

Synalloy



ANNUAL REPORT

Synalloy

COMPANY

PROFILE

Founded in 1945, Synalloy Corporation has a rich history supplying its customers with quality products and services while providing employees with an excellent place to work. Headquartered in Richmond, Virginia, Synalloy and its affiliates

currently employ more than 700 people with operations in North Carolina, South Carolina, Ohio, Pennsylvania, Tennessee, and Texas.

THE COMPANY IS A DIVERSE MANUFACTURER COMPRISED OF TWO MAJOR OPERATING SEGMENTS:

Synalloy **Metals**

Synalloy **Chemicals**

METALS SEGMENT

- Manufacturer of stainless steel pipe and tube, galvanized pipe and tube and ornamental tube.
- Manufacturer of stainless steel and carbon heavy wall pipe
- Manufacturer of fiberglass and steel liquid storage tanks, separation equipment, and ASME code vessels
- Master distributor of hot finish, seamless carbon steel pipe and tubing, with an emphasis on large outside diameters and exceptionally heavy wall thickness

SPECIALTY CHEMICALS SEGMENT

- Custom tolling and contract manufacturing
- Expertise in surfactants, defoamers, and other specialty chemicals
- Breadth of equipment and capabilities
- Proprietary products available for sale to distributors

DEAR SHAREHOLDERS, CUSTOMERS & EMPLOYEES;

Synalloy had an exceptionally good year in 2018. Our Company's financial performance was excellent, exceeding goals and in some cases toppling records that were more than 20 years old. Additionally, we accomplished a host of key initiatives that will provide continued momentum as we wrap up the current decade and head into the next. The record sales of \$201.1 million posted in 2017 did not hold up very long. Sales for 2018 were up 40%, coming in at \$280.8 million. Both adjusted EBITDA and adjusted EBITDA per share established new records at \$34.1 million and \$3.85 respectively. The previous record goes all the way back to 1995, a year that saw nickel prices more than double, generating outsized inventory profits. Adjusted Net Income in 2018, excluding mark to market losses on securities and acquisition related charges was \$18.2 million, or \$2.06 per share.

Both our shareholders and employees enjoyed the benefits of these strong financial results. The dividend to our shareholders increased by 92% over the prior year and our share price appreciated by 24%. During the year, our share price reached a ten-year high of \$24.55. For the first time in the Company's history, our stock was added to the Russell 2000 index. Our employees realized substantial increases in bonuses for their efforts in 2018. Incentive

bonuses to our manufacturing employees increased nearly four-fold over the bonuses paid in 2017, also the management team saw their bonuses double over the previous year.

Looking at the balance sheet, we report that our debt and associated leverage was a bit higher than our historical average. We ended 2018 with net debt to adjusted EBITDA of 2.1 times as compared with the ten-year average of 1.7 times. Hand in hand with the substantial growth in sales in 2018, both Accounts Receivables and Inventories drove an increased need for working capital. To support this growth, our ABL line with BB&T was increased at year-end to \$100 million.

Before leaving the financial discussion, I would like to comment on our performance relative to past cycles, and on how Synalloy has been valued over time. The comparisons to previous periods are not perfect, as the last several years reflect the use of sale-leaseback financing on our land and buildings. The effect of this financing is to reduce adjusted EBITDA by the amount of the building rental expense. For example, in 2018, building rental expense for the entire Company was \$3.0 million. While our adjusted EBITDA for recent years is arguably lower on a direct comparison with earlier periods, our debt and possibly equity would have been higher in recent years had we not

utilized this financing option.

Going back to the ten-year period 2001-2010, adjusted EBITDA averaged \$7.4 million annually, or \$1.20 per share. This period was marked by generally rising nickel prices, increasing adjusted EBITDA by \$0.5 million annually. Net debt to adjusted EBITDA (Leverage) was 1.6 times. During this period, the Company's Enterprise Value (EV) to EBITDA averaged 9.7 times. In those years with the best financial performance, EV to EBITDA averaged 7.8 times.

For the eight-year period 2011-2018, adjusted EBITDA averaged \$14.9 million annually, or \$1.88 per share. This period was marked by generally falling nickel prices, reducing adjusted EBITDA by \$1.0

million annually. Leverage during this period averaged 1.9 times. The Company's EV to EBITDA averaged 9.2 times, with the best financial years averaging 7.4 times.

As previously noted, 2018 generated adjusted EBITDA of \$34.1 million and leverage at year-end was 2.1 times. At year-end, EV to EBITDA was 6.4 times. At the time of this letter, our EV to EBITDA was 5.8 times.

