s Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders. In the event the registrant does not file a Proxy Statement for its 2020 Annual Meeting of Stockholders with the United States Securities and Exchange Commission within 120 days after the end of the registrant’s 2019 fiscal year, this information will be included in an amendment to this Annual Report on Form 10-K.	Part III

Disclosure Regarding Forward-Looking Statements

Information provided and statements contained in this report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (“Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and the Private Securities Litigation Reform Act of 1995. Such forward-looking statements only speak as of the date of this report and the Company assumes no obligation to update the information included in this report. Such forward-looking statements include information concerning our possible or assumed future results of operations, including descriptions of our business strategy, and the benefits that we expect to achieve from our working capital management initiative.. These statements often include words such as “believe,” “expect,” “anticipate,” “intend,” “predict,” “plan,” “should,” or similar expressions. These statements are not guarantees of performance or results, and they involve risks, uncertainties, and assumptions. Although we believe that these forward-looking statements are based on reasonable assumptions, there are many factors that could affect our actual financial results or results of operations and could cause actual results to differ materially from those in the forward-looking statements, including those risk factors identified in Item 1A “Risk Factors” of this report. All future written and oral forward-looking statements by us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to above. Except as required by the federal securities laws, we do not have any obligations or intention to release publicly any revisions to any forward-looking statements to reflect events or circumstances in the future, to reflect the occurrence of unanticipated events or for any other reason.

INDUSTRY AND MARKET DATA

In this report, we rely on and refer to information and statistics regarding the metal service center industry and general manufacturing markets. We obtained this information and these statistics from sources other than us, such as the Metals Service Center Institute, which we have supplemented where necessary with information from publicly available sources and our own internal estimates. Although we have not independently verified such information, we have used these sources and estimates and believe them to be reliable.

PART I

ITEM 1 — *Business*

In this Annual Report on Form 10-K, “the Company,” “we” or “our” refer to A. M. Castle & Co., a Maryland corporation, and its subsidiaries included in the consolidated financial statements, except as otherwise indicated or as the context otherwise requires.

Company Overview

A.M. Castle & Co. (the "Company") is a global distributor of specialty metals and supply chain services, principally serving the producer durable equipment, commercial and military aircraft, heavy equipment, industrial goods, and construction equipment sectors of the global economy. Its customer base includes many Fortune 500 companies as well as thousands of medium- and smaller-sized firms spread across a variety of industries. Particular focus is placed on the aerospace and defense, power generation, mining, heavy industrial equipment, and general manufacturing industries, as well as general engineering applications.

The Company’s corporate headquarters is located in Oak Brook, Illinois. As of December 31, 2019, the Company operates out of 19 service centers located throughout North America (15), Europe (2) and Asia (2). The Company's service centers hold inventory and process and distribute products to both local and export markets.

Industry and Markets

Service centers operate as supply chain intermediaries between primary producers, which deal in bulk quantities in order to achieve economies of scale, and end-users in a variety of industries that require specialized products in significantly smaller quantities and forms. Service centers also manage the differences in lead times that exist in the supply chain. While original equipment manufacturers (“OEM”) and other customers often demand delivery within hours, the lead time required by primary producers can range from several months to over a year for certain specialty metals. Service centers provide value to customers by aggregating purchasing, providing warehousing and distribution services to meet specific customer needs, including demanding delivery times and precise metal specifications, and by providing value-added metals processing services.

The principal markets served by the Company are highly competitive. The Company is focused on two key global end markets, aerospace and industrial. Competition within these markets is based on service, quality, processing capabilities, inventory availability, timely delivery, ability to provide supply chain solutions, and price. The Company competes in a highly fragmented industry. Competition in the various markets in which the Company participates comes from a large number of value-added metals processors and service centers on a local, regional, and global basis, some of which have greater financial resources, and some of which have more established brand names in certain local, regional, and global markets served by the Company.

The Company also competes to a lesser extent with primary metals producers who typically sell to larger customers requiring shipments of large volumes of metal with limited or no value-added processing.

In order to capture scale efficiencies and remain competitive, many primary metal producers are consolidating their operations and focusing on their core production activities. These producers have increasingly outsourced metals distribution, inventory management, and value-added metals processing services to metals service centers. This process of outsourcing allows the primary metal producers to work with a relatively small number of intermediaries rather than many end customers. As a result, metals service centers, including the Company, are now providing an expanding range of services for their customers, including metal purchasing, processing, and supply chain solutions.

The Company's marketing strategy focuses on distributing highly-engineered specialty grades and alloys of metals as well as providing specialized processing services designed to meet very precise specifications. Core products include alloy and stainless steels, nickel alloys, aluminum, titanium, and carbon. Inventories of these products may assume many forms such as plate, sheet, extrusions, round bar, hexagonal bar, square and flat bar, tubing, and coil. Depending on the size of the facility and the nature of the markets it serves, the Company's service centers are equipped as needed with bar saws, plate saws, oxygen and plasma arc flame cutting machinery, trepanning machinery, boring machinery, honing equipment, water-jet cutting equipment, stress relieving and annealing furnaces, leveling and surface grinding equipment, CNC machinery, and sheet shearing equipment. Various specialized fabrications are also performed for customers through pre-qualified subcontractors that thermally process, turn, polish, cut-to-length, and straighten alloy and carbon bar, among other things.

Procurement

The Company purchases metals from many producers. Material is purchased in large lots and stocked at its service centers until sold, usually in smaller quantities and typically with some value-added processing services performed. The Company's ability to provide timely delivery of a wide variety of specialty metals products, along with its processing capabilities and supply chain management solutions, allows customers to lower their own inventory investment by reducing their need to order the large quantities required by producers and their need to perform additional material processing services. Some of the Company's purchases are covered by long-term contracts and commitments, which generally have corresponding customer sales agreements.

Thousands of customers from a wide array of industries are serviced primarily through the Company's own sales organization. Orders are primarily filled with materials shipped from Company stock. The materials required to fill the balance of sales are obtained from other sources, such as purchases from other distributors or direct mill shipments to customers. Deliveries are made principally by third party logistics providers using their fleets, which display Company-branding. Otherwise, common carrier delivery is used in areas not serviced directly by such third party logistics providers. The Company's broad network of locations provides same or next-day delivery to most of their markets, and two-day delivery to substantially all of the remaining target markets.

Customers

The Company's customer base is broadly diversified and therefore, the Company does not have dependence upon any single customer, or a few customers. The customer base includes many Fortune 500 companies as well as thousands of medium- and smaller-sized firms.

Employees

As of December 31, 2019, the Company had 873 full-time employees. Of these full-time employees, 103 were represented by the United Steelworkers of America ("USW") under collective bargaining agreements. Effective May 15, 2018, we entered into a four-year collective bargaining agreement with the USW, which covers approximately 83 employees at our largest facility in Cleveland, Ohio. Approximately 20 employees at our Hammond, Indiana facility are covered by a separate collective bargaining agreement with the USW that was renegotiated effective September 1, 2016 and expires on August 31, 2020. The Company expects to begin negotiations to renew the collective bargaining agreement with the USW for employees at the Hammond, Indiana facility in early 2020. The Company believes its relationships with its employees and their representative unions are good.

Access to SEC Filings

The Company makes available free of charge on or through its Web site at www.castlemetals.com the Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the U.S. Securities and Exchange Commission (the "SEC"). Information on our Web site does not constitute part of this Annual Report on Form 10-K.

ITEM 1A — *Risk Factors*

(Dollar amounts in millions, except per share data)

Our business, financial condition, results of operations, and cash flows are subject to various risks, many of which are not exclusively within our control, that may cause actual performance to differ materially from historical or projected future performance. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. Any of the following risks, as well as other risks and uncertainties not currently known to us or that we currently consider to be immaterial, could materially and adversely affect our business, financial condition, results of operations, or cash flows.

Our substantial level of indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations under our debt instruments.

We have substantial debt service obligations. As of December 31, 2019, we had $324.3 million of total debt outstanding, all of which is secured. The debt outstanding, in order of priority, was comprised of $127.8 million of borrowings under our Revolving Credit and Security Agreement (as amended, the "ABL Credit Agreement"), $193.7 million aggregate principal amount of 5.00% / 7.00% Convertible Senior Secured Paid In Kind (PIK) Toggle Notes due 2022 (the "Second Lien Notes"), including $2.3 million of restricted Second Lien Notes issued to certain members of management ("MIP Notes"), and short-term borrowings of approximately $2.9 million under a local credit facility (see Note 2 - Debt). Our debt instruments currently limit our ability to pay in cash the interest accruing on our Second Lien Notes, so the amount of Second Lien Notes outstanding continues to increase quarterly as interest is paid in kind. The ABL Credit Agreement and the Second Lien Notes are secured by collateral security interests in substantially all of our assets and are guaranteed by certain of our subsidiaries.

Our substantial level of indebtedness could have significant effects on our business, including the following:

- it may be more difficult for us to satisfy our financial obligations;
- our ability to obtain additional financing for working capital, capital expenditures, strategic acquisitions, or general corporate purposes may be impaired;
- we must use a substantial portion of our cash flow from operations to pay interest on our indebtedness, which will reduce the funds available to use for operations and other purposes, including potentially accretive acquisitions;
- our ability to fund a change of control offer under our debt instruments may be limited;
- our substantial level of indebtedness could place us at a competitive disadvantage compared to our competitors that may have proportionately less debt or could affect our ability to secure favorable contracts with certain customers or suppliers;
- our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate may be limited; and
- our substantial level of indebtedness may make us more vulnerable to economic downturns and adverse developments in our business.

The ABL Credit Agreement provides for a $125.0 million senior secured, revolving credit facility ("Revolving A Credit Facility") and an additional $25.0 million last out Revolving B Credit Facility (the "Revolving B Credit Facility" and together with the Revolving A Credit Facility, the "Credit Facility"). We expect to obtain the funds to pay our expenses and to satisfy our debt obligations from our operations and available resources under the Credit Facility. Our ability to meet our expenses and make these principal and interest payments as they come due, therefore, depends on our future performance, which will be affected by financial, business, economic and other factors, many of which we cannot control. Our business may not generate sufficient cash flow from operations in the future, and our anticipated revenue and cash flow may not be realized, either or both of which could result in our being unable to repay indebtedness or to fund other liquidity needs. If we do not have enough funds, we may be required to refinance all or part of our then existing debt, sell assets or borrow more funds, which we may not be able to accomplish on terms acceptable to us, or at all. In addition, the terms of existing or future debt agreements may restrict us from pursuing any of these alternatives which could have an adverse effect on our financial condition or liquidity.

We may not be able to generate sufficient cash to service all of our existing debt service obligations, and may be forced to take other actions to satisfy our obligations under our debt agreements, which may not be successful.

Our total outstanding debt under our ABL Credit Agreement, the Second Lien Notes, including MIP Notes, and local credit facility has an aggregate principal amount of $324.3 million as of December 31, 2019. Our ability to make scheduled payments on or to refinance our debt obligations depends on our future financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. Therefore, we may not be able to maintain or realize a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments, capital expenditures or potentially accretive acquisitions, sell assets, seek additional capital or restructure or refinance our indebtedness. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous borrowing covenants, which could further restrict our business operations. The terms of existing or future debt instruments may restrict us from adopting some of these alternatives. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations which could have an adverse effect on our financial condition or liquidity.

Our debt instruments impose significant operating and financial restrictions, which may prevent us from pursuing certain business opportunities and taking certain actions and our failure to comply with the covenants contained in our debt instruments could result in an event of default that could adversely affect our operating results.

Our debt agreements impose, and future debt agreements may impose, operating and financial restrictions on us. These restrictions limit or prohibit, among other things, our ability to:

- incur additional indebtedness, or issue disqualified capital stock;
- pay dividends, redeem subordinated debt or make other restricted payments;
- make certain investments or acquisitions;
- grant or permit certain liens on our assets;
- enter into certain transactions with affiliates;
- merge, consolidate or transfer substantially all of our assets;
- create or permit restrictions on dividends, loans, asset transfers or other distributions to us from certain of our subsidiaries;
- transfer, sell or acquire assets; and
- change the business we conduct.

These covenants could adversely affect our ability to finance our future operations or capital needs, withstand a future downturn in our business or the economy in general, engage in or expand business activities, including future opportunities that may be in our interest, and plan for or react to market conditions or otherwise execute our business strategies. A breach of any of these covenants could result in a default in respect of the related indebtedness. If a default occurs, in certain circumstances, the relevant lenders or holders of such indebtedness could elect to declare the indebtedness, together with accrued interest and other fees, to be immediately due and payable and proceed against any collateral securing that indebtedness. If the maturity of our indebtedness is accelerated, we may not have sufficient cash resources to satisfy our debt obligations and may not be able to continue our operations as planned.

Our future operating results are impacted by the volatility of the prices and supply of metals, which could cause our results to be adversely affected.

The availability and prices we pay for metal raw materials and the prices we charge for products may fluctuate depending on many factors, including general economic conditions (both domestic and international), competition, production levels, import tariffs, duties, and other trade restrictions, geo-political health and safety issues,and currency fluctuations. To the extent metal prices decline, we would generally expect lower sales, pricing and possibly lower operating income. Depending on the timing of the price changes and to the extent we are not able to pass on to our customers any increases in our metal raw materials prices, our operating results may be adversely affected. In addition, because we maintain substantial inventories of metals in order to meet short lead-times and the just-in-time delivery requirements of our customers, a reduction in our selling prices could result in lower profitability or, in some cases, losses, either of which could adversely impact our ability to remain in compliance with certain provisions of our debt instruments, as well as result in us incurring impairment charges.

Our common stock is traded on the OTCQX® Best Market (the "OTCQX"), which could have an adverse impact on the market price and liquidity of our common stock and could involve additional risks compared to being listed on a national securities exchange.

The Company's Common Stock is traded on the OTCQX under the ticker "CTAM". The trading of our common stock in the OTC market rather than a national securities exchange may negatively impact the trading price of our common stock and the levels of liquidity available to our stockholders. Securities traded in the OTC market generally have less liquidity due to factors such as the reduced number of investors that will consider investing in the securities, the reduced number of market makers in the securities, and the reduced number of securities analysts that follow such securities. As a result, holders of shares of our common stock may find it difficult to resell their shares at prices quoted in the market or at all.

Furthermore, because of the limited market and generally low volume of trading in our common stock that could occur, the share price of our common stock could be more likely to be affected by broad market fluctuations, general market conditions, fluctuations in our operating results, changes in the markets perception of our business, and announcements made by us, our competitors, or parties with whom we have business relationships.

Because our common stock trades on the OTCQX, in some cases, we may be subject to additional compliance requirements under applicable state laws in the issuance of our securities. The lack of liquidity in our common stock may also make it difficult for us to issue additional securities for financing or other purposes, or to otherwise arrange for any financing we may need in the future. Accordingly, we urge that extreme caution be exercised with respect to existing and future investments in our common stock.

Ownership of our stock is concentrated, which may limit stockholders' ability to influence corporate matters.

The Company's ownership is concentrated among a small group of institutional investors and the Company's management team. Certain directors, their affiliates, and/or any other concentrated ownership interests may have the voting power to substantially affect or control the outcome of matters requiring a stockholder vote, including the election of directors and the approval of significant corporate matters. Such a concentration of control could adversely affect the market price of our common stock or prevent a change in control or other business combinations that might be beneficial to us.

The lender under our Credit Facility and/or the holders of our Second Lien Notes can require us to repay our debt obligations following a change of control. We may not have sufficient funds to satisfy such cash obligations.

As of December 31, 2019, we had $127.8 million of borrowings under our Credit Facility and $193.7 million of aggregate principal amount outstanding under the Second Lien Notes, including $2.3 million of MIP Notes. Upon the occurrence of a change in control (as defined in the ABL Credit Agreement) or a fundamental change (as defined in the indenture for the Second Lien Notes), which in either case includes the acquisition of more than 50% of our outstanding voting power by a person or group, we may be required to repay all borrowings under the Credit Facility and/or repurchase some or all of the Second Lien Notes for cash at a repurchase price equal to 100% of the principal amount of the Second Lien Notes being repurchased, plus any accrued and unpaid interest. We may not have sufficient funds to satisfy such cash obligations and, in such circumstances, may not be able to arrange the necessary financing on favorable terms or at all. In addition, our ability to satisfy such cash obligations will be restricted pursuant to covenants contained in the indenture for the Second Lien Notes and will be permitted to be paid only in limited circumstances. We may also be limited in our ability to satisfy such cash obligations by applicable law or the terms of other instruments governing our indebtedness. Our inability to make any cash payments that may be required to satisfy the obligations described above would trigger an event of default under the Second Lien Notes, which in turn could constitute an event of default under our other outstanding indebtedness, thereby potentially resulting in the acceleration of certain of such indebtedness, the prepayment of which could further restrict our ability to satisfy such cash obligations.

Holders of our Second Lien Notes may convert their Second Lien Notes into common stock at any time or in connection with a fundamental change. The conversion of our Second Lien Notes into common stock will dilute the ownership interest of our existing stockholders.

Pursuant to the terms of the Second Lien Notes Indenture, we may elect to settle any election to convert Second Lien Notes in cash, common stock or a combination of both, however, our debt instruments currently limit our ability to pay cash in respect of the Second Lien Notes. Any issuance by us of our common stock upon conversion of our Second Lien Notes will dilute the ownership interest of our existing stockholders. In addition, any such issuance of common stock could have a dilutive effect on our net income per share to the extent that the average stock price during the period is greater than the conversion prices and exercise prices of the Second Lien Notes. Furthermore, any sales in the public market of our common stock issuable upon conversion of the Second Lien Notes could adversely affect prevailing market prices of our common stock.

We have various mechanisms in place that may prevent a change in control that stockholders may otherwise consider favorable.

We are subject to the anti-takeover provisions of the Maryland General Corporation Law (the “MGCL”) that prohibit us from engaging in a “business combination” with an “interested stockholder” for a period of five years after the date of the transaction in which the person first becomes an “interested stockholder,” unless the business combination or stockholder interest is approved in a prescribed manner. The application of these and certain other provisions of our charter or the MGCL could have the effect of delaying or preventing a change of control, which could adversely affect the market price of our common stock.

The provisions of our debt instruments also contain limitations on our ability to enter into change of control transactions. In addition, the repurchase rights in our Second Lien Notes triggered by the occurrence of a fundamental change (as defined in the indenture for the Second Lien Notes), and the additional shares of our common stock by which the conversion rate is increased in connection with certain fundamental change transactions, as described in the indenture for the Second Lien Notes, could discourage a potential acquirer.

We service industries that are highly cyclical and impacted by international regulatory concerns, and any downturn in our customers’ industries could reduce our revenue and profitability.

Many of our products are sold to customers in industries that experience significant fluctuations in demand based on economic conditions, energy prices, consumer demand, availability of adequate credit and financing, customer inventory levels, changes in governmental policies and/or regulations and other factors beyond our control, such as acts of war or terrorism, natural disasters or public health issues or pandemics. As a result of this volatility in the industries we serve, when one or more of our customers’ industries experiences a decline, we may have difficulty increasing or maintaining our level of sales or profitability if we are not able to divert sales of our products to customers in other industries. Historically, we have made a strategic decision to focus sales resources on certain industries, specifically the aerospace, heavy equipment, machine tools and general industrial equipment industries. A downturn in these industries has had, and may in the future continue to have, an adverse effect on our operating results. We are also particularly sensitive to market trends in the manufacturing sectors of the North American economy and the two primary global markets which we serve, aerospace and industrial.

For example, two recent commercial aircraft accidents led to the grounding of the Boeing 737 Max aircraft in March 2019 by the Federal Aviation Administration and other international regulatory bodies. While our overall participation on the 737 MAX program is relatively limited both through direct sales and through our customer base, certain of our aerospace customers have significant content on the aircraft. The grounding of the aircraft has caused deliveries of that aircraft to be lower than expected in fiscal year 2019, and has therefore impacted our customers, in some cases significantly. Based on information currently available, we believe when the aircraft returns to service these missed deliveries will be fulfilled in future periods. Additionally, because Boeing sources large quantities of metal directly from mills for certain of its programs, including the 737 MAX, there could be impacts on our suppliers and market availability of certain products as a result of excesses or shortages. In 2019, we do not believe the grounding had a negative impact on our sales demand or pricing. Further, as stated above, our direct exposure to the 737 MAX is relatively limited, and therefore, we do not expect it to have a significant direct impact on sales demand or pricing of our products in 2020. However, we cannot exclude the possibility that these impacts could affect our aerospace end markets more broadly than the specific 737 MAX program, and thus could negatively impact our profitability and/or cash flow.

Our industry is highly competitive, which may force us to lower our prices and may have an adverse effect on our operating results.

The principal markets that we serve, aerospace and industrial, are highly competitive. Competition is based principally on price, service, quality, processing capabilities, inventory availability and timely delivery. We compete in a highly fragmented industry. Competition in the various markets in which we participate comes from a large number of value-added metals processors and service centers on a regional and local basis, some of which have greater financial resources than we do and some of which have more established brand names in the local markets we serve. We also compete to a lesser extent with primary metals producers who typically sell to very large customers requiring shipments of large volumes of metal. Increased competition could force us to lower our prices or to offer increased services at a higher cost to us, which could have an adverse effect on our operating results.

Our operating results are subject to the seasonal nature of our customers' businesses.

A portion of our customers experience seasonal slowdowns. Historically, our revenues in the months of July, November, and December have been lower than in other months because of a reduced number of shipping days and holiday or vacation closures for some customers. Dependent on market and economic conditions, our sales in the first two quarters of the year, therefore, can be higher than in the third and fourth quarters due to this seasonality. As a result, analysts and investors may inaccurately estimate the effects of seasonality on our operating results in one or more future quarters and, consequently, our operating results may fall below expectations.

An impairment or additional restructuring charge could have an adverse effect on our operating results.

We continue to evaluate opportunities to reduce costs and improve operating performance. These actions could result in restructuring and related charges, including but not limited to asset impairments, employee termination costs, charges for pension benefits, and pension settlement and/or curtailments, which could be significant and could adversely affect our financial condition and results of operations.

We have a significant amount of long-lived assets. We review the recoverability of long-lived assets whenever significant events or changes occur which might impair the recovery of recorded costs, making certain assumptions regarding future operating performance. The results of these calculations may be affected by the current demand and any decline in market conditions for our products, as well as interest rates and general economic conditions. If impairment is determined to exist, we will incur impairment losses, which may have an adverse effect on our operating results.

Disruptions or shortages in the supply of raw materials could adversely affect our operating results and our ability to meet our customers' demands.

Our business requires materials that are sourced from third party suppliers. If, for any reason, our primary suppliers of metals should curtail or discontinue their delivery of raw materials to us at competitive prices and in a timely manner, our operating results could suffer. Unforeseen disruptions in our supply bases, including those resulting from competition, political instability, acts of war or terrorism, natural disasters, and public health issues or pandemics, among other things, could materially impact our ability to deliver products to customers. The sourcing of certain metals may be highly competitive due to limited supplies and availability. The number of available suppliers could be reduced by factors such as industry consolidation and bankruptcies affecting metals producers, or suppliers may be unwilling or unable to meet our demand due to industry supply conditions. If we are unable to obtain sufficient amounts of raw materials from our traditional suppliers, we may not be able to obtain such raw materials from alternative sources at competitive prices to meet our delivery schedules, which could have an adverse impact on our operating results. To the extent we have quoted prices to customers and accepted orders for products prior to purchasing necessary raw materials, or have existing contracts, we may be unable to raise the price of products to cover all or part of the increased cost of the raw materials to our customers.

In some cases the availability of raw materials requires long lead times. As a result, we may experience delays or shortages in the supply of raw materials. If we are unable to obtain adequate and timely deliveries of required raw materials, we may be unable to timely supply customers with sufficient quantities of products. This could cause us to lose sales, incur additional costs, or suffer harm to our reputation, all of which may adversely affect our operating results.

Our ability to use our net operating loss carryforwards ("NOLs") is limited.

We have incurred substantial losses since 2008. As of December 31, 2019, we had United States ("U.S.") federal net operating loss carryforwards, or NOLs, of $12.3 million. The U.S. federal NOLs will expire in various years beginning with 2034. These U.S. federal NOLs reflect the attribute reduction for the cancellation of indebtedness resulting from our bankruptcy proceedings in 2017, as well as the write-off of the statutorily limited losses, which the Company will never be able to utilize due to Internal Revenue Code ("IRC") section 382 limitations. We have determined that an ownership shift of greater than fifty percent occurred in 2015, 2016 and 2017 and as such, a significant portion of the pre-ownership shift NOLs are subject to an annual utilization limitation under IRC section 382 that will act to prevent the Company from utilizing most of its losses against future taxable income. We may experience ownership changes in the future as a result of subsequent shifts in our stock ownership that we cannot predict or control that could result in further limitations being placed on our ability to utilize our federal NOLs. In addition, we may not generate future taxable income so that we can use our available NOLs as an offset. As of December 31, 2019, we have a full valuation allowance against our federal and state NOLs that we do not expect to utilize under IRC section 382 as we have concluded, based on all available evidence, that it is more likely than not that we will not utilize these federal and state NOLs prior to their respective expiration.