This demonstrates the progress that our growth strategy is producing as it relates to the Company's financial performance. However, we have yet to see a consistent recognition of this in our share price and Enterprise Value. We are not alone in this regard. Many micro-cap and small cap





KEVIN VAN ZANDT

Executive Vice President,
Munhall Operations

companies are undervalued relative to the universe of larger companies. Whether it's a dearth of research coverage, passive investing focused on larger companies, a lack of liquidity in the micro-cap sector, or anticipation of an eventual downturn in the business cycle, our share price has lagged our financial performance over the last year.

Let me now turn to the acquisitions completed in 2018. It was a very productive year. In July, we completed the acquisition of Marcegaglia's galvanized tube business in Munhall, PA. You will recall that in the spring of 2017, we acquired its stainless steel pipe and tube business in Munhall, PA. The galvanized tube business is focused on several end markets, including Intermediate Bulk Containers (IBCs) and road construction. This product is manufactured on high-frequency laser mills, which run at speeds as fast as 400 feet per minute. These mills will also allow us to manufacture stainless steel ornamental tube. The General Manager of the galvanized unit, Andrew Sorg, joined the Bristol Metals team and



ANDREW SORG

Vice President,
Munhall Operations

has been elevated to the position of Vice President of Operations at Munhall. With the addition of the galvanized business, Bristol Metals now occupies the entire Munhall facility. Kevin Van Zandt, Executive Vice President of Bristol Metals Munhall Operations, who joined us in 2017 will continue to manage the entire Munhall facility. Earlier this year, we executed long-term agreements with several key customers that increase our galvanized tonnage by as much as 30%.

In the second half of 2018, we had the pleasure of meeting the owners of American Stainless Tubing, Inc. (ASTI). ASTI was a second generation, family owned business that started as a manufacturer of stainless steel furniture back in 1968. Unable to find quality tubing for their furniture, the founders decided to build their own tube mills. Ten years later, they were out of the furniture business and focused exclusively on the sale of stainless steel tubing to third parties. By 2009, one of the founder's daughters, Maria Haughton Roberson, was named President and CEO of the company. Maria



**MARIA HAUGHTON
ROBERSON**

President, ASTI



REX HAUGHTON

Vice President of Operations, ASTI

and her brother, Rex, along with a very capable management team, built ASTI into one of the premier manufacturers of high-end, polished stainless steel ornamental tubing in the U.S. With two production facilities in the Charlotte, N.C. area, ASTI sells directly to OEMs and fabricators that supply multiple end markets, including: marine, appliances, transportation (auto, motorcycles, buses), architectural and construction, medical, and food service equipment. From mirror-finish railing on Carver yachts and Harley-Davidson handlebars to hospital IV poles, hotel luggage carts, pool ladders, refrigerator door handles, and bed rails for pickup trucks, there is a good chance you've already had your hands on ASTI steel.

As our two teams spent more time together, it was clear that a partnership would be best for both companies. The acquisition of ASTI was completed on January 1, 2019. Maria and her entire management team will continue to lead ASTI and will work directly with Kyle Pennington, our Metals Segment President.

We are thrilled to add ASTI and the former Marcegaglia galvanized business and all of their employees to the Synalloy family. Both units are perfect complements to our Metals business, and we believe with Synalloy's support that they will continue to grow and prosper. These new additions, coupled with the forecasted organic growth of our legacy units, can drive sales in 2019 to \$340 million.

We find that our pipeline of opportunities continues to expand. We are regularly contacted by potential sellers and their intermediaries who are familiar with Synalloy's story. We will continue to be disciplined in our process, looking for companies with strong management teams and product lines that allow us to build scale in both our Metals and Chemicals segments.

With more than 700 employees, the safety of our personnel remains the number one priority. In 2018, we had a total of seven lost time accidents across seven production facilities. One lost time accident is too many, even those of a relatively minor nature. We will continue to work toward

our goal of zero lost time accidents because nothing is more important than returning our employees home safely at the end of every work day.

As I write this letter in early March, we see no signs of declining business activity in any of our primary end markets. That said, we recognize that many economists are looking for growth in industrial production to slow in 2019 and 2020. Whether this turns into an actual decline in growth remains to be seen. There will always be peaks and troughs in our current businesses. That has been the case since the Company was established in 1945. As I measure the success of our efforts, one of the primary goals is for the Company to outperform each successive business cycle. Having done that, we believe that we are on track to continue to deliver.

Later this year, Manufacturers Chemicals will celebrate its 100-year anniversary. That is a staggering accomplishment for any business to weather all the changes that have occurred

during that time. Products have come and gone, employees have built careers and retired, and the economy has undergone massive change. Through it all, the business is still there and thriving. That spirit carries on in Synalloy today and will drive even greater accomplishments in the future. As I said in last year's annual report, Synalloy's best days are ahead of us!