Changes in United States tax laws could have a material adverse effect on our business, cash flow, results of operations or financial condition.

Legislative or regulatory measures by the U.S or non-U.S. governments, rules and interpretations under the current tax law, further changes in corporate tax rates, the realizability of the deferred tax assets and/or liabilities relating to our U.S. operations, the taxation of foreign earnings, and the deductibility of expenses (such as executive compensation) contained in tax legislation could have a material impact on the value of our deferred tax assets and/or liabilities, could result in significant charges in the current or future taxable years, and could increase our future U.S. tax expense. Furthermore, changes to the taxation of undistributed foreign earnings could change our future intentions regarding the reinvestment of such earnings. The foregoing items could have a material adverse effect on our business, cash flow, results of operations or financial condition.

Increases in freight and energy prices would increase our operating costs and we may be unable to pass these increases on to our customers in the form of higher prices, which may adversely affect our operating results.

We use energy to process and transport our products. The prices for and availability of energy resources are subject to volatile market conditions, which are affected by political, economic and regulatory factors beyond our control. Our operating costs increase if energy costs, including electricity, diesel fuel and natural gas, rise. During periods of higher freight and energy costs, we may not be able to recover our operating cost increases through price increases without reducing demand for our products. In addition, we typically do not hedge our exposure to higher freight or energy prices.

We operate in international markets, which expose us to a number of risks.

Although a majority of our business activity takes place in the United States, we serve and operate in certain international markets, which exposes us to political, economic and currency related risks, including the following:

- currency exchange risk;
- changes in tariffs, duties and taxes;
- limitations on the repatriation of earnings;
- restrictions on imports and exports or sources of supply;
- transportation delays or interruptions;
- political, social and economic instability and disruptions;
- acts of terrorism or war, natural disasters and other public health issues or pandemics;
- potential for adverse change in the local political or social climate or in government policies, laws and regulations; and
- difficulty in staffing and managing geographically diverse operations and the application of foreign labor regulations.

In addition to the United States, we operate in Canada, Mexico, France, Singapore, and China. An act of war, terrorism, public health issues or a major pandemic event could disrupt international shipping schedules, cause additional delays in importing or exporting products into or out of any of these countries, including the United States, or increase the costs required to do so. In addition, acts of crime or violence in these international markets could adversely affect our operating results. Fluctuations in the value of the U.S. dollar versus foreign currencies could reduce the value of these assets as reported in our consolidated financial statements, which could reduce our stockholders' equity. If we do not adequately anticipate and respond to these risks and the other risks inherent in international operations, it could have a material adverse impact on our operating results.

The imposition of tariffs or duties on imported metals could significantly increase the price of the metals we purchase from international suppliers and/or result in shortages in the supply of raw materials.

Though we source the majority of our products domestically in the countries in which we operate, we do source some products from international suppliers. The imposition of tariffs or duties on imported metals, other similar measures imposed by the U.S. government, and retaliatory/corresponding measure by other countries, has a pervasive impact on the metals market in which we operate. For example, we may be unable to pass through the higher costs to our customers for the metals we buy internationally, which could adversely impact our competitiveness, financial condition and operating results. Similarly, further decreases in imports could cause a disruption or shortage in the availability of the raw materials that we buy, which could limit our ability to meet customer's demand or to purchase material at competitive prices. This could cause us to lose sales, incur additional costs, or suffer harm to our reputation, all of which may adversely affect our operating results.

A portion of our workforce is represented by collective bargaining units, which may lead to work stoppages.

As of December 31, 2019, approximately 18% of our U.S. employees were represented by the USW under collective bargaining agreements, including hourly warehouse employees at our distribution centers in Cleveland, Ohio and Hammond, Indiana. As these agreements expire, there can be no assurance that we will succeed in concluding collective bargaining agreements with the USW to replace those that expire. Although we believe that our labor relations have generally been satisfactory, we cannot predict how stable our relationships with the USW will be or whether we will be able to meet the USW requirements without impacting our operating results and financial condition. The USW may also limit our flexibility in dealing with our workforce. Work stoppages and instability in our relationship with the USW could negatively impact the timely processing and shipment of our products, which could strain relationships with customers or suppliers and adversely affect our operating results. Effective May 15, 2018, we entered into a four-year collective bargaining agreement with the USW, which covers approximately 83 employees at our largest facility in Cleveland, Ohio. Approximately 20 employees at our Hammond, Indiana facility are covered by a separate collective bargaining agreement with the USW that was renegotiated effective September 1, 2016 and expires on August 31, 2020. We plan to begin negotiations in to renew the collective bargaining agreement with the USW for employees at the Hammond, Indiana facility in early 2020.

We rely upon our suppliers as to the specifications of the metals we purchase from them.

We rely on mill or supplier certifications that attest to the physical and chemical specifications of the metals received from our suppliers for resale and generally, consistent with industry practice, do not undertake independent testing of such metals. We rely on our customers to notify us of any product that does not conform to the specifications certified by the supplier or ordered by the customer. Although our primary sources of products have been domestic suppliers, we have and will continue to purchase product from foreign suppliers when we believe it is appropriate. In the event that metal purchased from domestic suppliers is deemed to not meet quality specifications as set forth in the mill or supplier certifications or customer specifications, we generally have recourse against these suppliers for both the cost of the products purchased and possible claims from our customers. However, such recourse will not compensate us for the damage to our reputation that may arise from sub-standard products and possible losses of customers. Moreover, there is a greater level of risk that similar recourse will not be available to us in the event of claims by our customers related to products from foreign suppliers that do not meet the specifications set forth in the mill or supplier certifications. In such circumstances, we may be at greater risk of loss for claims for which we do not carry, or do not carry sufficient, insurance.

Our business could be adversely affected by a disruption to our primary distribution hubs.

Our largest facilities, in Cleveland (Ohio), Hammond (Indiana), and Janesville (Wisconsin) serve as primary distribution centers that ship product to our other facilities as well as external customers. Our business could be adversely impacted by a major disruption at any of these facilities due to unforeseen developments occurring in or around the facility, such as:

- damage to or inoperability of our warehouse or related systems;

- a prolonged power or telecommunication failure;
- a natural disaster, environmental or public health issue or pandemic, or an act of war or terrorism on-site.

A prolonged disruption of the services and capabilities of these or other of our facilities could adversely impact our operating results.

Damage to or a disruption in our information technology systems could impact our ability to conduct business and could subject us to liability for failure to comply with privacy and information security laws.

Difficulties associated with the design and implementation of our enterprise resource planning (“ERP”) or other information technology systems could adversely affect our business, our customer service and our operating results.

We rely primarily on one information technology system to provide inventory availability to our sales and operating personnel, improve customer service through better order and product reference data and monitor operating results. Difficulties associated with upgrades or integration with new systems could lead to business interruption that could harm our reputation, increase our operating costs and decrease profitability. In addition, any significant disruption relating to our current information technology systems, whether resulting from such things as fire, flood, tornado and other natural disasters, power loss, network failures, loss of data, security breaches and computer viruses, or otherwise, may have an adverse effect on our business, our operating results and our ability to report our financial performance in a timely manner.

We could be vulnerable to interest rate fluctuations on our indebtedness, which could hurt our operating results.

We are exposed to various interest rate risks that arise in the normal course of business. Market risk arises from changes in interest rates. We currently finance our operations with both fixed rate and variable rate borrowings, and the fair market value of our $219.4 million of fixed rate borrowings may be impacted by changes in interest rates. In addition, if in the future interest rates subsequently increase significantly, it could significantly increase the interest expense on our variable rate borrowings which could have an adverse effect on our operating results and liquidity.

We may face risks associated with current or future litigation and claims.

From time to time, we are involved in a variety of lawsuits, claims and other proceedings relating to the conduct of our business. These suits concern issues including contract disputes, employment actions, employee benefits, taxes, environmental, health and safety, personal injury and product liability matters. Due to the uncertainties of litigation, we can give no assurance that we will prevail on all claims made against us in the lawsuits that we currently face or that additional claims will not be made against us in the future. While it is not feasible to predict the outcome of all pending lawsuits and claims, we do not believe that the disposition of any such pending matters is likely to have a materially adverse effect on our financial condition or liquidity, although the resolution in any reporting period of one of more of these matters could have an adverse effect on our operating results for that period. Also, we can give no assurance that any other lawsuits or claims brought in the future will not have an adverse effect on our financial condition, liquidity or operating results.

We could incur substantial costs in order to comply with, or to address any violations under, environmental and employee health and safety laws, which could adversely affect our operating results.

Our operations are subject to various environmental statutes and regulations, including laws and regulations governing materials we use and our facilities. In addition, certain of our operations are subject to international, federal, state and local environmental laws and regulations that impose limitations on the discharge of pollutants into the air and water and establish standards for the treatment, storage and disposal of solid and hazardous wastes. Our operations are also subject to various employee safety and health laws and regulations, including those concerning occupational injury and illness, employee exposure to hazardous materials and employee complaints. Certain of our facilities are located in industrial areas, have a history of heavy industrial use and have been in operation for many years and, over time, we and other predecessor operators of these facilities have generated, used, handled and disposed of hazardous and other regulated wastes. Currently unknown cleanup obligations at these facilities, or at off-site locations at which materials from our operations were disposed, could result in future expenditures that cannot be currently quantified, but which could have a material adverse effect on our financial condition, liquidity or operating results.

Potential environmental legislative and regulatory actions could impose significant costs on the operations of our customers and suppliers, which could have a material adverse impact on our results of operations, financial condition and cash flows.

As a metals distributor, our operations do not emit significant amounts of greenhouse gas ("GHG"). However, the manufacturing processes of many of our suppliers and customers are energy intensive and generate carbon dioxide and other GHG emissions. Any adopted future climate change and GHG legislative or regulatory measures may impose significant costs on the operations of our customers and suppliers and indirectly impact our operations. Until the timing, scope and extent of any future legislation and regulation becomes known, we cannot predict the effect on our results of operations, financial condition and cash flows.

Our business could be negatively impacted by cyber and other security threats or disruptions.

We face various cyber and other security threats, including attempts to gain unauthorized access to our sensitive information and computer networks. Unauthorized or inappropriate access to, or use of, our computer networks or systems may be intentional, unintentional or a result of criminal activity. Such unauthorized or inappropriate access may lead to the corruption of data, which could cause interruption in our operations or damage our computer systems or those of our customers or vendors. A party that is able to circumvent our security measures could also gain unauthorized access to confidential, proprietary, personal or other sensitive information or capabilities, which may belong to third parties, our employees or us.

The occurrence of such threats, attacks or incidents exposes us to risk of loss and possible claims brought by our customers, employees or other parties with whom we have commercial relationships, as well as actions by government regulators. In addition to potential legal liability, these activities may interfere with our ability to provide our products and services. Further, a perception that our security measures are ineffective against security incidents could damage our reputation, and we could lose employees, customers or vendors. Any of these occurrences could have an adverse impact on our financial condition and results of operations.

Thus, the success of our business depends on the security of our computer networks and systems and, in part, on the security of the computer networks and systems of our third-party vendors. Although we utilize various procedures and controls to monitor and mitigate the risk of these threats, there can be no assurance that these procedures and controls will be sufficient. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently, we may be unable to anticipate these techniques or to implement adequate preventative measures. We also cannot give assurance that the security measures of our third-party vendors, including network and system providers, providers of customer and vendor support services and other vendors will be adequate. Thus, we may need to expend significant resources to protect against security breaches or to address problems caused by such breaches.

ITEM 1B — *Unresolved Staff Comments*

None.

ITEM 2 — *Properties*

The Company's corporate headquarters are located in Oak Brook, Illinois. All properties and equipment are sufficient for the Company's current level of activities. As of December 31, 2019, distribution centers and sales offices are maintained at each of the following locations, most of which are leased, except as indicated:

Locations	Approximate Floor Area in Square Feet	
North America		
Bedford Heights, Ohio	374,400	(1)
Charlotte, North Carolina	116,500	(1)
Fairless Hills, Pennsylvania	71,600	(1)
Grand Prairie, Texas	78,000	(1)
Hammond, Indiana (H-A Industries)	252,595	
Janesville, Wisconsin	208,000	
Kennesaw, Georgia	87,500	
Mexicali, Mexico	160,220	
Mississauga, Ontario	57,000	
Paramount, California	155,568	
Queretaro, Mexico	32,291	
Santa Cantarina, Nuevo Leon, Mexico	97,692	
Selkirk, Manitoba	50,000	(1)
Stockton, California	60,000	
Wichita, Kansas	68,900	
Europe		
Tarbes, France	36,705	
Montoir de Bretagne, France	38,940	
Asia		
Shanghai, China	45,700	
Singapore	39,578	
Sales Offices		
Bilbao, Spain	*(Intentionally left blank)*	
Sub-Total	2,031,189	
Headquarters		
Oak Brook, Illinois	39,361	(2)
GRAND TOTAL	**2,070,550**	

(1) Represents owned facility.
(2) The Company's principal executive office does not include a distribution center.

ITEM 3 — Legal Proceedings

From time to time, the Company is party to a variety of legal proceedings, claims, and inquiries, including proceedings or inquiries by governmental authorities, which arise from the operation of its business. These proceedings, claims, and inquiries are incidental to and occur in the normal course of the Company's business affairs. The majority of these proceedings, claims, and inquiries relate to commercial disputes with customers, suppliers, and others; employment and employee benefits-related disputes; product quality disputes with vendors and/or customers; and environmental, health and safety claims. Although the outcome of these proceedings is inherently difficult to predict, management believes that the amount of any judgment, settlement or other outcome of these proceedings, claims and inquiries, after taking into account recorded accruals and the availability and limits of our insurance coverage, will not have a material adverse effect on the Company’s consolidated results of operations, financial condition or cash flows.

ITEM 4 — *Mine Safety Disclosures*

Not applicable.

Information About Our Executive Officers

The following selected information for each of our current executive officers (as defined by regulations of the SEC) was prepared as of February 27, 2020.

Name and Title	Age	Business Experience
Marec E. Edgar President & Chief Executive Officer	44	Mr. Edgar was promoted to the position of President and Chief Executive Officer, and was appointed a member of the board of directors effective January 1, 2020. Mr. Edgar began his employment with the registrant in April 2014, as Vice President and General Counsel. In May 2015, he was appointed to the position of Executive Vice President, General Counsel, Secretary & Chief Administrative Officer. In November 2018, he was promoted to the position of President.
Patrick R. Anderson Executive Vice President, Finance & Administration	48	Mr. Anderson was appointed to the position of Executive Vice President, Finance & Administration in December 2018. He began his employment with the registrant in 2007 as Vice President, Corporate Controller and Chief Accounting Officer. In September 2014, he was appointed to the position of Interim Vice President, Chief Financial Officer and Treasurer, and in May 2015 was appointed to the position of Executive Vice President, Chief Financial Officer & Treasurer.
Edward M. Quinn Vice President, Controller & Chief Accounting Officer	48	Mr. Quinn began his employment with the registrant in December 2017 as Vice President, Controller and Chief Accounting Officer.
Jeremy T. Steele Senior Vice President, General Counsel & Secretary	47	Mr. Steele began his employment with the registrant in May 2019 as Senior Vice President, General Counsel and Secretary.
Mark D. Zundel Executive Vice President, Global Supply & Aerospace	46	Mr. Zundel was appointed Executive Vice President of Global Supply and Aerospace in November 2018. Mr. Zundel began his employment with the registrant in December 1995 as Vice President of Sales. In March 2009 he was appointed to Regional Commercial Manager, in April 2010 he was appointed to Director of Merchandising, in September 2013 he was appointed Director of Sourcing Commodity, in September 2015 he was appointed Vice President of Strategic Sourcing, and in June 2017, he was appointed to Senior Vice President of Commercial Sales.

PART II

ITEM 5 — *Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

The Company's common stock is traded on the OTCQX tier of the OTC Markets Group, Inc. ("OTCQX") under the symbol "CTAM".

As of December 31, 2019, there were approximately 335 stockholders of record of our common stock, which excludes stockholders whose shares were held in nominee or street name by brokers.

See Part III, Item 12, “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters”, for information regarding common stock authorized for issuance under equity compensation plans.

ITEM 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations*

Information regarding the business and markets of A.M. Castle & Co. and its subsidiaries (the "Company") is included in Item 1 "Business" of this annual report on Form 10-K.

The following discussion should be read in conjunction with the Company's consolidated financial statements and related notes thereto in Item 8 "Financial Statements and Supplementary Data". The following discussion and analysis of our financial condition and results of operations contain forward-looking statements and includes numerous risks and uncertainties, including those described under Item 1A "Risk Factors" and "Disclosure Regarding Forward-Looking Statements" of this Annual Report on Form 10-K. Actual results may differ materially from those contained in any forward-looking statements.

EXECUTIVE OVERVIEW

Financial Results Summary

The Company's strategy is to become a leading global provider of specialty metals products and services and supply chain solutions to targeted global industries.

During the year ended December 31, 2019:

- Net sales decreased by 3.8% compared to the prior year. The decrease in net sales in the current year was driven by a decrease in average tons sold per day, which more than offset an increase in commodities pricing on the Company's products and a favorable sales mix.
- Operating loss improved from a loss of $16.7 million in the year ended December 31, 2018 to an operating loss of $10.1 million in the year ended December 31, 2019.
- Cash flows from operations generated $10.8 million in cash in the year ended December 31, 2019, driven primarily by improved inventory management, compared to cash flow used in operations of $23.8 million in the year ended December 31, 2018.
- Improved gross material margin to 25.2%, which includes a non-recurring non-cash inventory charge of $1.3 million, in the year ended December 31, 2019, compared to a gross material margin of 24.9% in the prior year. (Gross material margin is a non-U.S. GAAP measure calculated as net sales less cost of materials divided by net sales).

Recent Market and Pricing Trends

Although metals prices declined more than expected in the second half of the year, particularly in the North American industrial end markets, overall pricing within the metals market continued to have a positive impact on the Company's selling prices throughout 2019. To the extent that the Company can pass through higher material costs to its contractual customers, we expect higher selling prices within the metals market to continue to have an overall favorable impact on the Company's operating results. If higher material costs are not passed through to its contractual customers, the Company fails to avoid an overstocked position relative to the market and restock at lower replacement costs, or if prices begin to decrease within the metals market, the Company's operating results will be adversely impacted.

In many cases, the pricing of its products can have a more significant impact on the Company's operating results than demand because of the following reasons, among others:

- Changes in volume resulting from changes in demand typically result in corresponding changes to the Company's variable costs. However, as pricing changes occur, variable expenses are not directly impacted.
- If surcharges are not passed through to the customer or are passed through without a mark-up, the Company's profitability will be adversely impacted.

In total, demand for the Company's products softened considerably in 2019, compared to the prior year, as tons sold per day decreased compared to the prior year for the majority of the products the Company sells, with the exception of aluminum. The increase in aluminum demand was primarily the result of strength in the aerospace market, a trend the Company expects to continue despite uncertainties around the return to service of the Boeing 737 MAX. The Company expects demand for its other core products, namely alloy bar, carbon and alloy flat products and SBQ bar, to remain soft in the near term, primarily due to continued weakness in the Industrial end markets. The Company believes that its disciplined focus on highly-accretive sales, particularly those including its value-added service offerings, will allow it to maintain relatively stable gross material margins despite the softening of demand, particularly in the North American industrial end markets.

The demand for the Company's products may change from time to time based on, among other things, general economic conditions, industry capacity, and the cyclical nature of the industries in which the Company's customers operate. The pricing environment, leading to increased competitiveness within the market, can also have a significant impact on demand. An increase or decrease in the demand for the Company's products has a significant impact on the Company's operating results. When volume increases, the Company's sales dollars generally increase, which leads to more dollars earned from normal operations. Similarly, a decrease in demand results in lower sales dollars which, once costs and expenses are factored in, leads to less dollars earned from normal operations. Although the lower demand also decreases the cost of materials and operating costs, including warehouse, delivery, selling, general and administrative expenses, the decrease in these costs and expenses is often less than the decrease in sales dollars due to fixed costs, resulting in lower operating margins. Management believes that with the Company's new global supply organization, which is focused on reducing aged inventories, improving overall stock levels throughout the Company, and providing real-time facilitation of the Company's branches in selling higher cost inventory, as well as its focus to excel in its highly accretive core product lines to the exclusion of low-margin, working capital intensive opportunities, it is in a better position to react quickly to variability in end-market demand and to manage the impact that demand variability might have on operating margins.

Industry data provided by the Metals Service Center Institute ("MSCI") indicates that overall 2019 U.S. steel service center shipment volumes decreased 7% compared to 2018 levels. According to MSCI data, industry sales volumes of products consistent with the Company's product mix decreased 11% in 2019 compared to 2018. Of the U.S. steel service center products tracked by the MSCI, shipment volumes for all of the products decreased in 2019 compared to 2018 with carbon bars, carbon plate, and carbon pipe and tube having the most significant decreases.

Despite the decrease in sales volume due to the softening of the industrial end market, the Company's gross material margin, calculated as net sales less cost of materials (exclusive of depreciation) divided by net sales, was 25.2% in the year ended December 31, 2019, compared to a gross material margin of 24.9% in the prior year. The Company believes the slight improvement in gross material margin while in challenging market conditions is a result of a focus on highly accretive sales, particularly sales including higher margin value added service offerings. The Company expects its margins will remain stable in 2020 as its improved inventory management offsets the headwinds produced by reduced demand and a downward pricing environment.

Current Business Outlook

The Company is principally focused on two key global markets, aerospace and industrial.

The aerospace market continues to be strong with defense and commercial spending driving the demand for the Company's aluminum, stainless, and titanium products. The Company expects the aerospace market to remain robust, particularly where the Company has long-term contracts with subcontractors who support platforms that are anticipated to grow. However, the Company does anticipate continued pressure on transactional pricing resulting from competition in the market.

The industrial end markets the Company serves are expected to remain extremely competitive in the near term with some demand and pricing headwinds from the second half of 2019 continuing into 2020. Given the Company's lower cost structure, which is the result of its restructuring activities, it does see an opportunity to continue to grow market share by continuing to improve its conversion rate on transactional business on a competitive basis at still accretive net margins.

Uncertainty around the imposition of tariffs or duties on the import of steel or aluminum, as well as the ongoing negotiation of trade deals between the U.S. government and foreign nations, is expected to contribute to a competitive pricing environment in 2020. Particular to the aerospace end market, uncertainty regarding the return to service of the Boeing 737 MAX could lead to additional competition in the pricing of aluminum. Largely favorable commodity pricing is expected to continue in the near-term, although the Company also expects U.S. mill pricing to increase, resulting in higher material costs. However, given its long-standing relationships with domestic steel mills, the Company also believes it is currently well-positioned to take advantage of an increasing pricing environment expected to result from the tariffs and may have a competitive price advantage relative to other U.S.-based steel service centers that are more reliant on imported steel and aluminum products.

RESULTS OF OPERATIONS

Our discussion of comparative period results is based upon the following components of the Company's Consolidated Statements of Operations and Comprehensive Loss.

Net Sales —The Company derives its sales from the processing and delivery of metals. Pricing is established with each customer order and includes charges for the material, processing activities and delivery. The pricing varies by product line and type of processing. From time to time, the Company may enter into fixed price arrangements with customers while simultaneously obtaining similar agreements with its suppliers.

Cost of Materials — Cost of materials consists of the costs that the Company pays suppliers for metals and related inbound and transfer freight charges, excluding depreciation, which is included in operating costs and expenses discussed below.

Operating Costs and Expenses — Operating costs and expenses primarily consist of:

- Warehouse, processing and delivery expenses, including occupancy costs, compensation and employee benefits for warehouse personnel, processing, shipping and handling costs;
- Sales expenses, including compensation and employee benefits for sales personnel;
- General and administrative expenses, including compensation for executive officers and general management, expenses for professional services primarily related to accounting and legal advisory services, bad debt expense, data communication and computer hardware and maintenance;
- Depreciation for all property, plant and equipment.

Year ended December 31, 2019 compared to the year ended December 31, 2018

The following table sets forth certain statement of operations data in each year indicated:

	Year Ended December 31,				Favorable/ (Unfavorable)	
	2019		2018			
(Dollar amounts in millions)	$	% of Net Sales	$	% of Net Sales	Year-over-Year $ Change	Year-over-Year % Change
Net sales	$ 559.6	100.0 %	$ 582.0	100.0 %	$ (22.4)	(3.8)%
Cost of materials (exclusive of depreciation)	418.8	74.8 %	437.1	75.1 %	18.3	4.2 %
Operating costs and expenses	150.9	27.0 %	161.7	27.8 %	10.8	6.7 %
Operating loss	$ (10.1)	(1.8)%	$ (16.7)	(2.9)%	$ 6.6	(39.5)%

Net Sales

Net sales of $559.6 million in the year ended December 31, 2019 were a decrease of $22.4 million, or 3.8%, compared to $582.0 million in the year ended December 31, 2018. The decrease in net sales in the current year compared to the prior year was driven primarily by a decrease in tons sold per day, partially offset by an increase in selling prices and a favorable sales mix. Tons sold per day decreased 19.1% in the year ended December 31, 2019 compared to the prior year driven primarily by decreased sales volumes of carbon flat roll, alloy bar, SBQ bar, and stainless, partially offset by an increase in told sold per day of aluminum products. In the third quarter of 2019, the Company made the strategic decision to exit a portion of the carbon flat-roll market served by one of its Mexican operations.

Although metals prices declined more than expected in the second half of the year, particularly in the North American industrial end markets, overall pricing within the metals market continued to have a positive impact on the Company's selling prices throughout 2019. Overall, average selling prices of the Company's product mix sold increased 19.3% in the year ended December 31, 2019, compared to the prior year with favorable selling prices realized on the majority of the commodities that the Company sells. The most favorable selling prices were realized on the Company's highest selling commodities, including carbon and alloy plate, alloy bar, stainless, SBQ bar, and aluminum.

Cost of Materials

Cost of materials (exclusive of depreciation) was $418.8 million in the year ended December 31, 2019 compared to $437.1 million in the year ended December 31, 2018. The year ended December 31, 2019 included a one-time $1.3 million noncash charge for the write-down of inventory recorded in the third quarter of 2019 in conjunction with the Company's decision to exit a portion of the carbon flat-roll market served by one of its Mexican operations

("Mexican inventory write-down"). The $18.3 million, or 4.2%, decrease in the year ended December 31, 2019 compared to the year ended December 31, 2018 was primarily due to the decrease in net sales volume compared to the prior year, partially offset by the Mexican inventory write-down.

Cost of materials (exclusive of depreciation) was 74.8% of net sales in the year ended December 31, 2019, compared to 75.1% of net sales in the year ended December 31, 2018. Ongoing strength in commodity pricing and the Company's focus on selectively pursuing higher margin sales that are accretive to the business, particularly those including the Company's value added service offerings, resulted in favorable product mix towards sales of products with higher gross material margins (calculated as net sales less cost of materials divided by net sales) in the year ended December 31, 2019, compared to the year ended December 31, 2018.

Operating Costs and Expenses and Operating Loss

Operating costs and expenses in the year ended December 31, 2019 and in the year ended December 31, 2018 were as follows:

	Year Ended December 31,		Favorable/ (Unfavorable)	
(Dollar amounts in millions)	**2019**	**2018**	**Year-over-Year $ Change**	**Year-over-Year % Change**
Warehouse, processing and delivery expense	$ 77.6	$ 83.6	$ 6.0	7.2 %
Sales, general and administrative expense	64.6	68.9	4.3	6.2 %
Depreciation expense	8.8	9.1	0.3	3.3 %
Total operating costs and expenses	$ 150.9	$ 161.7	$ 10.8	6.7 %

Total operating costs and expenses decreased by $10.8 million to $150.9 million in the year ended December 31, 2019 from $161.7 million in the year ended December 31, 2018:

- Warehouse, processing and delivery expense decreased by $6.0 million primarily due to lower sales volume in the year ended December 31, 2019, compared to the year ended December 31, 2018, which resulted in a decrease in warehouse and freight costs as well as lower payroll and benefits costs.
- Sales, general and administrative expense decreased by $4.3 million primarily due to lower payroll and benefit costs in the year ended December 31, 2019, compared to the year ended December 31, 2018. Also contributing to the decrease were costs incurred in the year ended December 31, 2018 for professional services related to the review of the Company’s information technology security processes and protocol for potential enhancement, whereas these costs were not as significant in the year ended December 31, 2019.

Operating loss in the year ended December 31, 2019 was $10.1 million, compared to $16.7 million in the year ended December 31, 2018.

Other Income and Expense, Income Taxes and Net Loss

Interest expense, net was $39.9 million in the year ended December 31, 2019, compared to $33.2 million in the year ended December 31, 2018. Interest expense includes the interest cost component of the net periodic benefit cost of the Company's pension and post-retirement benefits of $5.3 million in the year ended December 31, 2019 and $4.9 million in the year ended December 31, 2018. The increase in interest expense in year ended December 31, 2019, compared to the prior year is primarily due to an increase in non-cash amortization of the Convertible Senior Secured Paid-in-Kind ("PIK") Toggle Notes due 2022 (the “Second Lien Notes”) discount. Also contributing to the increase in interest expense in the year ended December 31, 2019 is a full 12-months of non-cash interest expense on the Company's $25.0 million revolving credit facility entered into in June 2018 (see Note 2 - *Debt*, in the Notes to the Consolidated Financial Statements).

Other income, net, was $6.6 million in the year ended December 31, 2019, compared to $8.0 million in the year ended December 31, 2018. Included in other income, net in the year ended December 31, 2019 and December 31, 2018 was net pension benefit of $6.1 million and $7.9 million, respectively. The remaining other income, net for the comparative periods is comprised of foreign currency transaction gains. The Company recorded a foreign currency transaction gain of $0.5 million in the year ended December 31, 2019, compared to a foreign currency transaction gain of $0.1 million in the year ended December 31, 2018.

The Company recorded an income tax benefit of $4.9 million in the year ended December 31, 2019, compared to an income tax benefit of $4.8 million in the year ended December 31, 2018. The Company’s effective tax rate is expressed as income tax expense benefit as a percentage of loss before income taxes. The effective tax rate was 11.3% in the year ended December 31, 2019 and 11.4% in the year ended December 31, 2018. The change in the effective tax rate between periods resulted from changes in the geographic mix and timing of income (losses) and the inability to benefit from current year losses due to valuation allowance positions in the U.S.

Net loss was $38.5 million in the year ended December 31, 2019, compared to $37.1 million in the year ended December 31, 2018.

Liquidity and Capital Resources

Cash and cash equivalents increased (decreased) as follows:

(Dollar amounts in millions)	Year Ended December 31, 2019	2018
Net cash from (used in) operating activities	$ 10.8	$ (23.8)
Net cash used in investing activities	(3.6)	(5.6)
Net cash (used in) from financing activities	(9.6)	27.3
Effect of exchange rate changes on cash and cash equivalents	0.1	(0.4)
Net change in cash and cash equivalents	$ (2.2)	$ (2.4)

The Company’s principal sources of liquidity are cash provided by operations and proceeds from borrowings under its revolving credit facilities.

Specific components of the change in working capital (defined as current assets less current liabilities) are highlighted below:

- A decrease in accounts receivable in the year ended December 31, 2019 resulted in a cash flow source of $5.1 million, compared to an increase in accounts receivable in the year ended December 31, 2018, which resulted in a $6.1 million of cash flow use. The higher accounts receivable balance in the year ended December 31, 2018 is primarily attributable to higher sales in the fourth quarter of 2018, compared to the fourth quarter of 2019. Average receivable days outstanding was 55.7 days in the year ended December 31, 2019 and 55.4 days in the year ended December 31, 2018.
- A decrease in inventory in the year ended December 31, 2019 resulted in a $16.3 million cash flow source, compared to an increase in inventory in the prior year, which resulted in a $7.7 million cash flow use. Average days sales in inventory increased to 134.2 days in the year ended December 31, 2019, compared to 133.5 days in the year ended December 31, 2018 as a result of a decrease in sales offset by improved inventory management, which resulted in an overall decrease in inventory as of December 31, 2019.
- Total accounts payable, accrued payroll and employee benefits, and accrued and other current liabilities provided a cash flow use of $6.4 million in the year ended December 31, 2019, compared to a cash flow source of $3.7 million in the year ended December 31, 2018. Accounts payable days outstanding were 41.6 days in the year ended December 31, 2019, compared to 41.9 days in the year ended December 31, 2018.

Net cash used in investing activities of $3.6 million and $5.6 million in the year ended December 31, 2019 and December 31, 2018, respectively, was almost entirely the result of cash paid for capital expenditures in each period.

Net cash used in financing activities of $9.6 million in the year ended December 31, 2019 was mainly attributable to repayments of borrowings under the Company's ABL Credit Agreement (defined below) as well as repayments of short-term borrowings under the Company's local credit facilities. Net cash from financing activities of $27.3 million in the year ended December 31, 2018 was attributable to net proceeds from borrowings under the Company's ABL Credit Agreement (defined below), partially offset by payments of $0.9 million made in connection with the Company's build-to-suit liability associated with its warehouse in Janesville, WI.

Capital Resources

On August 31, 2017, the Company entered into the Revolving Credit and Security Agreement with PNC Bank, National Association ("PNC") as lender and as administrative and collateral agent (the “Agent”), and other lenders party thereto (the "Original ABL Credit Agreement"). The Original ABL Credit Agreement provided for a $125.0 million senior secured, revolving credit facility (the "Revolving A Credit Facility"), under which the Company and four of its subsidiaries each are borrowers (collectively, in such capacity, the “Borrowers”). The obligations of the Borrowers have been guaranteed by the subsidiaries of the Company named therein as guarantors. On June 1, 2018, the Company entered into an Amendment No. 1 to ABL Credit Agreement (the “Credit Agreement Amendment”) by and among the Company, the Borrowers and guarantors party thereto and the Agent and the other lenders party thereto, which amended the Original ABL Credit Agreement (as amended by the Credit Agreement Amendment, the “ABL Credit Agreement”) to provide for additional borrowing capacity. The ABL Credit Agreement provides for an additional $25.0 million last out Revolving B Credit Facility (the "Revolving B Credit Facility" and together with the Revolving A Credit Facility, the "Credit Facility") made available in part by way of a participation in the Revolving B Credit Facility by certain of the Company's stockholders. Borrowings under the Credit Facility will mature on February 28, 2022.

Subject to certain exceptions and permitted encumbrances, the obligations under the ABL Credit Agreement are secured by a first priority security interest in substantially all of the assets of each of the Borrowers and certain subsidiaries of the Company that are named as guarantors. The proceeds of the advances under the ABL Credit Agreement may only be used to (i) pay certain fees and expenses to the Agent and the lenders under the ABL Credit Agreement, (ii) provide for the Borrowers' working capital needs and reimburse drawings under letters of credit, (iii) repay the obligations under the Debtor-in-Possession Revolving Credit and Security Agreement dated as of July 10, 2017, by and among the Company, the lenders party thereto, and PNC, and certain other existing indebtedness, and (iv) provide for the Borrowers' capital expenditure needs, in accordance with the ABL Credit Agreement.

The Company may prepay its obligations under the ABL Credit Agreement at any time without premium or penalty, and must apply the net proceeds of material sales of collateral in prepayment of such obligations. Payments made must be applied to the Company's obligations under the Revolving A Credit Facility, if any, prior to its obligations under the Revolving B Credit Facility. In connection with an early termination or permanent reduction of the Revolving A Credit Facility prior to June 1, 2020, a 0.25% fee shall be due for the period from June 1, 2019 through May 31, 2020, in the amount of such commitment reduction, subject to reduction as set forth in the ABL Credit Agreement. Indebtedness for borrowings under the ABL Credit Agreement is subject to acceleration upon the occurrence of specified defaults or events of default, including (i) failure to pay principal or interest, (ii) the inaccuracy of any representation or warranty of a loan party, (iii) failure by a loan party to perform certain covenants, (iv) defaults under indebtedness owed to third parties, (v) certain liability producing events relating to ERISA, (vi) the invalidity or impairment of the Agent's lien on its collateral or of any applicable guarantee, and certain adverse bankruptcy-related and (vii) certain adverse bankruptcy-related and other events.

Interest on indebtedness under the Revolving A Credit Facility accrues at a variable rate based on a grid with the highest interest rate being the applicable LIBOR-based rate plus a margin of 3.0%, as set forth in the ABL Credit Agreement. Interest on indebtedness under the Revolving B Credit Facility accrues at a rate of 12.0% per annum, which will be paid-in-kind unless the Company elects to pay such interest in cash and the Revolving B payment conditions specified in the ABL Credit Agreement are satisfied. Additionally, the Company must pay a monthly facility fee equal to the product of (i) 0.25% per annum (or, if the average daily revolving facility usage is less than 50% of the maximum revolving advance amount of the Credit Facility, 0.375% per annum) multiplied by (ii) the amount by which the maximum advance amount of the Credit Facility exceeds such average daily Credit Facility usage for such month.

Under the ABL Credit Agreement, the maximum borrowing capacity of the Revolving A Credit Facility is based on the Company's borrowing base calculation. As of December 31, 2019, the weighted average advance rates used in the borrowing base calculation are 85.0% on eligible accounts receivable and 70.4% on eligible inventory.

The Company's ABL Credit Agreement contains certain covenants and restrictions customary to an asset-based revolving loan.

The Company's ABL Credit Agreement contains a springing financial maintenance covenant requiring the Company to maintain a Fixed Charge Coverage Ratio of 1.0 to 1.0 in any Covenant Testing Period (as defined in the ABL Credit Agreement) when the Company's cash liquidity (as defined in the ABL Credit Agreement) is less than $12.5 million for five consecutive days. The Company was not in a Covenant Testing Period as of and for the year ended December 31, 2019.

Additionally, upon the occurrence and during the continuation of an event of default or upon the failure of the Company to maintain cash liquidity (as defined in the ABL Credit Agreement, inclusive of certain cash balances and the additional unrestricted borrowing capacity shown below) in excess of $12.5 million, the lender has the right to take full dominion of the Company's cash collections and apply these proceeds to outstanding loans under the ABL Credit Agreement ("Cash Dominion"). Based on the Company's cash projections, it does not anticipate that Cash Dominion will occur, or that it will be in a Covenant Testing Period during the next 12 months.

Our ability to borrow funds is dependent on our ability to maintain an adequate borrowing base. Accordingly, if we do not generate sufficient cash flow from operations to fund our working capital needs and planned capital expenditures, and our availability is depleted, we may need to take further actions, such as reducing or delaying capital investments, strategic investments or other actions. We believe that our existing cash balances, together with our availability under the ABL Credit Agreement, will be sufficient to fund our normal business operations over the next twelve months from the issuance of this report. However, there can be no assurance that we will be able to achieve our strategic initiatives or obtain additional funding on favorable terms in the future which could have a significant adverse effect on our operations.

Additional unrestricted borrowing capacity under the Revolving A Credit Facility at December 31, 2019 was as follows (in millions):

Maximum borrowing capacity	$	125.0
Collateral reserves		(5.2)
Letters of credit and other reserves		(2.4)
Current maximum borrowing capacity		117.4
Current borrowings		(102.0)
Additional unrestricted borrowing capacity	$	15.4

Also on August 31, 2017, the Company entered into an indenture (the “Second Lien Notes Indenture”) with Wilmington Savings Fund Society, FSB, as trustee and collateral agent (“Indenture Agent”) and, pursuant thereto, issued approximately $164,902 in aggregate principal amount of Second Lien Notes, including $2,400 of restricted Second Lien Notes issued to certain members of the Company's management. The Second Lien Notes are five-year senior obligations of the Company and certain of its subsidiaries, secured by a lien on all or substantially all of the assets of the Company, its domestic subsidiaries and certain of its foreign subsidiaries, which lien the Indenture Agent has agreed will be junior to the lien of the Agent under the ABL Credit Agreement.

The Second Lien Notes are convertible into shares of the Company’s common stock at any time at the initial conversion price of $3.77 per share, which rate is subject to adjustment as set forth in the Second Lien Notes Indenture. Under the Second Lien Notes Indenture, upon the conversion of the Second Lien Notes in connection with a Fundamental Change (as defined in the Second Lien Notes Indenture), for each $1.00 principal amount of the Second Lien Notes, that number of shares of the Company’s common stock issuable upon conversion shall equal the greater of (a) $1.00 divided by the then applicable conversion price or (b) $1.00 divided by the price paid per share of the Company's common stock in connection with such Fundamental Change calculated in accordance with the Second Lien Notes Indenture, subject to other provisions of the Second Lien Notes Indenture. Subject to certain exceptions, under the Second Lien Notes Indenture a “Fundamental Change” includes, but is not limited to, the following: (i) the acquisition of more than 50% of the voting power of the Company’s common equity by a “person” or “group” within the meaning of Section 13(d) of the Securities Exchange Act of 1934, as amended; (ii) the consummation of any recapitalization, reclassification, share exchange, consolidation or merger of the Company pursuant to which the Company’s common stock will be converted into cash, securities or other property; (iii) the “Continuing Directors” (as defined in the Second Lien Notes Indenture) cease to constitute at least a majority of the board of directors; and (iv) the approval of any plan or proposal for the liquidation or dissolution of the Company by the Company’s stockholders.

Upon conversion, the Company will pay and/or deliver, as the case may be, cash, shares of the Company’s common stock or a combination of cash and shares of the Company’s common stock, at the Company’s election, together with cash in lieu of fractional shares. The value of shares of the Company’s common stock for purposes of the settlement of the conversion right, if the Company elects to settle in cash, will be calculated as provided in the Second Lien Notes Indenture, using a 20 trading day observation period.

The terms of the Second Lien Notes contain numerous covenants imposing financial and operating restrictions on the Company’s business. These covenants place restrictions on the Company’s ability and the ability of its subsidiaries to, among other things, pay dividends, redeem stock or make other distributions or restricted payments; incur indebtedness or issue certain stock; make certain investments; create liens; agree to certain payment restrictions affecting certain subsidiaries; sell or otherwise transfer or dispose assets; enter into transactions with affiliates; and enter into sale and leaseback transactions.

The Second Lien Notes may not be redeemed by the Company in whole or in part at any time, except the Company may be required to make an offer to purchase Second Lien Notes using the proceeds of certain material asset sales involving the Company or one of its restricted subsidiaries, as described more particularly in the Second Lien Notes Indenture. In addition, if a Fundamental Change occurs at any time, each holder of any Second Lien Notes has the right to require the Company to repurchase such holder’s Second Lien Notes for cash at a repurchase price equal to 100% of the principal amount thereof, together with accrued and unpaid interest thereon, subject to certain exceptions.

Indebtedness for borrowings under the Second Lien Notes Indenture is subject to acceleration upon the occurrence of specified defaults or events of default, including failure to pay principal or interest, the inaccuracy of any representation or warranty of any obligor under the Second Lien Notes, failure by an obligor under the Second Lien Notes to perform certain covenants, the invalidity or impairment of the Indenture Agent's lien on its collateral or of any applicable guarantee, and certain adverse bankruptcy-related and other events.

Upon satisfaction of certain conditions more particularly described in the Second Lien Notes Indenture, including the deposit in trust of cash or securities sufficient to pay the principal of and interest and any premium on the Second Lien Notes, the Company may effect a covenant defeasance of certain of the covenants imposing financial and operating restrictions on the Company's business. In addition, and subject to certain exceptions as more particularly described in the Second Lien Notes Indenture, the Company may amend, supplement or waive provisions of the Second Lien Notes Indenture with the consent of holders representing a majority in aggregate principal amount of the Second Lien Notes, and may in effect release collateral from the liens securing the Second Lien Notes with the consent of holders representing 66-2/3% in aggregate principal amount of the Second Lien Notes.

Interest on the Second Lien Notes accrues at the rate of 5.00% if paid in cash and at the rate of 7.00% if paid in kind. Pursuant to the terms of the Second Lien Note Indenture, the Company is currently paying interest on the Second Lien Notes in kind.

In July 2017, the Company's French subsidiary entered into a local credit facility under which it may borrow against 100% of the eligible accounts receivable factored, with recourse, up to €6.50 million, subject to factoring fees and floating Euribor or LIBOR interest rates, plus a 1.0% margin. The French subsidiary utilizes the local credit facility to support its operating cash needs. As of December 31, 2019, the French subsidiary has borrowings of $2.9 million under its credit facility, which is recorded as short-term borrowings at the Consolidated Balance Sheets.

Interest expense, net was $39.9 million in the year ended December 31, 2019, of which $27.9 million was non-cash interest related to long term debt and $5.3 million was non-cash interest related to the pension plan.

As of December 31, 2019, the Company had $2.4 million of irrevocable letters of credit outstanding.

The Company's debt agreements impose significant operating and financial restrictions which may prevent the Company from executing certain business opportunities, such as making acquisitions or paying dividends, among other things.

The Company is committed to achieving a strong financial position while maintaining sufficient levels of available liquidity, managing working capital and monitoring the Company's overall capitalization. Cash and cash equivalents at December 31, 2019 were $6.4 million, with approximately $1.2 million of the Company's consolidated cash and cash equivalents balance residing in the United States.

Working capital, defined as current assets less current liabilities, and the balances of its significant components were as follows:

(Dollar amounts in millions)	**December 31,**		**Working Capital**
	2019	**2018**	**Increase (Decrease)**
Working capital	$ 173.7	$ 198.2	$ (24.5)
Inventory	144.4	160.7	(16.3)
Accounts receivable	74.7	79.8	(5.1)
Accounts payable	41.7	42.7	1.0
Accrued and other current liabilities	3.5	5.3	1.8
Accrued payroll and employee benefits	7.6	11.3	3.7
Cash and cash equivalents	6.4	8.7	(2.3)

The Company currently plans that it will have sufficient cash flows from its operations to continue as a going concern.

Capital Expenditures

Cash paid for capital expenditures was $4.0 million in the year ended December 31, 2019 and $5.7 million in the year ended December 31, 2018. Expenditures in 2019 include $1.3 million related to IT equipment upgrades and software licenses. The balance of the capital expenditures in 2019 is the result of normal equipment purchases, building improvements, and furniture and fixture upgrades throughout the year. Management believes that capital expenditures will be approximately $6.0 million to $7.5 million in 2020.

Pension Funding

The Company's funding policy on its defined benefit pension plans is to satisfy the minimum funding requirements of the Employee Retirement Income Security Act ("ERISA"). Future funding requirements are dependent upon various factors outside the Company's control including, but not limited to, fund asset performance and changes in regulatory or accounting requirements. Based upon factors known and considered as of December 31, 2019, including the funding requirements under ERISA, the Company does not anticipate making significant cash contributions to the pension plans in 2020.

The investment target portfolio allocation for the Company-sponsored pension plans and supplemental pension plan focuses primarily on corporate fixed income securities that match the overall duration and term of the Company's pension liability structure. Refer to *"Retirement Plans"* within *Critical Accounting Policies* and *Note 7 - Employee Benefit Plans* to the consolidated financial statements for additional details regarding other plan assumptions.

Off-Balance Sheet Arrangements

As of December 31, 2019, the Company does not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K promulgated by the SEC, that have or are reasonably likely to have a current or future effect on our financial condition, changes in our financial condition, revenues, or expenses, results of operations, liquidity, capital expenditures, or capital resources, that are material to investors.

Critical Accounting Policies

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, and include amounts that are based on management's estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The following is a description of the Company's accounting policies that management believes require the most significant judgments and estimates when preparing the Company's consolidated financial statements:

Income Taxes — The Company accounts for income taxes using the asset and liability method, under which deferred income tax assets and liabilities are recognized based upon anticipated future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. The Company regularly reviews deferred tax assets to assess whether it is more-likely-than-not that the deferred tax assets will be realized and, if necessary, establish a valuation allowance for portions of such assets to reduce the carrying value.

For purposes of assessing whether it is more-likely-than-not that deferred tax assets will be realized, the Company considers the following four sources of taxable income for each tax jurisdiction: (a) future reversals of existing taxable temporary differences, (b) projected future earnings, (c) taxable income in carryback years, to the extent that carrybacks are permitted under the tax laws of the applicable jurisdiction, and (d) tax planning strategies, which represent prudent and feasible actions that a company ordinarily might not take, but would take to prevent an operating loss or tax credit carryforward from expiring unused. To the extent that evidence about one or more of these sources of taxable income is sufficient to support a conclusion that a valuation allowance is not necessary, other sources need not be considered. Otherwise, evidence about each of the sources of taxable income is considered in arriving at a conclusion about the need for and amount of a valuation allowance. See *Note 8 - Income Taxes* in the Notes to the Consolidated Financial Statements, for further information about the Company's valuation allowance assessments.

The Company has incurred significant losses in recent years. The Company's operations in the United States, Canada and the United Kingdom (prior to ceasing operations in 2019) have generated pre-tax losses for the three-year period ended December 31, 2019. The Company has determined that an ownership shift of greater than fifty percent occurred in 2015, 2016 and 2017 and as such, a significant portion of the pre-ownership shift net operating losses in these jurisdictions are subject to an annual utilization limitation under the Internal Revenue Code section

382 that will act to prevent the Company from utilizing most of its losses against future taxable income. As a result of the Company having recorded deferred tax assets in these jurisdictions as December 31, 2019 and December 31, 2018, coupled with the negative evidence of significant cumulative three-year pre-tax losses, the Company has provided a valuation allowance against the full net deferred tax asset balances recorded in Canada and the United Kingdom and certain of the deferred income tax assets recorded by the United States operations at December 31, 2019.

The Company is subject to taxation in the United States, various states and foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes and recording the related income tax assets and liabilities. It is possible that actual results could differ from the estimates that management has used to determine its consolidated income tax expense.