In closing, on behalf of the Board of Directors, I would like to thank Synalloy's employees, whose work ethic and unique skills make a year like 2018 possible. We have the greatest respect for all of you and sincerely appreciate your efforts.

Best Regards,



Craig C. Bram
Chief Executive Officer & President
March 15, 2018



MANUFACTURERS CHEMICALS CELEBRATES A CENTURY

Manufacturers Chemical, LP, has diversified product base

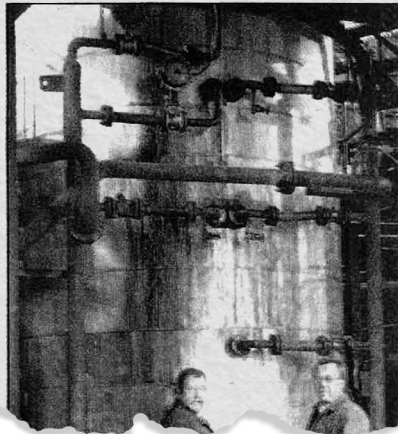
Established in 1919 as Manufacturers Soap and Chemical, Manufacturers Chemical, LP is still growing in the community.

Manufacturers Soap and Chemical was founded in part by Hardwick Woolen Mills, now known as Hardwick Clothes.

In the late 1800s and early 1900s, Hardwick manufactured a variety of textile products. Thus the necessity of birthing a company to cut costs and locally produce necessary fabric treatments.

"Hardwick was probably the first textile producer to get into the chemical industry," explained Ron Braam.

Braam serves as chief executive officer of Synalloy Corp. and Manufacturers Chemical, which is a publicly held entity



Manufacturers Chemicals plans plant expansion

Manufacturers Chemicals, LLC and T&G Construction, a pair of long-time economic development partners in Bradley County, have launched a 25,000-square-foot addition to the existing facility in the Cleveland Industrial Park on Old Tasso Road.

Manufacturers Chemicals is a division of Synamloy Corp.; T&G Construction is a division of Lynn Jones Enterprises, a Cleveland-based business conglomerate that includes several diversified operations and two nonprofit organizations.

The Manufacturers Chemicals site already boasts 100,000 square feet of space. This includes plant expansions in 1990 and 1994. T&G built both.

The newest project is already under way. Once completed, it will enhance current warehouse operations, alleviate traffic congestion on a busy section of Old Tasso Road and improve the company's material-handling capabilities, according to Ron Braam.

officer of Synamloy.

"The construction project involves the erection of a warehousing facility to augment existing warehouses at the site and to reconfigure Building 5," Braam explained. "This will redirect traffic for container deliveries and shipments onto Dalewood Lane. This will limit truck traffic onto the plant site from Old Tasso Road to only bulk deliveries and shipments."

Extensive grading and the addition of a retention pond, both of which comply with strict state and local regulations, have been completed at the site. These improvements will redirect rainfall runoff.

The expansion project marks T&G's 18th year of operation. The widely-respected contractor is one of the largest commercial and industrial builders in Bradley County. At any given time, the company employs as many as 125 to 150 subcontracted workers.

See PLAN, Page 10

1974

Manufacturers Chemical Purchases More Land

Manufacturers' Chemical Corporation purchased a five-acre site on Old Tasso Road in 1973 to enable future expansion of facilities.

The tract is opposite the Owens-Illinois plant. Future expansion plans at the company include the construction of a 100,000 square

foot one-floor plant at the new location.

The site would also contain office space, laboratories and eventually replace the existing plant on Euclid Avenue now in use. The new plant is to be completely expandable with more

sophisticated reaction equipment to hold rapidly expanding raw material costs in line.

Company president George Corn said, "Moderate growth in sales for 1974 is being projected by management although overriding economic conditions in the textile industry and the

The company is also currently examining feasibility of time sharing a local computer system to improve its data processing and streamlining certain phases of its accounting operation.

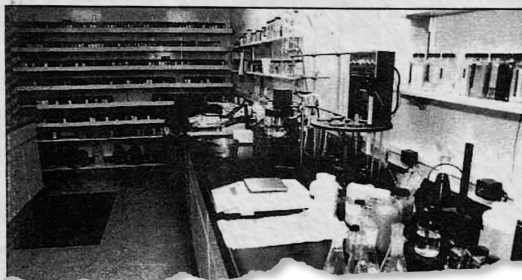
The soap and

equipment.

New equipment was installed to meet a growing demand for the new fiber lubricant chemical line. The company bases the growing demand on trade

Oklahoma, Illinois and Pennsylvania, states that have been outside the company's previous sphere of sales.