The Company accounts for uncertainty in income taxes by recognizing the financial statement benefit of a tax position only after determining that the relevant tax authority would more-likely-than-not sustain the position following an audit. For tax positions meeting the more-likely-than-not criteria, the amount recognized in the consolidated financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

Retirement Plans — The Company values retirement plan liabilities based on assumptions and valuations established by management. Future valuations are subject to market changes, which are not in the control of the Company and could differ materially from the amounts currently reported. The Company evaluates the discount rate and expected return on assets at least annually and evaluates other assumptions involving demographic factors, such as retirement age, mortality and turnover periodically, and updates them to reflect actual experience and expectations for the future. Actual results in any given year will often differ from actuarial assumptions because of economic and other factors.

Accumulated and projected benefit obligations are expressed as the present value of future cash payments which are discounted using the weighted average of market-observed yields for high quality fixed income securities with maturities that correspond to the payment of benefits. Lower discount rates increase present values and subsequent-year net periodic pension cost; higher discount rates decrease present values and subsequent-year net periodic pension cost. Discount rates used for determining the Company's projected benefit obligation for its pension plans were 2.99% - 3.11% at December 31, 2019 and 4.00% - 4.06% at December 31, 2018.

The Company's pension plan asset portfolio as of December 31, 2019 is primarily invested in fixed income securities with a duration of approximately 11 years. The assets generally fall within Level 2 of the fair value hierarchy. In 2019, the pension plan assets realized an investment gain of approximately 17%. The target investment asset allocation for the pension plans' funds focuses primarily on corporate fixed income securities that match the overall duration and term of the Company's pension liability structure. There was a funding surplus of less than 0.2% at December 31, 2019 compared to a funding deficit of 2.3% at December 31, 2018.

To determine the expected long-term rate of return on the pension plans' assets, current and expected asset allocations are considered, as well as historical and expected returns on various categories of plan assets.

The Company used the following weighted average discount rates and expected return on plan assets to determine the net periodic pension cost:

	Year Ended December 31,	
	2019	2018
Discount rate	4.00% - 4.06%	3.51% - 3.58%
Expected long-term rate of return on plan assets	5.00%	5.00%

Holding all other assumptions constant, the following table illustrates the sensitivity of changes to the discount rate and long-term rate of return assumptions on the Company's net periodic pension cost:

(Dollar amounts in millions)	Impact on 2020 Expenses - Increase (Decrease)
100 basis point decrease in discount rate	$(0.4)
100 basis point increase in discount rate	(1.0)
100 basis point decrease in expected long-term rate of return on plan assets	(1.5)

Inventories — Inventories are stated at the lower of cost or net realizable value. The net realizable value of metals is subject to volatility. During periods when open-market prices decline below net book value, we may need to record a provision to reduce the carrying value of our inventory. We analyze the carrying value of inventory for impairment if circumstances indicate impairment may have occurred. If impairment occurs, the amount of impairment loss is determined by measuring the excess of the carrying value of inventory over the net realizable value of inventory.

The Company maintains an allowance for excess and obsolete inventory. The excess and obsolete inventory allowance is determined through the specific identification of material, adjusted for expected scrap value to be received, based upon product knowledge, estimated future demand, market conditions and an aging analysis of the inventory on hand. Inventory in excess of our estimated usage requirements is written down to its estimated net realizable value. Although the Company believes its estimates of the inventory allowance are reasonable, actual financial results could differ from those estimates due to inherent uncertainty involved in making such estimates. Changes in assumptions around the estimated future demand, selling price, scrap value, a decision to reduce inventories to increase liquidity, or other underlying assumptions could have a significant impact on the carrying value of inventory, future inventory impairment charges, or both.

New Accounting Standards

See *Note 1 - Basis of Presentation and Significant Accounting Policies* to the Notes to the Consolidated Financial Statements for detailed information on recently issued guidance, whether adopted or to be adopted.

(Amounts in thousands, except par value and per share data)

Consolidated Statements of Operations and Comprehensive Loss

	Year Ended December 31,	
	2019	2018
Net sales	$ 559,591	$ 581,970
Costs and expenses:		
Cost of materials (exclusive of depreciation)	418,806	437,052
Warehouse, processing and delivery expense	77,567	83,635
Sales, general and administrative expense	64,557	68,933
Depreciation expense	8,759	9,082
Total costs and expenses	569,689	598,702
Operating loss	(10,098)	(16,732)
Interest expense, net	39,902	33,172
Other income, net	(6,586)	(7,980)
Loss before income taxes	(43,414)	(41,924)
Income tax benefit	(4,899)	(4,779)
Net loss	$ (38,515)	$ (37,145)
Basic and diluted loss per common share	$ (17.62)	$ (18.57)
Comprehensive loss:		
Net loss	$ (38,515)	$ (37,145)
Change in unrecognized pension and postretirement benefit costs, net of tax effect of $732 and $(3,060), respectively	2,082	(9,187)
Foreign currency translation adjustments, net of tax	(1,108)	(2,492)
Comprehensive loss	$ (37,541)	$ (48,824)

The accompanying notes are an integral part of these statements.

A.M. Castle & Co.
Consolidated Balance Sheets

	December 31,	
	2019	**2018**
Assets		
Current assets:		
Cash and cash equivalents	$ 6,433	$ 8,668
Accounts receivable, less allowances of $1,766 and $1,364, respectively	74,697	79,757
Inventories	144,411	160,686
Prepaid expenses and other current assets	9,668	14,344
Income tax receivable	1,995	1,268
Total current assets	237,204	264,723
Goodwill and intangible assets	8,176	8,176
Prepaid pension cost	5,758	1,754
Deferred income taxes	1,534	1,261
Operating right-of-use assets	29,423	—
Other noncurrent assets	792	1,278
Property, plant and equipment:		
Land	5,579	5,577
Buildings	20,950	21,218
Machinery and equipment	41,054	38,394
Property, plant and equipment, at cost	67,583	65,189
Accumulated depreciation	(20,144)	(11,989)
Property, plant and equipment, net	47,439	53,200
Total assets	$ 330,326	$ 330,392
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 41,745	$ 42,719
Accrued payroll and employee benefits	7,648	11,307
Accrued and other current liabilities	3,540	5,324
Operating lease liabilities	6,537	—
Income tax payable	573	1,589
Short-term borrowings	2,888	5,498
Current portion of finance leases	596	119
Total current liabilities	63,527	66,556
Long-term debt, less current portion	263,523	245,966
Deferred income taxes	3,775	7,540
Finance leases, less current portion	8,208	61
Build-to-suit liability	—	9,975
Other noncurrent liabilities	2,894	3,334
Pension and postretirement benefit obligations	6,709	6,321
Noncurrent operating lease liabilities	22,760	—
Commitments and contingencies (Note 9)		
Stockholders' deficit:		
Common stock, $0.01 par value—200,000 Class A shares authorized with 3,818 shares issued and 3,650 shares outstanding at December 31, 2019, and 3,803 shares issued and outstanding at December 31, 2018	38	38
Additional paid-in capital	61,461	55,421
Accumulated deficit	(88,741)	(50,472)
Accumulated other comprehensive loss	(13,374)	(14,348)
Treasury stock, at cost — 168 shares at December 31, 2019 and no shares at December 31, 2018	(454)	—
Total stockholders' deficit	(41,070)	(9,361)
Total liabilities and stockholders' deficit	$ 330,326	$ 330,392

The accompanying notes are an integral part of these statements.

A.M. Castle & Co.
Consolidated Statements of Cash Flows

	Year Ended December 31,	
	2019	**2018**
Operating activities:		
Net loss	$ (38,515)	$ (37,145)
Adjustments to reconcile net loss to net cash from (used in) operating activities:		
Depreciation	8,759	9,082
Amortization of deferred financing costs and debt discount	11,942	8,160
Noncash interest paid in kind	15,912	13,502
Loss on sale of property, plant & equipment	256	64
Unrealized foreign currency (gain) loss	(771)	580
Deferred income taxes	(5,605)	(7,071)
Noncash rent expense	247	—
Noncash compensation expense	2,862	2,784
Other, net	—	631
Changes in assets and liabilities:		
Accounts receivable	5,143	(6,100)
Inventories	16,286	(7,730)
Prepaid expenses and other current assets	3,963	(2,955)
Other noncurrent assets	(428)	740
Prepaid pension costs	(1,190)	(2,717)
Accounts payable	(1,014)	1,370
Accrued payroll and employee benefits	(3,983)	3,453
Income tax payable and receivable	(1,750)	1,624
Accrued and other current liabilities	(1,397)	(1,120)
Postretirement benefit obligations and other noncurrent liabilities	107	(933)
Net cash from (used in) operating activities	10,824	(23,781)
Investing activities:		
Capital expenditures	(4,021)	(5,687)
Proceeds from sale of property, plant and equipment	442	77
Net cash used in investing activities	(3,579)	(5,610)
Financing activities:		
Repayments of short-term borrowings, net	(2,461)	(115)
Proceeds from long-term debt including credit facilities	3,500	49,954
Repayments of long-term debt including credit facilities	(9,988)	(21,130)
Principal paid on finance leases	(611)	—
Payments of debt issue costs	—	(499)
Payments of build-to-suit liability	—	(897)
Net cash (used in) from financing activities	(9,560)	27,313
Effect of exchange rate changes on cash and cash equivalents	80	(358)
Net change in cash and cash equivalents	(2,235)	(2,436)
Cash and cash equivalents—beginning of year	8,668	11,104
Cash and cash equivalents—end of year	$ 6,433	$ 8,668

See Note 1 - Basis of Presentation and Significant Accounting Policies to the consolidated financial statements for supplemental cash flow disclosures.

The accompanying notes are an integral part of these statements.

A.M. Castle & Co.
Consolidated Statements of Stockholders' Deficit

	Common Shares	Treasury Shares	Common Stock	Treasury Stock	Additional Paid-in Capital	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Loss	Total
Balance at January 1, 2018	3,734	—	$ 37	$ —	$ 49,944	$ (13,327)	$ (2,669)	$ 33,985
Net loss						(37,145)		(37,145)
Foreign currency translation, net of tax							(2,492)	(2,492)
Change in unrecognized pension and postretirement benefit costs, $(3,060) tax effect							(9,187)	(9,187)
Reclassification to equity of interest paid in kind attributable to conversion option, net of $1,208 tax effect (Note 5)					3,430			3,430
Share-based compensation					1,816			1,816
Vesting of restricted shares and other	69		1		231			232
Balance at December 31, 2018	3,803	—	$ 38	$ —	$ 55,421	$ (50,472)	$ (14,348)	$ (9,361)
Cumulative effect from adoption of the new lease standard (Leases: Topic 842) (Note 1)						246		246
Net loss						(38,515)		(38,515)
Foreign currency translation, net of tax							(1,108)	(1,108)
Change in unrecognized pension and postretirement benefit costs, $732 tax effect							2,082	2,082
Reclassification to equity of interest paid in kind attributable to conversion option, net of $1,086 tax effect (Note 5)					3,547			3,547
Share-based compensation					1,938			1,938
Vesting of restricted shares and other	15	(168)	—	(454)	555			101
Balance at December 31, 2019	3,818	(168)	$ 38	$ (454)	$ 61,461	$ (88,741)	$ (13,374)	$ (41,070)

The accompanying notes are an integral part of these statements.

(1) Basis of Presentation and Significant Accounting Policies

Nature of operations — A.M. Castle & Co. and its subsidiaries (the “Company”) is a specialty metals distribution company serving customers on a global basis. The Company has operations in the United States, Canada, Mexico, France, Spain, China and Singapore. The Company provides a broad range of products and value-added processing and supply chain services to a wide array of customers. The Company's customers are principally within the producer durable equipment, aerospace, heavy industrial equipment, industrial goods, construction equipment, and retail sectors of the global economy. Particular focus is placed on the aerospace and defense, power generation, mining, heavy industrial equipment, and general manufacturing industries, as well as general engineering applications.

The Company’s corporate headquarters is located in Oak Brook, Illinois. The Company has 19 operational service centers located throughout North America (15), Europe (2) and Asia (2).

The Company purchases metals from many producers. Purchases are made in large lots and held in distribution centers until sold, usually in smaller quantities and often with value-added processing services performed. Orders are primarily filled with materials shipped from the Company's stock. The materials required to fill the balance of sales are obtained from other sources, such as direct mill shipments to customers or purchases from other distributors. Thousands of customers from a wide array of industries are serviced primarily through the Company’s own sales organization.

Basis of presentation — The consolidated financial statements included herein and the notes thereto have been prepared by the Company pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”), and accounting principles generally accepted in the United States of America (“U.S. GAAP”). This report contains consolidated financial statements of the Company as of and for the years ended December 31, 2019 and December 31, 2018.

The accompanying consolidated financial statements have been prepared on the basis of the Company continuing as a going concern for a reasonable period of time. The Company's principal source of liquidity is cash flows from operations and borrowings under its asset-based revolving credit facilities.

Use of estimates — The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The principal areas of estimation reflected in the consolidated financial statements are accounts receivable allowances, inventory reserves, the valuation of goodwill and intangible assets, the valuation of deferred income taxes, the fair value of the Company's Convertible Senior Secured Paid-in-Kind ("PIK") Toggle Notes due 2022 (the “Second Lien Notes”) and Revolving B Credit Facility (defined at *Note 2 - Debt,* in the Notes to the Consolidated Financial Statements), pension and other post-employment benefits, and share-based compensation.

Revenue recognition — Revenue from the sale of products is recognized when control of the product has transferred to the customer, which is primarily at the time of shipment to the customer. Revenue recognized other than at the time of shipment represented less than 1% of the Company’s consolidated net sales in both the year ended December 31, 2019 and the year ended December 31, 2018. Customer payment terms are established prior to the time of shipment. Provisions for allowances related to sales discounts and rebates are recorded based on terms of the sale in the period that the sale is recorded. Management utilizes historical information and the current sales trends of the business to estimate such provisions. The provisions related to discounts and rebates due to customers are recorded as a reduction within net sales.

Revenue from shipping and handling charges is recorded in net sales. Costs incurred in connection with shipping and handling the Company’s products, which are related to third-party carriers or performed by Company personnel, are included in warehouse, processing and delivery expenses. In the year ended December 31, 2019 and the year ended December 31, 2018, shipping and handling costs included in warehouse, processing and delivery expenses were $23,807 and $26,704, respectively. The Company accounts for shipping and handling activities as fulfillment costs and not a promised good or service.

The Company maintains an allowance for doubtful accounts related to the potential inability of customers to make required payments. The allowance for doubtful accounts is maintained at a level considered appropriate based on historical experience and specific identification of customer receivable balances for which collection is unlikely. The provision for doubtful accounts is recorded in sales, general and administrative expense in the Company's Consolidated Statements of Operations and Comprehensive Loss. Estimates of doubtful accounts are based on historical write-off experience as a percentage of net sales and judgments about the probable effects of economic conditions on certain customers.

The Company also maintains an allowance for credit memos for estimated credit memos to be issued against current sales. Estimates of allowance for credit memos are based upon the application of a historical issuance lag period to the average credit memos issued each month.

Accounts receivable allowance for doubtful accounts and credit memos activity is presented in the table below:

		December 31,	
		2019	2018
Balance, beginning of period		$ 1,364	$ 1,586
Add	Provision charged to expense[a]	472	379
	Recoveries	19	44
Less	Charges against allowance	(89)	(645)
Balance, end of period		$ 1,766	$ 1,364

[a] Includes the net amount of credit memos reserved and issued.

The Company does not incur significant incremental costs when obtaining customer contracts and any costs that are incurred are generally not recoverable from its customers. Substantially all of the Company's customer contracts are for a duration of less than one year and individual customer purchase orders for contractual customers are fulfilled within one year of the purchase order date. The Company recognizes incremental costs of obtaining a contract, if any, as an expense when incurred if the amortization period of the asset would have been one year or less. The Company does not have any costs to obtain a contract that are capitalized.

Information regarding the disaggregation of the Company's revenue by geographic region can be found at *Note 10 — Segment Reporting.*

Cost of materials — Cost of materials consists of the costs the Company pays for metals and related inbound and transfer freight charges. It excludes depreciation, which is discussed below.

Operating expenses — Operating costs and expenses primarily consist of:

- Warehouse, processing and delivery expenses, including occupancy costs, compensation and employee benefits for warehouse personnel, processing, shipping and handling costs;
- Sales expenses, including compensation and employee benefits for sales personnel;
- General and administrative expenses, including compensation for executive officers and general management, expenses for professional services primarily attributable to accounting and legal advisory services, bad debt expenses, data communication costs, computer hardware and maintenance expenses and occupancy costs for non-warehouse locations; and
- Depreciation includes depreciation for all property, plant and equipment.

Cash equivalents — Cash equivalents are highly liquid, short-term investments that have an original maturity of 90 days or less.

Statement of cash flows — Non-cash investing and financing activities and supplemental disclosures of consolidated cash flow information are as follows:

	December 31,	
	2019	2018
Non-cash investing and financing activities:		
Capital expenditures financed by accounts payable	$ 27	$ 115
Reclassification of interest paid in kind to additional paid in capital (Note 5)	3,547	3,430
Cash paid during the period for:		
Interest	7,075	5,110
Income taxes	1,647	866
Cash received during the period for:		
Income tax refunds	952	37

Inventories — Inventories consist primarily of finished goods. All of the Company's operations use the average cost method in determining the cost of inventory.

The Company maintains an allowance for excess and obsolete inventory. The excess and obsolete inventory allowance is determined through the specific identification of material, adjusted for expected scrap value to be received, based on previous sales experience.

Excess and obsolete inventory allowance activity is presented in the table below:

	December 31,	
	2019	2018
Balance, beginning of period	$ 3,274	$ 1,680
Adjustments to provision	1,967	3,612
Charges against allowance	(1,085)	(2,018)
Balance, end of period	$ 4,156	$ 3,274

Property, plant and equipment — Property, plant and equipment are stated at cost and include assets held under capital leases. Expenditures for major additions and improvements are capitalized, while maintenance and repair costs that do not substantially improve or extend the useful lives of the respective assets are expensed in the period in which they are incurred. When items are disposed, the related costs and accumulated depreciation are removed from the accounts and any gain or loss is reflected in income.

The Company provides for depreciation of plant and equipment sufficient to amortize the cost over their estimated useful lives as follows:

Buildings and building improvements	5 – 40 years
Plant equipment	5 – 20 years
Furniture and fixtures	2 – 10 years
Vehicles and office equipment	3 – 10 years

Leasehold improvements are depreciated over the shorter of their useful lives or the remaining term of the lease. Depreciation is calculated using the straight-line method. Depreciation expense in the year ended December 31, 2019 and the year ended December 31, 2018 was $8,759 and $9,082, respectively.

Long-lived assets — The Company's long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset or asset group to future net cash flows (undiscounted and without interest charges) expected to be generated by the asset or asset group. If future net cash flows are less than the carrying value, the asset or asset group may be impaired. If such assets are impaired, the impairment charge is calculated as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Determining whether impairment has occurred typically requires various estimates and assumptions, including determining which undiscounted cash flows are directly related to the potentially impaired asset, the useful life over which cash flows will occur, their amount, and the asset's residual value, if any. The Company derives the required undiscounted cash flow estimates from historical experience and internal business plans.

Goodwill and intangible assets — As of both December 31, 2019 and December 31, 2018, the Company had recorded goodwill with a carrying value of $2,676, none of which is tax deductible. There was no change in the carrying value of goodwill recognized in the year ended December 31, 2019. The Company's other intangible asset is comprised of an indefinite-lived trade name, which is not subject to amortization. The gross carrying value of the trade name intangible asset was $5,500 at both December 31, 2019 and December 31, 2018.

The Company tests goodwill for impairment at the reporting unit level on an annual basis at December 1 of each year or more frequently if a significant event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. The Company assesses, at least quarterly, whether any events or circumstances have significantly changed which may imply that the carrying amount of its one reporting unit's goodwill is in excess of its fair value. Based on the results of the Company's goodwill impairment testing it has recorded no impairment charges in the year ended December 31, 2019 or since the goodwill was originally recognized.

The Company currently has one reporting unit. The determination of the fair value of the reporting unit requires significant estimates and assumptions to be made by management. The fair value of the reporting unit is estimated using a combination of an income approach, which estimates fair value based on a discounted cash flow analysis using historical data, estimates of future cash flows and discount rates based on the view of a market participant, and a market approach, which estimates fair value using market multiples of various financial measures of comparable public companies. In selecting the appropriate assumptions, the Company considers the following: the selection of appropriate peer group companies; control premiums appropriate for acquisitions in the industry in which the Company competes; discount rates; terminal growth rates; long-term projections of future financial performance; and relative weighting of income and market approaches. The long-term projections used in the valuation are developed as part of the Company's annual long-term planning process. The discount rates used to determine the fair values of the reporting unit is that of a hypothetical market participant which are developed based upon an analysis of comparable companies and include adjustments made to account for any individual reporting unit specific attributes such as, size and industry.

The Company's intangible asset is comprised of an indefinite-lived trade name, which is not subject to amortization. The indefinite-lived trade name intangible asset is tested for impairment on an annual basis on December 1 of each year or more frequently if significant events or changes in circumstances occur which may indicate that the carrying amount of the asset may not be recoverable, as measured by comparing carrying value to the estimated future cash flows generated by its use. An impaired asset is recorded at estimated fair value, determined principally using an income-based approach similar to the relief from royalty method used in the initial valuation of the indefinite-lived intangible asset, with the excess amount of carrying value over the fair value representing the amount of the impairment. Assumptions used in the income-based approach including projected revenues and assumed royalty rate, long-term growth and discount rates. The Company recorded no impairment charges related to its indefinite-lived trade name intangible assets in the year ended December 31, 2019 or since the intangible asset was originally recorded.

Income taxes — The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement and the tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company records valuation allowances against its deferred tax assets when it is more likely than not that the amounts will not be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies and recent results of operations. In the event the Company determines it would not be able to realize its deferred tax assets, a valuation allowance is recorded, which increases the provision for income taxes in the period in which that determination is made.

During 2019, the Company's foreign assets remained pledged as collateral for certain borrowings. This continues to result in a taxable income inclusion in the U.S. of the annual earnings generated by its foreign subsidiaries. As a result of the enactment of H.R.1, "An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent

Resolution on the Budget for Fiscal Year 2018" (the "Tax Act") (also known as "The Tax Cuts and Jobs Act") and this pledge of foreign assets, there are no remaining undistributed earnings which have not been subject to U.S. income taxation as of December 31, 2019 on which the Company would need to record any additional U.S. deferred tax liability.

For uncertain tax positions, if any, the Company applies the provisions of relevant authoritative guidance, which requires application of a "more likely than not" threshold to the recognition and derecognition of tax positions. The Company's ongoing assessments of the more likely than not outcomes of tax authority examinations and related tax positions require significant judgment and can increase or decrease the Company's effective tax rate as well as impact operating results. As of December 31, 2019, the Company has no uncertain tax positions for which a tax or interest reserve has been recognized.

The Company recognizes interest and penalties related to unrecognized tax benefits, if any, within income tax expense. Accrued interest and penalties are included within income tax payable in the Consolidated Balance Sheets. As of December 31, 2019, the Company has accrued no interest and penalties associated with unrecognized tax benefits.

Insurance plans — The Company is a member of a group captive insurance company (the "Captive") domiciled in Grand Cayman Island. The Captive reinsures losses related to certain of the Company's workers' compensation, automobile and general liability risks that occur subsequent to August 2009. Premiums are based on the Company's loss experience and are accrued as expenses for the period to which the premium relates. Premiums are credited to the Company's "loss fund" and earn investment income until claims are actually paid. For claims that were incurred prior to August 2009, the Company is self-insured. Self-insurance amounts are capped, for individual claims and in the aggregate, for each policy year by an insurance company. Self-insurance reserves are based on unpaid, known claims (including related administrative fees assessed by the insurance company for claims processing) and a reserve for incurred but not reported claims based on the Company's historical claims experience and development.

The Company is self-insured up to a retention amount for medical insurance for its domestic operations. Self-insurance reserves are maintained based on incurred but not paid claims based on a historical lag.

Foreign currency — For the majority of the Company's operations, the functional currency is the local currency. Assets and liabilities of those operations are translated into U.S. dollars using year-end exchange rates, and income and expenses are translated using the average exchange rates for the reporting period. The currency effects of translating financial statements of the Company's non-U.S. operations which operate in local currency environments are recorded in accumulated other comprehensive loss, a separate component of stockholders' deficit. Transaction gains or losses resulting from foreign currency transactions have historically been primarily related to unhedged intercompany financing arrangements between the United States and Canada.

Loss per share — Diluted loss per share is computed by dividing net loss by the weighted average number of shares of common stock plus outstanding common stock equivalents. Common stock equivalents consist of restricted stock awards and contingently issuable shares related to the Company's Second Lien Notes, which are included in the calculation of weighted average shares outstanding using the if-converted method. Refer to *Note 2 - Debt*, for further description of the Second Lien Notes.

The following table is a reconciliation of the basic and diluted loss per common share calculations:

	December 31,	
	2019	2018
Numerator:		
Net loss	$ (38,515)	$ (37,145)
Denominator:		
Weighted average common shares outstanding	2,186	2,000
Effect of dilutive securities:		
Outstanding common stock equivalents	—	—
Denominator for diluted loss per share	2,186	2,000
Net basic loss per common share	$ (17.62)	$ (18.57)
Net diluted loss per common share	$ (17.62)	$ (18.57)
Excluded outstanding share-based awards having an anti-dilutive effect	1,429	1,803

The computation of diluted loss per common share does not include common shares issuable upon conversion of the Company's outstanding Second Lien Notes, as they were anti-dilutive under the if-converted method.

The Second Lien Notes are convertible into shares of the Company's common stock at any time at the initial conversion price of $3.77 per share. In future periods, absent a fundamental change (as defined in the Second Lien Notes Indenture, which is described in Note 2 - Debt), the outstanding Second Lien Notes could increase diluted average shares outstanding by a maximum of approximately 51,400 shares.

Concentrations — The Company's customer base is well diversified and, therefore, the Company does not have dependence upon any single customer or a few customers. No single customer represented more than 5% of the Company's total net sales in either the year ended December 31, 2019 or the year ended December 31, 2018. Approximately 64% of the Company's net sales in the year ended December 31, 2019, and 65% in the year ended December 31, 2018, were from locations in the United States.

Share-based compensation — Compensation expense related to restricted share awards made to directors, officers and employees of the Company is recognized on a straight-line basis over the vesting period based on the estimated grant date fair value of the award. The Company accounts for forfeitures as they occur. Compensation expense related to performance share unit awards made to senior level managers and other select personnel is based on management's expectation of future performance compared to the pre-established performance goals. If the performance goals are not expected to be met, no compensation expense is recognized and any previously recognized compensation expense is reversed.

New Accounting Standards

Recently Adopted Accounting Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, "Leases (Topic 842)", which requires that lessees recognize assets and liabilities for leases with lease terms greater than 12 months in the statement of financial position. ASU No. 2016-02 also requires additional disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. The provisions of ASU No. 2016-02 are to be applied using a modified retrospective approach, and are effective for fiscal years beginning after December 15, 2018, including interim reporting periods within that reporting period. Topic 842 was subsequently amended by ASU No. 2018-01, "Land Easement Practical Expedient for Transition to Topic 842"; ASU No. 2018-10, "Codification Improvements to Topic 842, Leases"; ASU No. 2018-11, "Leases (Topic 842): Targeted Improvements" ("ASU 2018-11"); and ASU No. 2018-20, "Narrow-Scope Improvements for Lessors" (collectively, "ASC 842"). ASU 2018-11 provides clarity on separating components of a lease contract and includes an option to not restate comparative periods in transition and elect to use the effective date of Topic 842 as the date of initial application.

The Company adopted ASC 842 effective January 1, 2019 using the modified retrospective approach, as required. The Company elected the transition method that allows it to apply the new standard only to leases existing at the date of initial application, January 1, 2019, and recognized the cumulative effect of initially applying the standard as an adjustment to opening retained earnings for the fiscal year beginning January 1, 2019. Consequently, financial information has not been updated and the disclosures required under the new standard have not be provided for dates and periods before January 1, 2019.

The Company has also elected the package of practical expedients permitted under the transition guidance, which among other things, allows the Company to carryforward the historical lease classification. ASC 842 also provides practical expedients for an entity's ongoing accounting. The Company has made an accounting policy election to keep leases with an initial term of 12 months or less off the balance sheet and recognize those lease payments in the Consolidated Statements of Operations and Comprehensive Loss on a straight-line basis over the lease term. The Company has also elected the practical expedient to not separate lease and non-lease components for all of its real estate leases.

The adoption of ASC 842 resulted in recognition of additional operating right of use assets and lease liabilities on the Company's Consolidated Balance Sheets as of January 1, 2019 of $35,508 and $35,470, respectively. Additionally, the Company's build-to-suit financing obligation has been classified as a finance lease liability, resulting in a $246 adjustment to the Company's beginning accumulated deficit. The adoption of Topic 842 did not have a material effect on the Company's consolidated net loss or liquidity. The Company has reclassified certain prior year presentations to conform to the current period presentation under ASC 842. Refer to Note 4 - Leases, for further information and disclosures related to the adoption of ASC 842.

Recently Issued Account Standards Not Yet Effective

In June 2016, the FASB issued ASU No. 2016-13, "Measurement of Credit Losses on Financial Instruments." ASU 2016-13 adds a current expected credit loss ("CECL") impairment model to U.S. GAAP that is based on expected losses rather than incurred losses. Modified retrospective adoption is required with any cumulative-effect adjustment recorded to retained earnings as of the beginning of the period of adoption. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, including interim periods within the year of adoption. The Company does not expect the application of the CECL impairment model to have a significant impact on the Company's allowance for uncollectible amounts for accounts receivable. The Company will adopt the disclosure requirements of ASU No. 2016-13 in fiscal year 2020.

In August 2018, the FASB issued ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement." ASU No. 2018-13 amends Fair Value Measurement (Topic 820) to add, remove, and modify fair value measurement disclosure requirements. The ASU's changes to disclosures aim to improve the effectiveness of Topic 820's disclosure requirements under the aforementioned FASB disclosure framework project. ASU No. 2018-13 is effective for all entities for fiscal years beginning after December 15, 2019, including interim periods within the year of adoption. Early adoption is permitted for any eliminated or modified disclosures prescribed by the ASU. The Company will adopt the disclosure requirements of ASU No. 2018-13 in its Quarterly Report on Form 10-Q for the three-months ended March 31, 2020 and the Company expects it will have no impact on its fair value disclosures therein.

Also in August 2018, the FASB issued ASU No. 2018-14, "Compensation – Retirement Benefits – Defined Benefit Plans - General (Topic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plan." ASU No. 2018-14 amends Compensation - Retirement Benefits (Topic 715) to add or remove certain disclosure requirements related to defined benefit pension and other postretirement plans. The ASU's changes to disclosures aim to improve the effectiveness of Topic 715's disclosure requirements under the FASB's disclosure framework project. ASU No. 2018-14 is effective for public entities for fiscal years beginning after December 15, 2020. ASU No. 2018-14 does not impact the interim disclosure requirements of Topic 715. Early adoption is permitted. The Company will adopt the disclosure requirements of this new guidance in fiscal year 2021.

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." ASU 2019-12 amends ASC 740 to simplify the accounting for income taxes by removing certain exceptions for investments, intraperiod allocations and interim calculations, and adding guidance to reduce complexity in the accounting standard under the FASB's simplification initiative. ASU 2019-12 is effective for public entities for fiscal years beginning after December 15, 2020. Upon adoption, the amendments in ASU 2019-12 should be applied on a prospective basis to all periods presented. Early adoption is permitted. The Company is currently assessing the impact of the adoption of the new guidance. The Company expects to adopt the new guidance under ASU 2019-12 in fiscal year 2021.

(2) Debt

Long-term debt consisted of the following:

	December 31,	
	2019	2018
LONG-TERM DEBT		
5.00% / 7.00% Second Lien Notes due August 31, 2022[(a)]	193,660	180,894
Floating rate Revolving A Credit Facility due February 28, 2022	102,000	108,488
12.00% Revolving B Credit Facility due February 28, 2022[(b)]	25,788	22,875
Less: unvested restricted Second Lien Notes[(c)]	(323)	(1,378)
Less: unamortized discount	(57,313)	(64,491)
Less: unamortized debt issuance costs	(289)	(422)
Total long-term debt	$ 263,523	$ 245,966
Less: current portion of long-term debt	—	—
Total long-term portion	$ 263,523	$ 245,966

[(a)] Included in balance is interest paid in kind of $28,991 as of December 31, 2019 and $15,992 as of December 31, 2018.

[(b)] Included in balance is interest paid in kind of $4,288 as of December 31, 2019 and $1,375 as of December 31, 2018.

[(c)] Represents unvested portion of restricted Second Lien Notes issued to certain members of management (see *Note 6 - Share-based compensation*).

Credit Facilities

On August 31, 2017, the Company entered into the Revolving Credit and Security Agreement with PNC Bank, National Association ("PNC") as lender and as administrative and collateral agent (the “Agent”), and other lenders party thereto (the "Original ABL Credit Agreement"). The Original ABL Credit Agreement provided for a $125,000 senior secured, revolving credit facility under which the Company and four of its subsidiaries each are borrowers (collectively, in such capacity, the “Borrowers”). The obligations of the Borrowers have been guaranteed by the subsidiaries of the Company named therein as guarantors

On June 1, 2018, the Company entered into an Amendment No. 1 to the Original ABL Credit Agreement (the “Credit Agreement Amendment”) by and among the Company, the Borrowers and guarantors party thereto and the Agent and the other lenders party thereto, which amended the Original ABL Credit Agreement (as amended by the Credit Agreement Amendment, the “ABL Credit Agreement”) to provide for additional borrowing capacity.

The ABL Credit Agreement provides for an additional $25,000 last out Revolving B Credit Facility (the "Revolving B Credit Facility" and together with the Revolving A Credit Facility, the "Credit Facility"). The Credit Facility was made available in part by way of a participation in the Revolving B Credit Facility by certain of the Company’s shareholders. Borrowings under the Credit Facility will mature on February 28, 2022.

Subject to certain exceptions and permitted encumbrances, the obligations under the ABL Credit Agreement are secured by a first priority security interest in substantially all of the assets of each of the Borrowers and certain subsidiaries of the Company that are named as guarantors. The proceeds of the advances under the ABL Credit Agreement may only be used to (i) pay certain fees and expenses to the Agent and the lenders under the ABL Credit Agreement, (ii) provide for the Borrowers' working capital needs and reimburse drawings under letters of credit, (iii) repay the obligations under the Debtor-in-Possession Revolving Credit and Security Agreement dated as of July 10, 2017, by and among the Company, the lenders party thereto, and PNC, and certain other existing indebtedness, and (iv) provide for the Borrowers' capital expenditure needs, in accordance with the ABL Credit Agreement.

The Company may prepay its obligations under the ABL Credit Agreement at any time without premium or penalty, and must apply the net proceeds of material sales of collateral in prepayment of such obligations. Payments made must be applied to the Company's obligations under the Revolving A Credit Facility, if any, prior to its obligations under the Revolving B Credit Facility. In connection with an early termination or permanent reduction of the Revolving A Credit Facility prior to June 1, 2020, a 0.25% fee shall be due for the period from June 1, 2019 through May 31, 2020 on the amount of such commitment reduction, subject to reduction as set forth in the ABL Credit

Agreement. Indebtedness for borrowings under the ABL Credit Agreement is subject to acceleration upon the occurrence of specified defaults or events of default, including (i) failure to pay principal or interest, (ii) the inaccuracy of any representation or warranty of a loan party, (iii) failure by a loan party to perform certain covenants, (iv) defaults under indebtedness owed to third parties, (v) certain liability producing events relating to ERISA, (vi) the invalidity or impairment of the Agent's lien on its collateral or of any applicable guarantee, and (vii) certain adverse bankruptcy-related and other events.

Interest on indebtedness under the Revolving A Credit Facility accrues at a variable rate based on a grid with the highest interest rate being the applicable LIBOR-based rate plus a margin of 3.0%, as set forth in the ABL Credit Agreement. Interest on indebtedness under the Revolving B Credit Facility accrues at a rate of 12.0% per annum, which will be paid in kind unless the Company elects to pay such interest in cash and the Revolving B payment conditions specified in the ABL Credit Agreement are satisfied. Additionally, the Company must pay a monthly Facility Fee equal to the product of (i) 0.25% per annum (or, if the average daily revolving facility usage is less than 50% of the maximum revolving advance amount, 0.375% per annum) multiplied by (ii) the amount by which the maximum revolving advance amount exceeds such average daily revolving facility usage for such month.

The weighted average interest rate on outstanding borrowings under the Revolving A Credit Facility for the year ended December 31, 2019 was 5.32% and the weighted average facility fee for the year was 0.25%. The Company pays certain customary recurring fees with respect to the ABL Credit Agreement. Interest expense related to the Revolving B Credit Facility of $2,913 and $1,375 was paid in kind in the years ended December 31, 2019 and December 31, 2018, respectively.

The ABL Credit Agreement includes negative covenants customary for an asset-based revolving loan. Such covenants include limitations on the ability of the Borrowers to, among other things, (i) effect mergers and consolidations, (ii) sell assets, (iii) create or suffer to exist any lien, (iv) make certain investments, (v) incur debt and (vi) transact with affiliates. In addition, the ABL Credit Agreement includes customary affirmative covenants for an asset-based revolving loan, including covenants regarding the delivery of financial statements, reports and notices to the Agent. The ABL Credit Agreement also contains customary representations and warranties and event of default provisions for a secured term loan.

The Company's ABL Credit Agreement contains a springing financial maintenance covenant requiring the Company to maintain a Fixed Charge Coverage Ratio of 1.0 to 1.0 in any Covenant Testing Period (as defined in the ABL Credit Agreement) when the Company's cash liquidity (as defined in the ABL Credit Agreement) is less than $12,500. The Company is not in a Covenant Testing Period as of December 31, 2019.

Unamortized debt issuance costs of $289 associated with the ABL Credit Agreement were recorded as a reduction in long-term debt as of December 31, 2019.

Second Lien Notes

Also on August 31, 2017, the Company entered into an indenture (the "Second Lien Notes Indenture") with Wilmington Savings Fund Society, FSB, as trustee and collateral agent ("Indenture Agent") and, pursuant thereto, issued approximately $164,902 in aggregate original principal amount of its Second Lien Notes, including $2,400 of restricted Second Lien Notes issued to certain members of management (see *Note 6 - Share-based compensation*).

The Second Lien Notes are five year senior obligations of the Company and certain of its subsidiaries, secured by a lien on all or substantially all of the assets of the Company, its domestic subsidiaries and certain of its foreign subsidiaries, which lien the Indenture Agent has agreed will be junior to the lien of the Agent under the ABL Credit Agreement. The Second Lien Notes are convertible into shares of the Company's common stock at any time at the initial conversion price of $3.77 per share, which rate is subject to adjustment as set forth in the Second Lien Notes Indenture.

Under the Second Lien Notes Indenture, upon the conversion of the Second Lien Notes in connection with a "Fundamental Change" (as defined in the Second Lien Notes Indenture), for each $1.00 principal amount of the Second Lien Notes, that number of shares of the Company's common stock issuable upon conversion shall equal the greater of (a) $1.00 divided by the then applicable conversion price or (b) $1.00 divided by the price paid per share of the Company's common stock in connection with such Fundamental Change calculated in accordance with the Second Lien Notes Indenture, subject to other provisions of the Second Lien Notes Indenture. Subject to certain exceptions, under the Second Lien Notes Indenture a "Fundamental Change" includes, but is not limited to, the following: (i) the acquisition of more than 50% of the voting power of the Company's common equity by a "person" or "group" within the meaning of Section 13(d) of the Securities Exchange Act of 1934, as amended; (ii) the consummation of any recapitalization, reclassification, share exchange, consolidation or merger of the Company pursuant to which the Company's common stock will be converted into cash, securities or other property; (iii) the "Continuing Directors" (as defined in the Second Lien Notes Indenture) cease to constitute at least a majority of the board of directors; and (iv) the approval of any plan or proposal for the liquidation or dissolution of the Company by the Company's stockholders.

Upon conversion, the Company will pay and/or deliver, as the case may be, cash, shares of the Company's common stock or a combination of cash and shares of the Company's common stock, at the Company's election, together with cash in lieu of fractional shares. The value of shares of the Company's common stock for purposes of the settlement of the conversion right, if the Company elects to settle in cash, will be calculated as provided in the Second Lien Notes Indenture, using a 20 trading day observation period.

The Second Lien Notes are guaranteed, jointly and severally, by certain subsidiaries of the Company. The Second Lien Notes and the related guarantees are secured by a lien on substantially all of the Company's and the guarantors' assets, subject to certain exceptions pursuant to certain collateral documents entered by the Company and the guarantors in connection with Second Lien Notes Indenture. The terms of the Second Lien Notes contain numerous covenants imposing financial and operating restrictions on the Company's business. These covenants place restrictions on the Company's ability and the ability of its subsidiaries to, among other things, pay dividends, redeem stock or make other distributions or restricted payments; incur indebtedness or issue certain stock; make certain investments; create liens; agree to certain payment restrictions affecting certain subsidiaries; sell or otherwise transfer or dispose assets; enter into transactions with affiliates; and enter into sale and leaseback transactions.

The Second Lien Notes may not be redeemed by the Company in whole or in part at any time, except the Company may be required to make an offer to purchase Second Lien Notes using the proceeds of certain material asset sales involving the Company or one of its restricted subsidiaries, as described more particularly in the Second Lien Notes Indenture. In addition, if a Fundamental Change occurs at any time, each holder of any Second Lien Notes has the right to require the Company to repurchase such holder's Second Lien Notes for cash at a repurchase price equal to 100% of the principal amount thereof, together with accrued and unpaid interest thereon, subject to certain exceptions.

The Company must use the excess proceeds of material sales of collateral to make an offer of repurchase to holders of the Second Lien Notes. Indebtedness for borrowings under the Second Lien Notes Indenture is subject to acceleration upon the occurrence of specified defaults or events of default, including failure to pay principal or interest, the inaccuracy of any representation or warranty of any obligor under the Second Lien Notes, failure by an obligor under the Second Lien Notes to perform certain covenants, the invalidity or impairment of the Indenture Agent's lien on its collateral or of any applicable guarantee, and certain adverse bankruptcy-related and other events.

Indebtedness for borrowings under the Second Lien Notes Indenture is subject to acceleration upon the occurrence of specified defaults or events of default, including failure to pay principal or interest, the inaccuracy of any representation or warranty of any obligor under the Second Lien Notes, failure by an obligor under the Second Lien Notes to perform certain covenants, the invalidity or impairment of the Indenture Agent's lien on its collateral or of any applicable guarantee, and certain adverse bankruptcy-related and other events.

Interest on the Second Lien Notes accrues at the rate of 5.00% if paid in cash and 7.00% if paid in kind. Pursuant to the terms of the Second Lien Notes Indenture, the Company is currently paying interest on the Second Lien Notes in kind. Interest expense of $12,999 and $12,127 was paid in kind for the years ended December 31, 2019 and December 31, 2018, respectively.

Upon satisfaction of certain conditions more particularly described in the Second Lien Notes Indenture, including the deposit in trust of cash or securities sufficient to pay the principal of and interest and any premium on the Second Lien Notes, the Company may effect a covenant defeasance of certain of the covenants imposing financial and operating restrictions on the Company's business. In addition, and subject to certain exceptions as more particularly described in the Second Lien Notes Indenture, the Company may amend, supplement or waive provisions of the Second Lien Notes Indenture with the consent of holders representing a majority in aggregate principal amount of the Second Lien Notes, and may in effect release collateral from the liens securing the Second Lien Notes with the consent of holders representing 66-2/3% in aggregate principal amount of the Second Lien Notes.

As of December 31, 2019, all of the Company's principal and interest paid in kind related to its long-term debt matures and is payable in fiscal year 2022. The Company has no other required long-term debt payments within the next five years or thereafter.

Short-term borrowings

The Company's French subsidiary is party to a local credit facility under which it may borrow against 100% of the eligible accounts receivable factored, with recourse, up to €6,500. The French subsidiary is charged a factoring fee of 0.16% of the gross amount of accounts receivable factored. Local currency borrowings on the French subsidiary's credit facility are charged interest at the daily 3-months Euribor rate plus a 1.0% margin and U.S dollar borrowings on the credit facility are 3-months LIBOR plus a 1.0% margin. The French subsidiary utilizes the local credit facility to support its operating cash needs. As of December 31, 2019 and December 31, 2018, the French subsidiary has borrowings of $2,888 and $5,498 under the local credit facility, respectively.

(3) Fair Value Measurements

The three-tier value hierarchy the Company utilizes, which prioritizes the inputs used in the valuation methodologies, is:

Level 1—Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2—Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3—Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants.

The fair value of cash, accounts receivable and accounts payable approximate their carrying values. The fair value of cash equivalents is determined using the fair value hierarchy described above.

The Company’s pension plan asset portfolio as of December 31, 2019 and December 31, 2018 is primarily invested in fixed income securities, which generally fall within Level 2 of the fair value hierarchy. Fixed income securities in the pension plan asset portfolio are valued based on evaluated prices provided to the trustee by independent pricing services. Such prices may be determined by factors which include, but are not limited to, market quotations, yields, maturities, call features, ratings, institutional size trading in similar groups of securities and developments related to specific securities. Refer to *Note 7 - Employee Benefit Plans* for pension fair value disclosures.

Fair Value Measurements of Debt

As of December 31, 2019, the fair value of the Company's Second Lien Notes, including the conversion option, was estimated to be $136,085 compared to a carrying value of $193,660. As of December 31, 2018, the fair value of the Company's Second Lien Notes, including the conversion option, was estimated to be $174,063 compared to a carrying value of $180,894.The fair values for the Second Lien Notes, including the conversion option, falls within Level 3 of the fair value hierarchy and was determined using a binomial lattice model using assumptions based on market information and historical data, and a review of prices and terms available for similar debt instruments that do not contain a conversion feature, as well as other factors related to the callable nature of the Second Lien Notes.

The main inputs and assumptions into the fair value model for the Second Lien Notes at December 31, 2019 were as follows:

Risk-free interest rate	1.61 %
Credit spreads	22.86 %
PIK premium spread	2.00 %
Volatility	50.00 %

As of December 31, 2019, the fair value of the Company's Revolving B Credit Facility was estimated to be $25,082 compared to a carrying value of $25,788. As of December 31, 2018, the fair value of the Company's Revolving B Credit Facility was estimated to be $22,124 compared to a carrying value of $22,875. The fair value of the Revolving B Credit Facility was estimated based on a model that discounted future principal and interest payments at interest rates available to the Company at the end of the period for similar debt of the same maturity, which is a Level 2 input as defined by the fair value hierarchy.

Given the nature and the variable interest rates, the fair value of borrowings under the Revolving A Credit Facility and the French subsidiary's foreign line of credit approximated the carrying value at December 31, 2019.

(4) Lease Agreements

The Company adopted ASC 842 effective January 1, 2019 using the modified retrospective approach. Refer to Note - 1 Basis of Presentation and Significant Accounting Policies for additional information regarding the adoption of ASC 842.

The Company has operating and finance leases covering primarily warehouse and office facilities and equipment, with the lapse of time as the basis for all rental payments. The Company determines if an arrangement is a lease at inception.

Operating right-of-use ("ROU") assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the estimated present value of lease payments over the lease term. In determining the estimated present value of lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date, with consideration given to the Company's recent debt issuances as well as publicly available data for instruments with similar characteristics when calculating the Company's incremental borrowing rates.

The ROU assets also include any lease payments made and are reduced by any lease incentives received. The Company’s lease terms may include options to extend or not terminate the lease when it is reasonably certain that it will exercise any such options. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Lease expense is recognized in operating loss on a straight-line basis over the expected lease term.

Real estate leases of warehouse and office facilities are the most significant leases held by the Company. For these leases, the Company has elected the practical expedient permitted under ASC 842 to account for the lease and non-lease components as a single lease component. As a result, non-lease components, such as common area maintenance charges, are accounted for as a single lease element. The Company’s remaining operating leases are primarily comprised of leases of copiers, vehicles, and other warehouse equipment.

Certain of the Company’s operating lease agreements include variable payments that are passed through by the landlord, such as insurance, taxes, and common area maintenance, payments based on the usage of the asset, and rental payments adjusted periodically for inflation. Pass-through charges, payments due to changes in usage of the asset, and payments due to changes in indexation are included within variable rent expense.

As a result of the adoption of ASC 842, the Company's build-to-suit liability recognized under the previous guidance was reclassified to a finance leases liability in the Consolidated Balance Sheet and is presented as such as of December 31, 2019.

None of the Company's lease agreements contain significant residual value guarantees, restrictions, or covenants.

Lease-related assets and liabilities consisted of the following:

	Classification on the Balance Sheet	December 31, 2019
ASSETS		
Operating lease assets	Operating right-of-use assets	$ 29,423
Finance lease assets	Property, plant and equipment, net	10,293
Total lease assets		$ 39,716
LIABILITIES		
Current		
Operating	Operating lease liabilities	$ 6,537
Finance	Current portion of finance leases	596
Noncurrent		
Operating	Noncurrent operating lease liabilities	22,760
Finance	Finance leases, less current portion	8,208
Total liabilities		$ 38,101

Weighted average remaining lease term (years)	
Operating leases	5.5
Finance leases	10.9
Weighted average discount rate	
Operating leases	5.2 %
Finance leases	4.7 %

Lease-related expenses were as follows:

	Year Ended December 31, 2019
Finance lease expense:	
Amortization of finance lease assets	$ 1,046
Interest on finance lease liabilities	424
Operating lease expense	8,551
Variable lease expense	612
Short-term lease expense	34
Sublease income (1)	(744)
Total lease expense	$ 9,923

(1) Relates primarily to one property subleased through September 2020.

Lease-related supplemental cash flow information was as follows:

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows for operating leases	(8,633)
Operating cash for finance leases	(424)
Financing cash flows for finance leases	(611)
Lease obligations obtained in exchange for right-of-use assets:	
Operating leases	1,713

Maturities of lease liabilities as of December 31, 2019 are as follows:

Year ending December 31:	Finance Leases	Operating Leases
2020	$ 991	$ 7,716
2021	955	7,042
2022	975	6,010
2023	992	4,860
2024	1,012	2,176
Later years	6,365	5,866
Total lease payments	11,290	33,670
Less: imputed interest	(2,486)	(4,373)
Total lease obligations	$ 8,804	$ 29,297

Comparable future minimum rental payments under leases that have initial or remaining non-cancelable lease terms in excess of one year as previously disclosed under Account Standards Codification No. 840, (Leases) ("ASC 840") as of December 31, 2018 are as follows:

	Finance Leases	Operating Leases	Built-to-Suit Lease
2019	$ 119	$ 7,882	$ 915
2020	56	7,398	933
2021	2	6,414	952
2022	2	5,702	971
2023	1	4,828	990
Later years	—	8,068	7,461
Total future minimum rental payments	$ 180	$ 40,292	$ 12,222

Total rental payments charged to expense under ASC 840 were $8,377 in the year ended December 31, 2018.

(5) Stockholders' Equity

Reclassification of interest paid in kind to additional paid in capital

The Company has classified the fair value of the conversion option associated with its Second Lien Notes as additional paid-in capital. Similarly, the interest paid-in kind attributable to the fair value conversion option of the Second Lien Notes is classified as additional paid-in capital. Interest paid-in kind attributable to the fair value of the conversion option recognized as additional paid-in capital was $3,547 in the year ended December 31, 2019, net of the tax impact of $1,086, and $3,430, net of the tax impact of $1,208, in the year ended December 31, 2018.

Accumulated Comprehensive Loss

The components of accumulated other comprehensive loss are as follows:

	December 31,	
	2019	2018
Unrecognized pension and postretirement costs, net of tax	$ (7,071)	$ (9,153)
Foreign currency translation losses, net of tax	(6,303)	(5,195)
Total accumulated other comprehensive loss, net of tax	$ (13,374)	$ (14,348)

Changes in accumulated other comprehensive (loss) income by component are as follows:

	Defined Benefit Pension and Postretirement Items		Foreign Currency Items		Total	
	Year Ended December 31,		Year Ended December 31,		Year Ended December 31,	
	2019	2018	2019	2018	2019	2018
Beginning Balance	$ (9,153)	$ 34	$ (5,195)	$ (2,703)	$ (14,348)	$ (2,669)
Other comprehensive income (loss) before reclassifications, net of tax	1,990	(9,187)	(1,108)	(2,492)	882	(11,679)
Amounts reclassified from accumulated other comprehensive loss, net of tax [(a)]	92	—	—	—	92	—
Net current period other comprehensive income (loss)	2,082	(9,187)	(1,108)	(2,492)	974	(11,679)
Ending Balance	$ (7,071)	$ (9,153)	$ (6,303)	$ (5,195)	$ (13,374)	$ (14,348)

[(a)] See reclassifications from accumulated other comprehensive loss table below for details of reclassification from accumulated other comprehensive loss for the years ended December 31, 2019 and December 31, 2018.

Reclassifications from accumulated other comprehensive loss are as follows:

	December 31,	
	2019	2018
Unrecognized pension and postretirement benefit items:		
Prior service credit	$ (2)	$ —
Actuarial loss	94	—
Total before tax	92	—
Tax effect	—	—
Total reclassifications for the period, net of tax[(a)]	$ 92	$ —

[(a)] The total reclassifications for the period are included in other income, net.

(6) Share-based Compensation

Provisions governing the Company's share-based compensation awards are included in the A.M. Castle & Co. 2017 Management Incentive Plan (the “MIP”), which became effective on August 31, 2017. The Board of Directors (the "Board") or a committee thereof (either, in such capacity, the “Administrator”) administers the MIP. The Administrator has broad authority under the MIP, among other things, to: (i) select participants; (ii) determine the terms and conditions, not inconsistent with the MIP, of any award granted under the MIP; (iii) determine the number of shares of the Company’s common stock to be covered by each award granted under the MIP; and (iv) determine the fair market value of awards granted under the MIP.

Persons eligible to receive awards under the MIP include officers, directors and employees of the Company and its subsidiaries. The types of awards that may be granted under the MIP include Second Lien Notes, stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, performance shares and other forms of cash or share-based awards.

The maximum number of shares of the Company’s common stock that may be issued or transferred pursuant to awards under the MIP (including shares initially convertible as a result of conversion of Second Lien Notes issued pursuant to the MIP) is 3,952, which number may be increased with the approval of the Company’s shareholders. If any outstanding award granted under the MIP expires or is terminated or canceled without having been exercised or settled in full, or if shares of the Company's common stock acquired pursuant to an award subject to forfeiture are forfeited, the shares of the Company's common stock allocable to the terminated portion of such award or such forfeited shares will revert to the MIP and will be available for grant under the MIP as determined by the Administrator, subject to certain restrictions.

As is customary in management incentive plans of this nature, in the event of any change in the outstanding shares of the Company's common stock by reason of a stock split, stock dividend or other non-recurring dividends or distributions, recapitalization, merger, consolidation, spin-off, combination, repurchase or exchange of stock, reorganization, liquidation, dissolution or other similar corporate transaction, an equitable adjustment will be made in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the MIP. Such adjustment may include an adjustment to the maximum number and kind of shares of stock or other securities or other equity interests as to which awards may be granted under the MIP, the number and kind of shares of stock or other securities or other equity interests subject to outstanding awards and the exercise price thereof, if applicable.

Restricted Shares

The Board has issued restricted shares of the Company's common stock ("Restricted Shares") and restricted Second Lien Notes (the "Restricted Notes") to certain officers of the Company, as well as Restricted Shares to certain members of the Board. The aggregate principal amount of Restricted Notes outstanding as of December 31, 2019 was $2,300. The Restricted Notes outstanding were convertible into an additional 610 shares of the Company's common stock as of December 31, 2019.

The Restricted Shares and Restricted Notes granted to certain officers of the Company on September 1, 2017 cliff vest three years from the date of grant, subject to the conditions set forth in the MIP.

The Restricted Shares granted to certain members of the Board on April 25, 2018 cliff vested one year from the date of grant, subject to the conditions set forth in the MIP. The grant date fair value of the Restricted Shares was based on the market price of the Company's common stock on the date of grant.

The following table summarizes the activity relating to the Company's Restricted Shares for the year ended December 31, 2019:

	Number of Shares	Weighted-Average Grant Date Fair Value
Beginning Balance	1,803	$ 3.19
Granted	15	1.77
Forfeited	(168)	3.14
Vested	(221)	3.52
Ending Balance	1,429	3.13
Expected to vest after December 31, 2019	1,429	3.13

Performance Share Units

The Board has granted performance share unit awards ("PSUs") under the MIP to non-executive senior level managers and other select personnel. The PSUs contain a performance-based condition tied to the enterprise value of the Company. Each PSU that vests entitles the participant to receive, at the discretion of the Company's Board, either one share of the Company's common stock or cash equal to the fair market value of one share of the Company's common stock. Vesting occurs upon achievement of a defined enterprise value of the Company, with 50% vesting upon achievement of the defined enterprise value between the performance period September 30, 2020 and September 30, 2022, and the remaining 50% vesting upon the achievement of the defined enterprise value as a result of a specified transaction, as defined in the PSU agreement, on or before September 30, 2022.

As of December 31, 2019, there were 791 PSUs outstanding.

Share-Based Compensation Expense

As of December 31, 2019, the unrecognized share-based compensation expense related to unvested Restricted Shares was $585 and the remaining unrecognized compensation cost is expected to be recognized over a weighted-average period of approximately 0.8 years. As discussed in *Note 1 - Basis of Presentation and Significant Accounting Policies*, the Company has elected to account for forfeitures as they occur.

As of December 31, 2019, the unrecognized compensation expense related to the Restricted Notes was $214 and is expected to be recognized over a weighted-average period of approximately 0.7 years. The Company is recognizing this expense on a straight-line basis over the three-year vesting period using the fair value of the Restricted Notes at the issue date.

Compensation expense recognized related to the PSUs is based on management’s expectation of future performance compared to the pre-established performance goals. If the performance goals are not expected to be met, no compensation expense is recognized and any previously recognized compensation expense is reversed. As of December 31, 2019, no compensation expense was recognized for these awards to date as the threshold for expense recognition for the performance-based condition had not been met.

Total share-based compensation expense was $2,862 for the year ended December 31, 2019 and $2,784 for the year ended December 31, 2018.

(7) Employee Benefit Plans

Pension Plans

Certain employees of the Company are covered by a Company-sponsored qualified pension plan and a supplemental non-qualified, unfunded pension plan (collectively, the “Pension Plans”). These Pension Plans are defined benefit, noncontributory plans. Benefits paid to retirees are based upon age at retirement, years of credited service and average earnings. The Company uses a December 31 measurement date for the pension plans.

The Company-sponsored pension plans are frozen for all employees except for employees represented by the United Steelworkers of America. The assets of the Company-sponsored qualified pension plan are maintained in a single trust account.

Effective January 1, 2017, the Company opened a lump-sum payout option to participants and their surviving spouses eligible to receive postretirement defined benefit pension payments under the Company-sponsored qualified pension plan. Eligible pension plan participants were provided the opportunity to elect to receive a one-time lump-sum payment equal to the actuarial equivalent present value of the participant's accrued benefit payable at the participant's normal retirement date. Pension benefit payments paid from pension plan assets under the lump-sum payout options were $3,375 and $1,931 during the years ended December 31, 2019 and December 31, 2018, respectively.

In 2018, the collective bargaining agreement was updated to provide an increase in the benefit multiplier for eligible hourly participants in the qualified pension plan, effective May 15, 2018 through September 30, 2022. As a result of this amendment, a prior service cost base was established and the impact of this plan amendment was included in the projected benefit obligation as of December 31, 2018.

The Company’s funding policy is to satisfy the minimum funding requirements of the Employee Retirement Income Security Act ("ERISA"). Based upon factors known and considered as of December 31, 2019, including the funding requirements under ERISA, the Company does not anticipate making significant cash contributions to the pension plans in 2020.

Components of net periodic pension plans benefit were as follows:

	Year Ended December 31,	
	2019	2018
Service cost	$ 357	$ 434
Interest cost	5,233	4,858
Expected return on assets	(6,124)	(7,883)
Amortization of actuarial loss	52	—
Net periodic pension plans benefit	$ (482)	$ (2,591)

The Company expects amortization of pension prior service cost of $52 and no amortization of actuarial gain/loss for the next fiscal year.

The status of the Pension Plans was as follows:

	Year Ended December 31,	
	2019	2018
Change in projected benefit obligation:		
Projected benefit obligation at beginning of period	$ 148,479	$ 157,427
Service cost	357	434
Interest cost	5,233	4,858
Benefit payments	(12,380)	(10,959)
Actuarial loss (gain)	16,054	(3,631)
Plan amendment resulting from change in collective bargaining agreement	—	350
Projected benefit obligation at end of period	$ 157,743	$ 148,479
Change in plan assets:		
Fair value of plan assets at beginning of period	$ 145,065	$ 162,758
Actual return on assets	24,933	(7,105)
Employer contributions	384	371
Benefit payments	(12,380)	(10,959)
Fair value of plan assets at end of period	$ 158,002	$ 145,065
Funded status – net asset (liability)	$ 259	$ (3,414)
Amounts recognized in the consolidated balance sheets consist of:		
Prepaid pension cost	$ 5,758	$ 1,754
Accrued liabilities	(390)	(389)
Pension benefit obligations	(5,109)	(4,779)
Net amount recognized	$ 259	$ (3,414)
Pre-tax components of accumulated other comprehensive loss:		
Unrecognized actuarial gain	$ 8,568	$ 11,322
Unrecognized prior service cost	298	350
Total	$ 8,866	$ 11,672
Accumulated benefit obligation	$ 157,698	$ 148,479

For the plans with an accumulated benefit obligation in excess of plan assets, the projected benefit obligation, accumulated benefit obligation and fair value of plan assets were $5,499, $5,499 and $0, respectively, at December 31, 2019, and $148,479, $148,479 and $145,065, respectively, at December 31, 2018.

The assumptions used to measure the projected benefit obligations of the Company's Pension Plans were as follows:

	Year Ended December 31,	
	2019	2018
Discount rate	2.99% - 3.11%	4.00% - 4.06%
Projected annual salary increases	3.00%	0%

The assumptions used to determine net periodic pension cost of the Company's Pension Plans were as follows:

	Year Ended December 31,	
	2019	2018
Discount rate	4.00% - 4.06%	3.51% - 3.58%
Expected long-term rate of return on plan assets	5.00%	5.00%

The Company’s expected long-term rate of return on plan assets is derived from reviews of asset allocation strategies and historical and anticipated future long-term performance of individual asset classes. The Company’s analysis gives consideration to historical returns and long-term, prospective rates of return.

For salaried and hourly, non-union participants, the Pension Plans were frozen in July 2008. As a result, the projected benefit obligations or net periodic pension cost are based on the accrued benefit as of that date and the Company has not used a projected annual salary increase assumption. For hourly, union participants, the accrued benefit is based on a multiplier that is pre-defined per the agreement governing the Pension Plans, which includes the accrued benefit for the participants vacation pay that is based on the participant's final hourly rate at retirement. Therefore, the projected benefit obligations or expense for hourly, union participants in the Pension Plans assumes a 3% projected annual salary increase for the year ended December 31, 2019.

The assets of the Company-sponsored qualified pension plan are allocated primarily to fixed income securities at December 31, 2019 and December 31, 2018.

The assets of the Company-sponsored qualified pension plan are managed in accordance with investment policies recommended by its investment advisor and approved by the human resources committee of the board of directors (the "Committee"). The overall target portfolio allocation is 100% fixed income securities. These funds’ conformance with style profiles and performance is monitored regularly by management, with the assistance of the Company’s investment advisor. Adjustments are typically made in the subsequent quarters when investment allocations deviate from the target range. The investment advisor provides quarterly reports to management and the Committee.

In accordance with ASU No. 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value ("NAV") per Share (or Its Equivalent)," certain of the Company's investments have been valued using the NAV per share (or its equivalent) practical expedient and are therefore not classified in the fair value hierarchy. The fair value amounts presented in these tables for the Company's investments are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the reconciliation of changes in the plan's benefit obligations and fair value of plan assets above.

The fair values of the assets of the Company-sponsored qualified pension plan fall within the following levels of the fair value hierarchy as of December 31, 2019:

	Level 1	Level 2	Level 3	Total
Fixed income securities [(a)]	$ 8,925	$ 172,293	$ —	$ 181,218
Investments measured at net asset value				8,662
Accounts payable – pending trades				(31,878)
Total				$ 158,002

[(a)] Fixed income securities are comprised of corporate bonds (72%), government bonds (17%), government agency securities (1%) and other fixed income securities (10%).

The fair values of the assets of the Company-sponsored qualified pension plan fall within the following levels of the fair value hierarchy as of December 31, 2018:

	Level 1	Level 2	Level 3	Total
Fixed income securities [(b)]	$ 9,232	$ 136,778	$ —	$ 146,010
Investments measured at net asset value				7,323
Accounts payable – pending trades				(8,268)
Total				$ 145,065

[(b)] Fixed income securities are comprised of corporate bonds (75%), government bonds, (17%) government agency securities (2%) and other fixed income securities (6%).

The estimated future pension benefit payments are:

2020	$	11,900
2021		10,810
2022		10,770
2023		10,180
2024		10,180
2024 — 2028		48,930

The Company was party to a multi-employer pension plan in Ohio from which it has stated its intention to withdraw. As of December 31, 2019, the total estimated liability to withdraw from the plan is $3,134. The current liability associated with the Company's withdrawal from the multi-employer pension plan of $240 is included in accrued and other current liabilities in the Consolidated Balance Sheet and the long-term liability of $2,894 is included in other noncurrent liabilities in the Consolidated Balance Sheet.

Postretirement Plan

The Company also provides declining value life insurance to its retirees and a maximum of three years of medical coverage to qualified individuals who retire between the ages of 62 and 65. The Company does not fund these benefits in advance, and uses a December 31 measurement date.

Components of net periodic postretirement plan benefit were as follows:

	Year Ended December 31,	
	2019	**2018**
Service cost	$ 67	$ 35
Interest cost	56	41
Amortization of prior service credit	(2)	—
Amortization of actuarial loss	42	—
Net periodic postretirement plan cost	$ 163	$ 76

The Company expects amortization of prior service cost of $2 and amortization of actuarial loss of $49 the next fiscal year.

The status of the postretirement plan was as follows:

	Year Ended December 31,	
	2019	2018
Change in accumulated postretirement benefit obligations:		
Accumulated postretirement benefit obligation at beginning of period	$ 1,627	$ 1,438
Service cost	67	35
Interest cost	56	41
Benefit payments	(22)	(426)
Actuarial loss	32	556
Contribution change per collective bargaining agreement	—	(17)
Accumulated postretirement benefit obligation at end of period	$ 1,760	$ 1,627
Funded status – net liability	$ (1,760)	$ (1,627)
Amounts recognized in the consolidated balance sheets consist of:		
Accrued liabilities	$ (160)	$ (85)
Postretirement benefit obligations	(1,600)	(1,542)
Net amount recognized	$ (1,760)	$ (1,627)
Pre-tax components of accumulated other comprehensive loss:		
Unrecognized prior service cost	$ (15)	$ (17)
Unrecognized actuarial loss	548	558
Total	$ 533	$ 541

The assumed health care cost trend rates for medical plans were as follows:

	Year Ended December 31,	
	2019	2018
Medical cost trend rate	6.75%	7.00%
Ultimate medical cost trend rate	4.50%	4.50%
Year ultimate medical cost trend rate will be reached	2030	2027

A 1% increase in the health care cost trend rate assumptions would have increased the accumulated postretirement benefit obligation as of December 31, 2019 by $57 with no significant impact on the annual periodic postretirement benefit cost. A 1% decrease in the health care cost trend rate assumptions would have decreased the accumulated postretirement benefit obligation as of December 31, 2019 by $53 with no significant impact on the annual periodic postretirement benefit cost.

The weighted average discount rate used to determine the net periodic postretirement benefit costs and the accumulated postretirement benefit obligations were as follows:

	Year Ended December 31,	
	2019	2018
Net periodic postretirement benefit costs	3.90%	3.45%
Accumulated postretirement benefit obligations	2.92%	3.90%

Retirement Savings Plans

The Company’s retirement savings plan for U.S. employees includes features under Section 401(k) of the Internal Revenue Code. The Company provides a 401(k) matching contribution of 100% of each dollar on eligible employee contributions up to the first 3% of the employee’s pre-tax compensation, and an additional 50% of each dollar on eligible employee contributions up to the next 2% of the employee's pre-tax compensation. Each year, in addition to the employer matching contribution, the Company's Chief Executive Officer may approve a discretionary Company contribution up to 4% of eligible employee's annual pre-tax compensation. The discretionary contribution is provided as an identical percentage of each employee's annual pre-tax compensation, regardless of their individual contributions to the 401(k) program. Company contributions cliff vest after two years of employment. There was no discretionary contribution made in either the year ended December 31, 2019 or the year ended December 31, 2018.

The amounts expensed by the Company relating to its 401(k) plan and other international retirement plans were $1,672 for the year ended December 31, 2019 and $2,114 for the year ended December 31, 2018.

(8) Income Taxes

The components of (loss) income before income taxes were as follows:

	Year Ended December 31,	
	2019	2018
Domestic	$ (49,024)	$ (48,194)
Foreign	5,610	6,270

The income taxes benefit consisted of the following components:

	Year Ended December 31,	
	2019	2018
Federal		
current	$ (99)	$ (413)
deferred	(4,834)	(5,000)
State		
current	(116)	296
deferred	(1,189)	(1,761)
Foreign		
current	1,307	1,986
deferred	32	113
	$ (4,899)	$ (4,779)

The items accounting for differences between the income tax benefit computed at the federal statutory rate and the provision for income taxes were as follows:

	Year Ended December 31,	
	2019	2018
Federal income tax at statutory rates	$ (9,117)	$ (8,804)
State income taxes, net of federal income tax benefits	(2,249)	(1,536)
Permanent items:		
Foreign inclusions	1,104	369
Other permanent differences	585	804
Rate differential on foreign income	262	452
Valuation allowance	3,667	(40,849)
Provision to return adjustments	182	2,910
Net operating loss ("NOL") carryforward asset limitation	—	41,767
Other	667	108
Income tax benefit	$ (4,899)	$ (4,779)
Effective income tax benefit rate	11.3 %	11.4 %

The Company's U.S. federal corporate income tax statutory rate is 21%.

Substantially all of the Company's federal and state NOL carryforwards are expected to be limited by Internal Revenue Code Section 382 ("Section 382") due to the ownership change in 2017 resulting from the Company's restructuring through its chapter 11 cases. In the year ended December 31, 2018, the Company wrote-off the federal and state net operating loss deferred tax assets that are statutorily unusable in future periods due to these Section 382 limitations and the pre-2017 NOL carryforward periods. There was a corresponding reduction to the valuation allowance in the same amount.

As a U.S. shareholder, the Company is subject to tax on Global Intangible Low-Taxed Income (“GILTI”) earned by certain foreign subsidiaries. At December 31, 2019, the Company has elected to include $1,304 of tax expense related to GILTI as a period expense.

A deferred tax asset of $1,086 at December 31, 2019 and $1,208 at December 31, 2018 associated with the temporary difference between the financial reporting basis and tax basis of the Second Lien Notes conversion feature at each balance sheet date was reclassified from a liability to additional paid-in capital on December 31, 2019 and December 31, 2018, respectively (see *Note 5 - Stockholders' Equity*).

Significant components of deferred tax assets and liabilities are as follows:

	December 31,	
	2019	2018
Deferred tax assets:		
Pension and postretirement benefits	$ 1,208	$ 2,111
Deferred compensation	973	1,452
Restructuring related and other reserves	6	4
Operating lease liabilities	10,314	—
Alternative minimum tax and net operating loss carryforward	19,529	11,227
Inventory	4,161	5,223
Intangible assets and goodwill	4,744	5,561
Other, net	1,741	1,841
Deferred tax assets before valuation allowance	42,676	27,419
Valuation allowance	(14,344)	(10,842)
Total deferred tax assets	$ 28,332	$ 16,577
Deferred tax liabilities:		
Depreciation	$ 4,394	$ 5,372
Operating right-of-use asset	10,300	—
Excess of book basis over tax basis in investments	318	225
Convertible debt discount	15,140	16,834
Other, net	421	425
Total deferred tax liabilities	30,573	22,856
Net deferred tax liabilities	$ (2,241)	$ (6,279)

As of December 31, 2019, the Company had $12,307 of federal and $10,257 of state net operating loss carryforwards which will begin expiring in 2034 and 2022, respectively, and $1,005 of federal AMT credits which will be fully refundable by 2021, and $546 of state credit carryforwards which will begin expiring in 2024. Substantially all of the Company's federal and state net operating loss carryforwards are expected to be limited by IRC Section 382 due to the ownership change in 2017 resulting from the Company's restructuring through its chapter 11 cases. As of December 31, 2019, the Company had $33,119 of foreign net operating loss carryforwards, of which a significant portion carry forward for an indefinite period.

The Tax Act includes new limitations on interest expense deductions. As of December 31, 2019, the portion of the non-deductible interest expense as a result of the Tax Act will be carried forward.

The Company continues to maintain valuation allowances against substantially all U.S. and foreign deferred tax assets to reduce those deferred tax assets to amounts that are realizable either through future reversals of existing taxable temporary differences or through taxable income in carryback years for the applicable jurisdictions.

Activity in the Company's valuation allowances for the U.S. and non-U.S. operations were as follows:

	Year Ended December 31,	
	2019	2018
Domestic		
Balance, beginning of period	$ 2,271	$ 43,037
Provision charged to expense	3,949	—
Reduction due to Section 382 limitations	—	(40,766)
Provision charged to discontinued operations and other comprehensive income	(92)	—
Balance, end of period	$ 6,128	$ 2,271
Foreign		
Balance, beginning of period	$ 8,571	$ 9,116
Impact of foreign exchange on beginning of period balance	240	(437)
Provision charged to expense	(595)	(108)
Balance, end of period	$ 8,216	$ 8,571

The Company is subject to taxation in the U.S, state jurisdictions and foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes and recording the related income tax assets and liabilities. The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more-likely-than-not sustain the position following an audit. For tax positions meeting the more-likely-than-not criterion, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

In the ordinary course of business, the Company is subject to review by domestic and foreign taxing authorities, including the IRS. In general, the Company is no longer subject to audit by the IRS for tax years through 2012 and state, local or foreign taxing authorities for tax years through 2011.

Pursuant to changes made by the Tax Act, remittances from subsidiaries held by the Company made in 2019 and future years are generally not subject to U.S. federal income tax. These remittances are either excluded from taxable income in the United States as earnings that are already subject to taxation or are subject to a 100% dividends received deduction. There are no other differences which would cause the Company to be required to record a material deferred tax liability.

(9) Commitments and Contingent Liabilities

From time to time, the Company is party to a variety of legal proceedings, claims, and inquiries, including proceedings or inquiries by governmental authorities, which arise from the operation of its business. These proceedings, claims, and inquiries are incidental to and occur in the normal course of the Company's business affairs. The majority of these proceedings, claims, and inquiries relate to commercial disputes with customers, suppliers, and others; employment and employee benefits-related disputes; product quality disputes with vendors and/or customers; and environmental, health and safety claims. Although the outcome of these proceedings is inherently difficult to predict, management believes that the amount of any judgment, settlement or other outcome of these proceedings, claims and inquiries, after taking into account recorded accruals and the availability and limits of our insurance coverage, will not have a material adverse effect on the Company’s consolidated results of operations, financial condition or cash flows.

(10) Segment Reporting

The Company has only one reportable segment, Metals. The Company's marketing strategy focuses on distributing highly engineered specialty grades and alloys of metals as well as providing specialized processing services designed to meet very precise specifications. Core products include alloy, aluminum, stainless steel, nickel, carbon and titanium. Inventories of these products assume many forms such as plate, sheet, extrusions, round bar, hexagon bar, square and flat bar, tubing and coil. Depending on the size of the facility and the nature of the markets it serves, service centers are equipped as needed with bar saws, plate saws, oxygen and plasma arc flame cutting machinery, trepanning machinery, boring machinery, honing equipment, water-jet cutting equipment, stress relieving and annealing furnaces, surface grinding equipment, CNC machinery and sheet shearing equipment. The Company also performs various specialized fabrications for its customers through pre-qualified subcontractors that thermally process, turn, polish, cut-to-length and straighten alloy and carbon bar.

The Company operates primarily in North America. Net sales are attributed to countries based on the location of the Company's subsidiary that is selling direct to the customer and exclude assessed taxes such as sales and excise tax. Company-wide geographic data is as follows:

	Year Ended December 31,	
	2019	2018
Net sales		
United States	$ 360,748	$ 379,155
Canada	42,468	47,454
Mexico	49,915	62,431
France	53,644	50,900
China	34,897	25,288
All other countries	17,919	16,742
Total	$ 559,591	$ 581,970

	December 31,	
	2019	2018
Long-lived assets		
United States	$ 38,482	$ 43,698
Canada	2,508	2,579
Mexico	3,233	3,549
France	1,961	2,162
China	374	384
All other countries	881	828
Total	$ 47,439	$ 53,200

(11) Guarantor Financial Information

As described in *Note 12 - Subsequent Event*, the Company plans to commence an exchange offer to holders of the Second Lien Notes to exchange shares of its common stock and its new 3.00% Cash / 5.00% PIK Convertible Senior Secured Notes due 2024 (the "New Notes") in exchange for any and all outstanding Second Lien Notes. The New Notes, to be issued by A.M. Castle & Co. (the "Parent"), will be unconditionally guaranteed on a joint and several basis by all current and future domestic subsidiaries of the Parent (other than those designated as unrestricted subsidiaries) and the parent's subsidiaries in Canada and Mexico (collectively, the "Guarantors"). Each guarantor is 100% owned by the Parent.

Under the proposed exchange offer, the guarantees of the Guarantors will be subject to release in limited circumstances, only upon the occurrence of certain customary conditions. There will be no significant restrictions on the ability of the parent company or any guarantor to obtain funds from its subsidiaries by dividend or loan.

The accompanying financial statements have been prepared and presented pursuant to Rule 3-10 of SEC Regulation S-X "Financial Statements of Guarantors and Issuers of Guaranteed Securities Registered or Being Registered." The financial statements present condensed consolidating financial information for the Parent, the

Guarantors, the non-guarantor subsidiaries (all other subsidiaries) and an elimination column for adjustments to arrive at the information for the Parent, Guarantors, and non-guarantors on a consolidated basis. The condensed consolidating financial information has been prepared on the same basis as the consolidated statements of the Parent. The equity method of accounting is followed within this financial information.

Condensed Consolidated Statements of Operations and Comprehensive Loss
For the year ended December 31, 2019

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Net sales	$ 361,232	$ 92,576	$ 106,528	$ (745)	$ 559,591
Costs and expenses:					
Cost of materials (exclusive of depreciation)	257,387	73,347	88,817	(745)	418,806
Warehouse, processing and delivery expense	59,569	11,152	6,846	—	77,567
Sales, general and administrative expense	53,467	4,782	6,308	—	64,557
Depreciation expense	7,128	982	649	—	8,759
Total costs and expenses	377,551	90,263	102,620	(745)	569,689
Operating (loss) income	(16,319)	2,313	3,908	—	(10,098)
Interest expense, net	38,792	1,076	34	—	39,902
Other income, net	(6,085)	(1,173)	672	—	(6,586)
(Loss) income before income taxes	(49,026)	2,410	3,202	—	(43,414)
Income tax (benefit) expense	(5,894)	236	759	—	(4,899)
Equity in earnings of subsidiaries	(4,617)	—	—	4,617	—
Net (loss) income	$ (38,515)	$ 2,174	$ 2,443	$ (4,617)	$ (38,515)
Comprehensive (loss) income	$ (37,541)	$ 1,075	$ 2,434	$ (3,509)	$ (37,541)

Condensed Consolidated Statements of Operations and Comprehensive Loss
For the year ended December 31, 2018

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Net sales	$ 379,213	$ 109,922	$ 92,934	$ (99)	$ 581,970
Costs and expenses:					
Cost of materials (exclusive of depreciation)	274,037	84,970	78,144	(99)	437,052
Warehouse, processing and delivery expense	63,660	12,807	7,168	—	83,635
Sales, general and administrative expense	58,352	4,762	5,819	—	68,933
Depreciation expense	7,462	922	698	—	9,082
Total costs and expenses	403,511	103,461	91,829	(99)	598,702
Operating (loss) income	(24,298)	6,461	1,105	—	(16,732)
Interest expense, net	31,787	1,061	324	—	33,172
Other income, net	(7,894)	1,970	(2,056)	—	(7,980)
(Loss) income before income taxes	(48,191)	3,430	2,837	—	(41,924)
Income tax (benefit) expense	(6,714)	1,593	342	—	(4,779)
Equity in earnings of subsidiaries	(4,332)	—	—	4,332	—
Net (loss) income	$ (37,145)	$ 1,837	$ 2,495	$ (4,332)	$ (37,145)
Comprehensive (loss) income	$ (48,824)	$ 2,082	$ (242)	$ (1,840)	$ (48,824)

Condensed Consolidating Balance Sheet
As of December 31, 2019

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Assets					
Current assets:					
Cash and cash equivalents	$ 1,000	$ 2,295	$ 3,138	$ —	$ 6,433
Accounts receivable, less allowance for doubtful accounts	43,321	16,147	15,229	—	74,697
Inventories	95,252	26,154	23,005	—	144,411
Prepaid expenses and other current assets	4,074	4,190	3,399	—	11,663
Total current assets	143,647	48,786	44,771	—	237,204
Goodwill and intangible assets	8,176	—	—	—	8,176
Operating right-of-use assets	18,825	6,259	4,339	—	29,423
Other non-current assets	8,362	234	(512)	—	8,084
Investment in subsidiaries	95,599	—	—	(95,599)	—
Receivables from affiliates	60,388	60,547	8,551	(129,486)	—
Property, plant and equipment, net	38,483	5,741	3,215	—	47,439
Total assets	$ 373,480	$ 121,567	$ 60,364	$ (225,085)	$ 330,326
Liabilities and Stockholders' (Deficit) Equity					
Current liabilities:					
Accounts payable	$ 32,280	$ 5,800	$ 3,665	$ —	$ 41,745
Other current liabilities	12,615	4,231	2,048	—	18,894
Short-term borrowings	—	—	2,888	—	2,888
Total current liabilities	44,895	10,031	8,601	—	63,527
Long-term debt, less current portion	263,523	—	—	—	263,523
Payables due to affiliates	69,098	48,174	12,214	(129,486)	—
Deferred income taxes	3,637	—	138	—	3,775
Non-current operating lease liabilities	15,590	3,894	3,276	—	22,760
Other non-current liabilities	17,807	—	4	—	17,811
Stockholders' (deficit) equity	(41,070)	59,468	36,131	(95,599)	(41,070)
Total liabilities and stockholders' (deficit) equity	$ 373,480	$ 121,567	$ 60,364	$ (225,085)	$ 330,326

Condensed Consolidating Balance Sheet
As of December 31, 2018

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Assets					
Current assets:					
Cash and cash equivalents	$ 3,079	$ 4,030	$ 1,559	$ —	$ 8,668
Accounts receivable, less allowance for doubtful accounts	44,327	18,754	16,676	—	79,757
Receivables from affiliates	7	—	—	(7)	—
Inventories	104,882	28,191	27,613	—	160,686
Prepaid expenses and other current assets	6,263	6,205	3,144	—	15,612
Total current assets	158,558	57,180	48,992	(7)	264,723
Goodwill and intangible assets	8,176	—	—	—	8,176
Other non-current assets	3,789	188	316	—	4,293
Investment in subsidiaries	92,065	—	—	(92,065)	—
Receivables from affiliates	68,169	60,547	4,954	(133,670)	—
Property, plant and equipment, net	43,698	6,128	3,374	—	53,200
Total assets	$ 374,455	$ 124,043	$ 57,636	$ (225,742)	$ 330,392
Liabilities and Stockholders' (Deficit) Equity					
Current liabilities:					
Accounts payable	$ 31,802	$ 6,014	$ 4,903	$ —	$ 42,719
Payables due to affiliates	—	7	—	(7)	—
Other current liabilities	13,484	4,171	684	—	18,339
Short-term borrowings	—	—	5,498	—	5,498
Total current liabilities	45,286	10,192	11,085	(7)	66,556
Long-term debt, less current portion	245,966	—	—	—	245,966
Payables due to affiliates	65,502	55,412	12,756	(133,670)	—
Deferred income taxes	7,421	—	119	—	7,540
Other non-current liabilities	19,641	44	6	—	19,691
Stockholders' (deficit) equity	(9,361)	58,395	33,670	(92,065)	(9,361)
Total liabilities and stockholders' (deficit) equity	$ 374,455	$ 124,043	$ 57,636	$ (225,742)	$ 330,392

Condensed Consolidating Statement of Cash Flows
For the year ended December 31, 2019

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Operating activities:					
Net (loss) income	$ (38,515)	$ 2,174	$ 2,443	$ (4,617)	$ (38,515)
Equity in earnings of subsidiaries	(4,617)	—	—	4,617	—
Adjustments to reconcile net (loss) income to net cash from (used in) operating activities	38,892	4,113	6,334	—	49,339
Net cash from (used in) operating activities	(4,240)	6,287	8,777	—	10,824
Investing activities:					
Capital expenditures	(2,154)	(1,337)	(530)	—	(4,021)
Proceeds from sale of property, plant and equipment	8	434	—	—	442
Net advances to subsidiaries	11,377	—	—	(11,377)	—
Net cash used in investing activities	9,231	(903)	(530)	(11,377)	(3,579)
Financing activities:					
Proceeds from long-term debt including credit facilities	3,500	—	—	—	3,500
Repayments of long-term debt including credit facilities	(9,988)	—	—	—	(9,988)
Net intercompany (repayments) borrowings	—	(7,238)	(4,139)	11,377	—
Other financing	(582)	—	(2,490)	—	(3,072)
Net cash (used in) from financing activities	(7,070)	(7,238)	(6,629)	11,377	(9,560)
Effect of exchange rate changes on cash and cash equivalents	—	119	(39)	—	80
Net change in cash and cash equivalents	(2,079)	(1,735)	1,579	—	(2,235)
Cash and cash equivalents—beginning of year	3,079	4,030	1,559	—	8,668
Cash and cash equivalents—end of year	$ 1,000	$ 2,295	$ 3,138	$ —	$ 6,433

Condensed Consolidating Statement of Cash Flows
For the year ended December 31, 2018

	Parent	Guarantors	Non-Guarantors	Eliminations	Consolidated
Operating activities:					
Net (loss) income	$ (37,145)	$ 1,837	$ 2,495	$ (4,332)	$ (37,145)
Equity in earnings of subsidiaries	(4,332)	—	—	4,332	—
Adjustments to reconcile net (loss) income to net cash (used in) from operating activities	17,961	(416)	(4,181)	—	13,364
Net cash (used in) from operating activities	(23,516)	1,421	(1,686)	—	(23,781)
Investing activities:					
Capital expenditures	(4,130)	(848)	(709)	—	(5,687)
Proceeds from sale of property, plant and equipment	8	—	69	—	77
Net advances to subsidiaries	392	—	—	(392)	—
Net cash from (used in) investing activities	(3,730)	(848)	(640)	(392)	(5,610)
Financing activities:					
Proceeds from long-term debt including credit facilities	49,954	—	—	—	49,954
Repayments of long-term debt including credit facilities	(21,130)	—	—	—	(21,130)
Net intercompany (repayments) borrowings	—	58	(450)	392	—
Other financing	(1,396)	—	(115)	—	(1,511)
Net cash from (used in) financing activities	27,428	58	(565)	392	27,313
Effect of exchange rate changes on cash and cash equivalents	—	(261)	(97)	—	(358)
Net change in cash and cash equivalents	182	370	(2,988)	—	(2,436)
Cash and cash equivalents—beginning of year	2,897	3,660	4,547	—	11,104
Cash and cash equivalents—end of year	$ 3,079	$ 4,030	$ 1,559	$ —	$ 8,668

(12) Subsequent Events

On February 24, 2020, the Company's Board approved the commencement of an exchange offer (the “Exchange Offer”) pursuant to which the Company will issue shares of its common stock and its New Notes in exchange for any and all outstanding Second Lien Notes. The New Notes will be guaranteed on a senior basis by all current and future domestic subsidiaries (other than those designated as “Unrestricted Subsidiaries”) of the Issuer (the “Guarantors”) upon completion of the Exchange Offer. The restrictive covenants in the indenture governing the New Notes will be substantially similar to the covenants in the indenture governing the Second Lien Notes. All Second Lien Notes that are tendered and accepted as part of the Exchange Offer, as well as all accrued and unpaid interest on the tendered Second Lien Notes, will be exchanged into New Notes and the Company's common stock at the rate of $0.4918619 principal amount of New Notes and 0.3632585 shares of the Company's common stock per $1 principal amount of Second Lien Notes tendered on the date on which the Exchange Offer is completed. The Exchange Offer will be effected through the filing of a Registration Statement on Form S-4 (the “S-4 Registration Statement”).

The New Notes will bear interest at a rate of 3.00% per annum if paid in cash or 5.00% if paid in kind per annum, payable quarterly. The New Notes will mature August 31, 2024 and will be convertible, at the option of the holders, into shares of the Company's common stock.

Concurrently with the Exchange Offer, the Company is soliciting consents from holders of the Second Lien Notes for certain amendments to the indenture governing the Second Lien Notes to eliminate or amend substantially all of the restrictive covenants, release all collateral securing the Company’s obligations under the indenture governing the Second Lien Notes, and modify certain of the events of default and various other provisions, contained in such indenture.

The filing of the S-4 Registration Statement triggers certain additional reporting obligations concerning the Issuer, the Parent and the Guarantors that are being satisfied through this filing, which will be incorporated by reference into the S-4 Registration Statement. This additional information concerns the Issuer, the Parent and Guarantors, which is hereby reported through additional footnote disclosure at *Note 11 - Guarantor Financial Information* contained herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of A.M. Castle & Co.
Oak Brook, Illinois

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of A.M. Castle & Co. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive loss, stockholders' deficit, and cash flows for the years then ended, and the related consolidated notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the financial statements, the Company changed its method of accounting for leases in the year ended December 31, 2019 due to the adoption of Financial Accounting Standards Board Accounting Standard Update No. 2016-02, *Leases (Topic 842)*, under the modified retrospective method.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 27, 2020

We have served as the Company's auditor since 2002.

ITEM 9 — *Changes In and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

ITEM 9A — *Controls & Procedures*

Disclosure Controls and Procedures

A review and evaluation was performed by the Company's management, including the President and Chief Executive Officer ("CEO") and the Executive Vice President of Finance and Administration ("CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) of the Security Exchange Act of 1934). Based upon that review and evaluation, the CEO and CFO have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2019.

(a) Management's Annual Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in the Securities Exchange Act of 1934 rule 240.13a-15(f). The Company's internal control over financial reporting is a process designed under the supervision of the Company's CEO and CFO to provide reasonable assurance regarding the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Internal control over financial reporting, no matter how well designed, has inherent limitations and may not prevent or detect misstatements. Therefore, even effective internal control over financial reporting can only provide reasonable assurance with respect to the financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company, under the direction of its CEO and CFO, conducted an evaluation of the effectiveness of its internal control over financial reporting as of December 31, 2019 based upon the framework published by the Committee of Sponsoring Organizations of the Treadway Commission, referred to as the *Internal Control - Integrated Framework (2013)*.

Based on our evaluation under the framework in *Internal Control — Integrated Framework (2013)*, the Company's management has concluded that our internal control over financial reporting was effective as of December 31, 2019.

(b) Change in Internal Control Over Financial Reporting

There has been no change in internal control over financial reporting in the quarter ended December 31, 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B — *Other Information*

None.

PART III

ITEM 10 — *Directors, Executive Officers and Corporate Governance*

Information with respect to our executive officers is set forth in Part I of this Annual Report under the caption "Executive Officers of the Registrant." All additional information required by this Item 10 will be incorporated by reference from the Company's Definitive Proxy Statement for its 2020 annual meeting of stockholders, dated and to be filed with the Securities and Exchange Commission within 120 days of the Company's fiscal year end.

ITEM 11 — *Executive Compensation*

The information required by this Item 11 will be incorporated by reference from the Company's Definitive Proxy Statement for its 2020 annual meeting of stockholders, dated and to be filed with the Securities and Exchange Commission within 120 days of the Company's fiscal year end.

ITEM 12 — *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The information required by this Item 12 will be incorporated by reference from the Company's Definitive Proxy Statement for its 2020 annual meeting of stockholders, dated and to be filed with the Securities and Exchange Commission within 120 days of the Company's fiscal year end.

ITEM 13 — *Certain Relationships and Related Transactions, and Director Independence*

The information required by this Item 13 will be incorporated by reference from the Company's Definitive Proxy Statement for its 2020 annual meeting of stockholders, dated and to be filed with the Securities and Exchange Commission within 120 days of the Company's fiscal year end.

ITEM 14 — *Principal Accountant Fees and Services*

The information required by this Item 14 will be incorporated by reference from the Company's Definitive Proxy Statement for its 2020 annual meeting of stockholders, dated and to be filed with the Securities and Exchange Commission within 120 days of the Company's fiscal year end.

PART IV

ITEM 15 — *Financial Statement Schedules and Exhibits*

A. M. Castle & Co.
Index to Financial Statements

Exhibit Index

The following exhibits are filed herewith or incorporated herein by reference:

Exhibit Number	Description of Exhibit	Incorporated by Reference Herein			
		Form	Exhibit	Filing Date	File No.
2.1	Debtors' Amended Prepackaged Joint Chapter 11 Plan of Reorganization dated July 25, 2017.	8-K	2.1	August 3, 2017	1-5415
3.1	Articles of Amendment and Restatement of the Company.	8-A	3.1	August 31, 2017	1-5415
3.2	Amended and Restated Bylaws of the Company, adopted August 31, 2017.	8-A	3.2	August 31, 2017	1-5415
4.1	Specimen Certificate for New Common Stock.	8-A	4.1	August 31, 2017	1-5415
4.2	Indenture, dated August 31, 2017, between the Company, certain of its subsidiaries, WSFS, FSB, as Trustee and Collateral Agent.	8-K	10.2	September 6, 2017	1-5415
4.3	Stockholders Agreement dated as of August 31, 2017 by and among A.M. Castle & Co. and certain beneficial owners or holders of record of the New Common Stock signatory thereto.	8-A	10.1	August 31, 2017	1-5415
4.4	Description of the Company's Securities Registered Pursuant to Section 12 of the Exchange Ace of 1934				
10.1	Revolving Credit and Security Agreement dated August 31, 2017 between the Company and certain of its subsidiaries, PNC Bank, National Association, as lender and as administrative and collateral agent, and the other lenders party thereto.	8-K	10.1	September 6, 2017	1-5415
10.2	Intercreditor Agreement dated August 31, 2017, between PNC Bank, National Association and Wilmington Savings Fund Society, FSB, and acknowledged by the Company and certain of its subsidiaries.	8-K	10.3	September 6, 2017	1-5415
10.3	Registration Rights Agreement dated as of August 31, 2017 by and among A. M. Castle & Co. and certain beneficial owners or holders of record of the New Common Stock signatory thereto.	8-A	10.2	August 31, 2017	1-5415
10.4*	2017 Management Incentive Plan of the Company.	10-Q	10.1	November 14, 2017	1-5415
10.5*	Form of Award Agreement under the 2017 Management Incentive Plan of the Company.	8-K	10.4	September 6, 2017	1-5415
10.9*	Amended and Restated Employment Agreement dated December 15, 2017, between A. M. Castle & Co. and Edward Quinn.	10-K	10.9	March 15, 2018	1-5415
10.10*	Amended and Restated Employment Agreement dated May 15, 2017, between A. M. Castle & Co. and Patrick R. Anderson.	10-Q	10.3	August 9, 2017	1-5415
10.11*	A. M. Castle & Co. Supplemental 401(k) Savings and Retirement Plan, as amended and restated, effective as of January 1, 2009.	10-K	10.14	March 12, 2009	1-5415
10.12*	A. M. Castle & Co. Supplemental Pension Plan, as amended and restated, effective as of January 1, 2009.	10-K	10.15	March 12, 2009	1-5415
10.13*	Form of A. M. Castle & Co. Indemnification Agreement to be executed with all directors and executive officers.	8-K	10.16	July 29, 2009	1-5415

10.14*	First Amendment to the A. M. Castle & Co. Supplemental 401(k) Savings and Retirement Plan, executed April 15, 2009 (as effective April 27, 2009).	8-K	10.1	April 16, 2009	1-5415
10.15*	Second Amendment dated October 8, 2015 to the A.M. Castle & Co. Supplemental 401(k) Savings and Retirement Plan as Amended and Restated effective as of January 1, 2009.	10-K/A	10.4	March 16, 2016	1-5415
10.16*	A.M. Castle & Co. 401(k) Savings and Retirement Plan (as amended and restated effective as of January 1, 2015).	10-K/A	10.4	March 16, 2016	1-5415
10.17*	Second Amendment dated October 8, 2015, to the A.M. Castle & Co. Salaried Employees Pension Plan as Amended and Restated Effective as of January 1, 2010.	10-K/A	10.5	March 16, 2016	1-5415
10.18	Amendment No. 1, dated June 1, 2018, to the Revolving Credit and Security Agreement Revolving Credit dated August 31, 2017 between the Company and certain of its subsidiaries, PNC Bank, National Association, as lender and as administrative and collateral agent, and the other lenders party thereto.	8-K	10.1	June 4, 2018	1-5415
10.19	Supplemental Indenture and Amendment No. 1, dated June 1, 2018, to the Indenture dated August 31, 2017 between the Company and Wilmington Saving Fund Society, FSB, as trustee and as collateral agent.	8-K	10.2	June 4, 2018	1-5415
10.20*	Form of Performance Unit Award Agreement	10-Q	10.1	November 14, 2018	1-5415
10.21*	Employment Agreement dated May 9, 2019, between A.M. Castle & Co. and Jeremy Steele	10-Q	10.1	May 9, 2019	1-5415
10.22*	Retirement Agreement and Release dated January 7, 2020, between A.M. Castle & Co. and Steven W. Scheinkman	8-K	10.1	January 8, 2020	1-5415
10.23*	Amended and Restated Employment Agreement dated January 7, 2020, between A.M. Castle & Co. and Marec E. Edgar	8-K	10.2	January 8, 2020	1-5415
10.24*	Form of Non-Employee Director Restricted Stock Award Agreement under the 2017 Management				
21.1	Subsidiaries of Registrant	.			
23.1	Consent of Deloitte & Touche LLP				
31.1	CEO Certification Pursuant to Section 302 of the Sarbanes Oxley Act of 2002.				
31.2	CFO Certification Pursuant to Section 302 of the Sarbanes Oxley Act of 2002.				
32.1	CEO and CFO Certification Pursuant to Section 906 of the Sarbanes Oxley Act of 2002.				
101	The following financial statements from the Company’s Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL: (i) Consolidated Statements of Operations and Comprehensive Loss, (ii) Consolidated Balance Sheets, (iii) Consolidated Statements of Cash Flows, (v) Consolidated Statements of Stockholders’ Deficit, and (vi) Notes to Consolidated Financial Statements.				

104	Cover page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101

* *Management contract or compensatory plan or arrangement.*

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 to be signed on its behalf by the undersigned, thereunto duly authorized.

A. M. Castle & Co.

(Registrant)

By: /s/ Edward M. Quinn

Edward M. Quinn, Vice President, Controller
and Chief Accounting Officer
(Principal Accounting Officer)

Date: February 27, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities as shown following their name on this 27th day of February, 2020.

/s/ Marec E. Edgar	/s/ Patrick R. Anderson	
Marec E. Edgar, President, Chief Executive Officer and Director (Principal Executive Officer)	Patrick R. Anderson, Executive Vice President, Finance and Administration (Principal Financial Officer)	
/s/ Jeffrey A. Brodsky	/s/ Jonathan B. Mellin	/s/ Jacob Mercer
Jeffrey A. Brodsky, Director	Jonathan B. Mellin, Director	Jacob Mercer, Director
/s/ Steven W. Scheinkman	/s/ Jonathan Segal	/s/ Michael J. Sheehan
Steven W. Scheinkman, Director	Jonathan Segal, Director	Michael J. Sheehan, Chairman

EXHIBIT 4.4

DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of February 24, 2020, A. M. Castle & Co. (the "Company") has one class of securities, our common stock, registered under Section 12 of the Securities Exchange Act of 1934, as amended.

DESCRIPTION OF COMMON STOCK

General

The following descriptions are summaries of the material terms of our charter, amended and restated bylaws, and Stockholders Agreement, and are qualified by reference to our charter, our amended and restated bylaws, and the Stockholders Agreement, each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.4 is a part, and to Maryland corporate law. We refer in this exhibit to our articles of amendment and restatement, as amended, supplemented, corrected or restated from time to time, as our charter, and we refer to our amended and restated bylaws as our bylaws.

Our authorized capital stock consists of 200,000,000 shares of capital stock, consisting of 200,000,000 shares of common stock, $0.01 par value per share. As of February 24, 2020, 3,649,658 shares of our common stock were issued and outstanding and held by approximately 335 stockholders of record.

Common Stock

The Company's common stock carries the following rights:

Voting. Holders of our common stock are entitled to one vote per share of common stock owned as of the relevant record date on all matters submitted to a vote of stockholders. Except as otherwise provided in our charter, holders of common stock (as well as holders of any preferred stock of the Company entitled to vote with such common stockholders) vote together as a single class on all matters presented to the stockholders for their vote or approval, including the election of directors. There is no cumulative voting in the election of directors of the Company. Directors are elected by a plurality of the votes cast by the stockholders present in person or represented by proxy at the meeting and entitled to vote thereon. All other matters are determined by the affirmative vote of a majority of the votes cast by the stockholders present in person or represented by proxy at the meeting and entitled to vote thereon, unless the matter is one upon which, under applicable law, the rules or regulations of any stock exchange applicable to the Company, our charter, the bylaws or the Stockholders Agreement, a different vote is required, in which case such provision shall govern and control the vote required to approve such matter.

Dividends and other Distributions. Subject to the preferential rights of holders of any other class or series of stock of the Company, holders of shares of common stock are entitled to receive dividends and other distributions on such shares if, as and when authorized by the Board of Directors of the Company out of assets legally available therefor and declared by the Company.

Liquidation, dissolution or winding up. Subject to the preferential rights of holders of any other class or series of stock of the Company, holders of shares of common stock are entitled to share ratably in the Company's assets legally available for distribution to its stockholders in the event of the liquidation, dissolution or winding up of the Company after payment or establishment of reserves for all known debts and liabilities of the Company.

Restrictions on transfer. The common stock is not subject to restrictions on transfer as a result of the charter or the bylaws. Nevertheless, stockholders party to the Stockholders Agreement are subject to restrictions on transfer and there may be restrictions on transfer imposed by applicable securities laws or by the terms of other agreements entered into in the future. To the extent transfer restrictions apply, the Stockholders Agreement and the Maryland General Corporation Law (the "MGCL") require the Company to place restrictive legends on its stock certificates, or state on such certificates that the Company will furnish a full statement of such restrictions on request and without charge.

Liability protection. Under Maryland law, stockholders generally are not personally liable for the Company's debts or obligations solely as a result of their status as stockholders.

Other rights. Holders of shares of the common stock have no preference, conversion, exchange, sinking fund, redemption rights or appraisal rights and have no preemptive rights to subscribe for any securities of the Company, except as otherwise provided in the Stockholders Agreement.

The rights, preferences and privileges of the holders of the common stock will be subject to, and may be adversely affected by, the rights of the holders of any class or series of preferred stock that may be issued by the Company.

Preferred Stock

The Company has no shares of preferred stock authorized or outstanding. Under the charter, the Company's Board of Directors is authorized, without further action by the Company's stockholders, to classify or reclassify, in one or more classes or series, any unissued shares of common stock by setting or changing the number of shares constituting such class or series and the designation, preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends and other distributions, qualifications and terms and conditions of redemption of such shares and, if so classified or reclassified, the Company must file for record with the State Department of Assessments and Taxation of Maryland (the "SDAT") articles supplementary in substance and form as prescribed by the MGCL. If shares of one class or series of stock are classified or reclassified into shares of another class or series of stock, the number of authorized shares of the former class will be automatically decreased and the number of authorized shares of the latter class or series will be automatically increased, in each case by the number of shares so classified or reclassified, so that the aggregate number of shares of stock of all classes that the Company has authority to issue will not be more than 200,000,000.

The Company believes that the power of the Board of Directors to classify or reclassify unissued shares of stock and thereafter to authorize the Company to issue such classified or reclassified shares of stock provides the Company with increased flexibility in structuring possible future financings and acquisitions and in meeting other needs that might arise. However, the Board of Directors of the Company could authorize the issuance of shares of preferred stock that have priority over the shares of common stock with respect to dividends or other distributions or rights upon liquidation or with other terms and conditions, including voting rights, that could have the effect of delaying, deferring or preventing a transaction or a change of control of the Company that might involve a premium price for holders of the common stock or that the common stockholders otherwise believe to be in their best interests. As a result of these and other factors, the issuance of preferred stock could have an adverse impact on the market price of the common stock.

Anti-Takeover Effects of Maryland Law and Our Charter, Bylaws and Stockholders Agreement

The MGCL and our charter and bylaws contain provisions that may delay, defer or prevent a change of control or other transaction that might involve a premium price for shares of the common stock or otherwise be in the best interests of the Company's stockholders.

No Cumulative Voting. Our charter does not provide for cumulative voting with respect to the election of directors or any other matters. The absence of cumulative voting in the election of directors may make it more difficult for a stockholder who acquires a substantial minority of shares to obtain representation on the Board of Directors. To the extent that it impedes the ability of a stockholder to obtain representation, the absence of cumulative voting may render more difficult any attempt by a minority stockholder or group of holders of voting shares of stock to change or influence the management or policies of the Company, and might be viewed as perpetuating incumbent management. In addition, the absence of cumulative voting may render more difficult or discourage entirely a merger, tender offer or proxy contest or the assumption of control by a holder of a large block of the Company's stock. Mergers and other business combinations sometimes result in stockholders receiving a premium over the market price for their shares of stock.

Subtitle 8. Subtitle 8 of Title 3 of the MGCL ("Subtitle 8") permits a Maryland corporation with a class of equity securities registered under the Securities Exchange Act of 1934 (the "Exchange Act") and at least three independent directors to elect to be subject, by provision in its charter or bylaws or a resolution of its Board of Directors and notwithstanding any contrary provision in the charter or bylaws, to any or all of the following five provisions:

- a classified board;
- a two-thirds vote requirement for removing a director;
- a requirement that the number of directors be fixed only by vote of the directors;
- a requirement that a vacancy on the board be filled only by the remaining directors and for the remainder of the full of the class of directors in which the vacancy occurred; and
- a majority requirement for the calling of a stockholder-requested special meeting of stockholders.

The Company has elected by a provision in the charter to be subject to the provisions of Subtitle 8 relating to a majority requirement for the calling of a stockholder-requested special meeting. Through provisions in the Company's charter and the bylaws unrelated to Subtitle 8, the Company already vests in the Board of Directors the exclusive power to fix the number of directors. However, as permitted by the MGCL, by resolution of its Board of Directors, the Company has opted out of the provisions of Subtitle 8 relating to the classification of the Board and the two-thirds vote requirement for removing a director. In addition, the Company is prohibited from classifying the Board of Directors pursuant to Subtitle 8, unless such decision is approved by the affirmative vote of a majority of the votes cast on the matter by stockholders entitled to vote generally in the election of directors. Subject to the above requirement regarding self-classification, in the future, the Board of Directors may elect, without stockholder approval, to elect to be subject to one or more of the other provisions of Subtitle 8.

Board Composition; Removal

The stockholders party to the Stockholders Agreement have agreed that (i) the number of Directors will be fixed from time to time by the Company's Board of Directors as provided for in the Company's charter and bylaws and (ii) certain stockholders will have the right to designate members of the Company's Board of Directors until such time as such right may be lost in accordance with the Stockholders Agreement. Specifically, the Board of Directors shall consist of: (i) one director designated by Highbridge Capital Management, LLC ("Highbridge") ; (ii) one director designated by Whitebox Advisors LLC ("Whitebox Advisors"); (iii) one director designated by SGF, LLC ("SGF"); (iv) one director, who must be an Independent Director, designated by mutual agreement of Corre Partners Management, LLC ("Corre") and Wolverine Flagship Fund Trading Limited ("WFF") (together with Highbridge, Whitebox Advisors and SGF, the "Designating Stockholders"); and (v) one director, who must be the President and Chief Executive Officer of the

Company. The term “Independent Director” is defined to refer to a director who qualifies as an “independent director” of the Company under NASDAQ Marketplace Rule 5605(a)(2) (assuming for this purpose that it applies to such person). As of the date of this prospectus, the Board of Directors consists of seven members.

In general, each committee of the Board of Directors must include a director designated by a Designating Stockholder, for so long as such Designating Stockholder retains its Board Designation Right (as defined in the Stockholders Agreement) and to the extent requested by such Designating Stockholder.

The Stockholder Parties have agreed, in the Stockholders Agreement, to vote all of their shares of the Company’s common stock and other voting equity securities, execute proxies or written consents, as the case may be, and take all other necessary action in order to ensure that the composition of the Board of Directors is as set forth in the Stockholders Agreement and to ensure that the Company’s charter and bylaws both (i) facilitate, and do not at any time conflict with, any provision of Stockholders Agreement and (ii) permit the Stockholder Parties (as defined in the Stockholders Agreement) to receive the benefits to which they are entitled under the Stockholders Agreement.

Meetings of Stockholders

Special meetings of stockholders may be called by the chairman of the Company’s Board of Directors, the president and the Board of Directors. Additionally, subject to the provisions of the bylaws, a special meeting of stockholders to act on any matter that may properly be considered at a meeting of stockholders must be called by the secretary of the Company upon the written request of stockholders entitled to cast a majority of all of the votes entitled to be cast on the matter at such meeting who have requested the special meeting in accordance with the procedures specified in the bylaws. Only matters set forth in the notice of a special meeting of stockholders may be considered and acted upon at such a meeting.

Advance Notice Requirements

The bylaws provide that nominations of individuals for election as directors and proposals of business to be considered by stockholders at any annual meeting may be made only (1) pursuant to the Company’s notice of meeting, (2) by or at the direction of the Board of Directors, (3) by any stockholder (a) who was a stockholder of record both at the time of giving the notice required by the bylaws and at the time of the meeting, (b) who is entitled to vote at the meeting in the election of the individuals so nominated or on such other proposed business and (c) who has complied with the advance notice procedures of the bylaws, or (4) as otherwise provided in the Stockholders Agreement. Stockholders generally must provide notice of a stockholder proposal for the annual meeting to the secretary of the Company not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of preceding year’s annual meeting.

Only the business specified in the notice of the meeting may be brought before a special meeting of stockholders of the Company. Nominations of individuals for election as directors at a special meeting of stockholders may be made only (1) pursuant to the Company’s notice of meeting, (2) by or at the direction of the Board of Directors, (3) if the special meeting has been called in accordance with the bylaws for the purpose of electing directors, by a stockholder (a) who is a stockholder of record both at the time of giving the notice required by the bylaws and at the time of the special meeting, (b) who is entitled to vote at the meeting and (c) who has complied with the advance notice procedures of the bylaws, or (4) as otherwise provided in the Stockholders Agreement. Stockholders generally must provide notice of a stockholder proposal for a special meeting to the secretary of the Company not earlier than the close of business 120th day before such special meeting and not later than the close of business on the later of the 90th day before the special meeting or the tenth day after the first public announcement of the date of the special meeting.

A stockholder’s notice must contain certain information specified by the bylaws about the stockholder, its affiliates and any proposed business or nominee for election as a director, including information about the economic interest of the stockholder, its affiliates and any proposed nominee in the Company.

Amendment to Bylaws

The bylaws provide that, except as otherwise provided in the Company’s charter or the Stockholders Agreement, the Company’s Board of Directors has the exclusive power to make, alter or repeal the bylaws.

Business Combinations

Under the MGCL, certain “business combinations” between a Maryland corporation and an interested stockholder or an affiliate of an interested stockholder are prohibited for five years after the most recent date on which the interested stockholder becomes an interested stockholder. These business combinations include a merger, consolidation, share exchange, or, in circumstances specified in the statute, an asset transfer or issuance or reclassification of equity securities. An interested stockholder is defined as:

- any person who beneficially owns, directly or indirectly, 10% or more of the voting power of the outstanding voting stock of the corporation; or

- an affiliate or associate of the corporation who, at any time within the two-year period prior to the date in question, was the beneficial owner, directly or indirectly, of 10% or more of the voting power of the then outstanding voting stock of the corporation.

A person is not an interested stockholder under the statute if the Board of Directors of the corporation approved in advance the transaction by which the person otherwise would have become an interested stockholder.

After such five-year period, any business combination between the Maryland corporation and an interested stockholder generally must be recommended by the Board of Directors of the corporation and approved by the affirmative vote of at least:

• 80% of the votes entitled to be cast by holders of outstanding shares of voting stock of the corporation, voting together as a single voting group; and

• two-thirds of the votes entitled to be cast by holders of voting stock of the corporation other than shares held by the interested stockholder with whom (or with whose affiliate) the business combination is to be effected or held by an affiliate or associate of the interested stockholder.

These supermajority approval requirements do not apply if, among other conditions, the corporation's common stockholders receive a minimum price (as defined in the MGCL) for their shares and the consideration is received in cash or in the same form as previously paid by the interested stockholder for its shares.

The business combination statute may discourage others from trying to acquire control of the Company and increase the difficulty of consummating any offer.

Pursuant to the statute, the Board of Directors of the Company has by resolution exempted business combinations between the Company and any stockholder party to the Stockholders Agreement and between the Company and any other person, provided that in the latter case the business combination is first approved by the Board of Directors (including a majority of the Company's directors who are not affiliates or associates of such person). Consequently, the five-year prohibition and the supermajority vote requirements will not apply to a business combination between the Company and any stockholder party to the Stockholders Agreement or to a business combination between the Company and any other person if the Board of Directors has first approved the combination. As a result, any person described in the preceding sentence may be able to enter into business combinations with the Company that may not be in the best interests of stockholders of the Company, without compliance with the supermajority vote requirements and other provisions of the statute. The Company cannot assure you that the Board of Directors will not amend or repeal this resolution in the future.

Exchange Listing

Our common stock is presently quoted on the OTCQB under the symbol "CTAM".

Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue Brooklyn, New York 11219, and its telephone number is (800) 937-5449.

A.M. CASTLE & CO.

NON-EMPLOYEE DIRECTOR
RESTRICTED STOCK AWARD AGREEMENT
2017 MANAGEMENT INCENTIVE PLAN

GRANTEE:

NUMBER OF SHARES OF RESTRICTED STOCK: 22,910

DATE OF GRANT: April 25, 2018

This is an award agreement (the "Award Agreement") between A.M. Castle & Co., a Maryland corporation (the "Corporation") and the individual named above (the "Grantee"). The Corporation hereby grants to the Grantee an aggregate of the above-stated number of shares of Common Stock of the Corporation on the terms and conditions contained herein and in the 2017 Management Incentive Plan, and as may be further amended from time to time (the "Plan"). Capitalized terms used but not otherwise defined herein shall have the meaning ascribed to them in the Plan.

1. Vesting of Restricted Stock. Subject to the terms and conditions of this Award Agreement and the Plan, the Restricted Stock shall vest as follows:

NUMBER OF SHARES: 22,910 VESTED ON OR AFTER: April 25, 2019

2. Stock Certificates. Certificates for the Restricted Stock shall be issued by the Corporation in the name of the Grantee and delivered to the Grantee at the time of grant. The certificates shall bear the following legend evidencing its restrictive nature as follows:

> THE TRANSFERABILITY OF THIS CERTIFICATE AND THE SHARES OF STOCK REPRESENTED HEREBY ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE) CONTAINED IN THE 2017 MANAGEMENT INCENTIVE PLAN AND AN AGREEMENT ENTERED INTO BETWEEN THE REGISTERED OWNER AND A.M. CASTLE & CO. A COPY OF SUCH PLAN AND AGREEMENT IS ON FILE IN THE OFFICE OF THE SECRETARY OF A. M. CASTLE & CO., 1420 KENSINGTON ROAD, SUITE 220, OAK BROOK, ILLINOIS 60523.

3. Effect of Termination of Service as a Director. If the Grantee's service as a director of the Corporation terminates for any reason, other than due to a Change in Control, as defined below, then any Restricted Stock not vested as of such date will be forfeited to the Corporation, subject in each case to acceleration of vesting, as determined by the Committee in its sole discretion.

4. Change in Control. If the Grantee's service as a director of the Corporation terminates due to a Change in Control, then any Restricted Stock not vested as of such Change in Control will vest in full upon the closing of the Change in Control. For purposes of this Award Agreement, a "Change in Control" shall mean any of the following that occur after the Date of Grant:

a. Approval by the stockholders of the Corporation of a complete dissolution or liquidation of the Corporation;

b. Any sale or disposition to a "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act) of the assets of the corporation equal to more than fifty percent (50%) of the total gross fair market value of all of the assets of the Corporation before such sale or disposition, provided that, for purposes of this subparagraph, the "gross fair market value" shall be determined without regard to any liabilities associated with the assets of the Corporation or the assets so sold or disposed;

c. There is consummated a merger or consolidation of the Corporation or any direct or indirect subsidiary of the Corporation with any other corporation or entity, other than a merger or consolidation immediately following which the individuals who comprise the Board of the Corporation immediately prior thereto constitute at least a majority of the board of directors of (i) the Corporation, (ii) the entity surviving such merger or consolidation, or (iii) if the Corporation or the entity surviving such merger or consolidation is then a subsidiary, the ultimate parent thereof.

5. Rights as Shareholder. The Grantee shall have all rights of a shareholder prior to the vesting of the Restricted Stock, including the right to vote the shares and receive all dividends and other distributions paid or made with respect thereto.

6. Transferability. The Restricted Stock may not be transferred, assigned or made subject to any encumbrance, pledge or charge until such Restricted Stock has vested and any other restrictions or conditions on such Restricted Stock are removed, have been satisfied or expire.

7. Amendment. This Award Agreement may be amended only by a writing executed by the Corporation and the Grantee that specifically states that it is amending this Award Agreement. Notwithstanding the foregoing, this Award Agreement may be amended solely by the Committee by a writing which specifically states that it is amending this Award Agreement, so long as a copy of such amendment is delivered to the Grantee, and provided that no such amendment adversely affecting the rights of the Grantee hereunder may be made without the Grantee's written consent. Without limiting the foregoing, the Committee reserves the right to change, by written notice to the Grantee, the provisions of the Restricted Stock or this Award Agreement in any way it may deem necessary or advisable to carry out the purpose of the grant as a result of any change in applicable laws or regulations or any future law, regulation, ruling or judicial decisions, provided that any such change shall be applicable only to shares of Restricted Stock which are than subject to restrictions as provided herein.

8. Severability. If all or any part of this Award Agreement is declared by any court or government authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Award Agreement not declared to be unlawful or invalid. Any Section of this Award Agreement so declared to be unlawful or invalid shall, if possible, be construed in a manner that will give effect to the terms of such Section to the fullest extent possible while remaining lawful and valid.

9. Construction. The Restricted Stock is being issued pursuant to Section 9 of the Plan and is subject to the terms of the Plan. A copy of the Plan has been given to the Grantee and

additional copies of the Plan are available upon request during normal business hours at the principal executive officers of the Corporation. To the extent that any provision of this Award Agreement violates or is inconsistent with an express provision of the Plan, the Plan provision shall govern and any inconsistent provision in this Award Agreement shall be of no force or effect.

10. Binding Effect and Benefit. This Award Agreement shall be binding upon and, subject to the conditions hereof, inure to the benefit of the Corporation, its successors and assigns, and the Grantee and his successors and assigns.

11. Entire Understanding. This Award Agreement embodies the entire understanding and agreement of the parties in relation to the subject matter hereof, and no promise, condition, representation or warranty, expressed or implied, not herein stated, shall bind either party hereto.

12. Governing Law; Choice of Forum. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland. The Grantee submits to the in personam jurisdiction of the federal and state courts in the district or county, respectively, in which Oak Brook, Illinois is situate and agrees that such courts shall be the sole and exclusive forum for the resolution of any disputes regarding the Plan or this Award Agreement.

13. Signature in Counterparts. This Award Agreement may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

The Corporation and the Grantee hereby agree to the terms and conditions of this Award Agreement and have executed it as of the Date of Grant set forth above.

A.M. CASTLE & CO.

____

By: Marec E. Edgar
Its: Executive Vice President, General Counsel,
Secretary & Chief Administrative Officer

____

Exhibit 21.1

Subsidiary	Jurisdiction of Incorporation	Ownership
A.M. Castle & Co. (Canada) Inc.	British Columbia	100%
A.M. Castle & Co. (Singapore) Pte. Ltd.	Singapore	100%
A.M. Castle Metal Materials (Shanghai) Co., Ltd.	Peoples Republic of China	100%
A.M. Castle Metals UK Limited	United Kingdom	100%
Castle Metals de Mexicali, S.A. de C.V.	Mexico	100%
Castle Metals de Mexico, S.A. de C.V.	Mexico	100%
Castle Metals France S.A.S.	France	100%
Castle Metals UK Limited	United Kingdom	100%
HY-Alloy Steels Company	Delaware	100%
Keystone Service Inc.	Indiana	100%
Keystone Tube Company, LLC	Delaware	100%
Total Plastics, Inc.	Michigan	100%

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-221785 on Form S-1 and Registration Statement No. 333-221787 on Form S-8 of our report dated February 27, 2020, relating to the consolidated financial statements of A.M. Castle & Co. and subsidiaries (the "Company"), (which report expresses an unqualified opinion and includes an explanatory paragraph related to the adoption of Financial Accounting Standards Board Accounting Standard Update No. 2016-02, *Leases (Topic 842),* under the modified retrospective method), appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 27, 2020

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Marec E. Edgar, certify that:

1. I have reviewed this Annual Report on Form 10-K of A. M. Castle & Co. (the “Company”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;

4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures [as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)] and internal control over financial reporting [as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)] for the Company and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the Company’s most recent fiscal quarter (the Company’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonable likely to materially affect, the Company’s internal control over financial reporting; and

5. The Company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’s board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.

Date: February 27, 2020

/s/ Marec E. Edgar

Marec E. Edgar
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Patrick R. Anderson, certify that:

1. I have reviewed this Annual Report on Form 10-K of A. M. Castle & Co. (the "Company");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures [as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)] and internal control over financial reporting [as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)] for the Company and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonable likely to materially affect, the Company's internal control over financial reporting; and

5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: February 27, 2020

/s/ Patrick R. Anderson

Patrick R. Anderson
Executive Vice President, Finance & Administration
(Principal Financial Officer)

Exhibit 32.1

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

In connection with the accompanying Annual Report of A. M. Castle & Co. (the "Company") on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Marec E. Edgar, President and Chief Executive Officer (Principal Executive Officer) and Patrick R. Anderson, Executive Vice President, Finance and Administration (Principal Financial Officer) of the Company, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted to section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

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

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

/s/ Marec E. Edgar
Marec E. Edgar
President and Chief Executive Officer
February 27, 2020

/s/ Patrick R. Anderson
Patrick R. Anderson
Executive Vice President, Finance and Administration
February 27, 2020

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. This certification shall also not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.