Company to celebrate 75th anniversary



Manufacturers Soap and Chemical

Manufacturers Soap and Chemical Co. will celebrate its 75th anniversary during 1994. As a result of excellent growth in 1993, the company has ambitious plans for the anniversary.

During 1993, the company experienced a 20.9 percent increase in sales, posting its best year of growth since 1980. The mix was



For the past 100 years, Manufacturers Chemicals in Cleveland, TN has been helping medium and large chemical companies make their proprietary product development and manufacturing needs a reality. Manufacturers Chemicals is a true American success story and we are proud to celebrate its 100th anniversary this year.

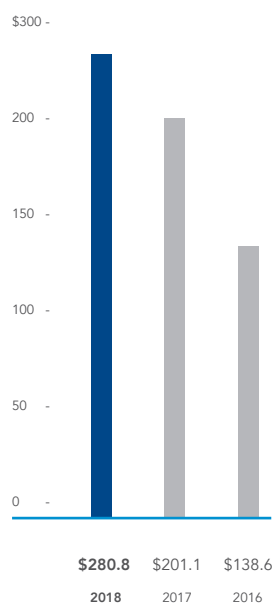
FINANCIAL HIGHLIGHTS

	2018	2017	2016
(dollar amounts in thousands except per share data and stock price)			
OPERATIONS			
Net Sales	\$ 280,841	\$ 201,148	\$ 138,566
Gross Profit	51,237	28,081	16,904
Operating (Loss) Income (1)	21,237	2,057	(8,246)
Net (Loss) Income	13,097	1,341	(6,994)
FINANCIAL POSITION			
Total Assets	228,399	159,874	138,638
Shareholders' Equity	102,484	89,700	88,593
FINANCIAL RATIOS			
Gross Profit to Net Sales	18%	14%	12%
Return on Average Equity	14%	2%	-7%
PER SHARE DATA—DILUTED			
Net (Loss) Income	\$ 1.48	\$ 0.15	\$ (0.81)
STOCK PRICE			
Price Range of Common Stock			
High	\$ 24.55	\$ 15.30	\$ 11.70
Low	\$ 12.60	\$ 9.75	\$ 6.42
Close	\$ 16.59	\$ 13.40	\$ 10.95

(1) Certain prior period amounts have been reclassified to conform to the current period presentation, including changes in the fair value of the Company's earn-out liabilities from "Other Expense (Income)" to "Operating Income (Loss)".

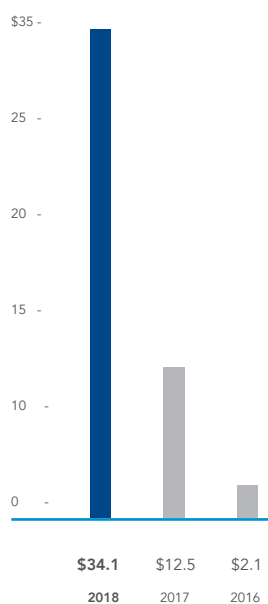
NET SALES

(in millions)



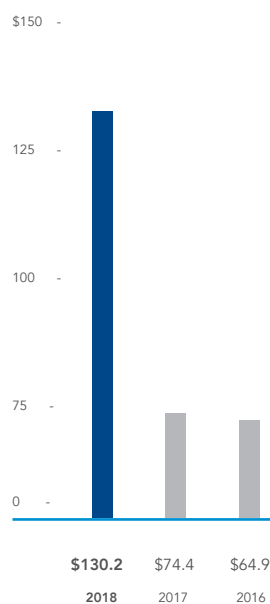
ADJUSTED EBITDA

(in millions)



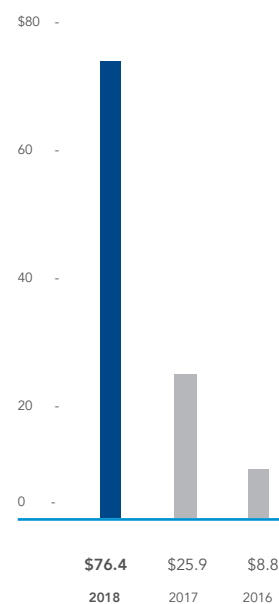
WORKING CAPITAL

(in millions)



TOTAL DEBT OUTSTANDING

(in millions)



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, 2018

OR

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

COMMISSION FILE NUMBER 0-19687

Synalloy

SYNALLOY CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State of incorporation)

57-0426694

(I.R.S. Employer Identification No.)

4510 Cox Road, Suite 201, Richmond, Virginia, 23060

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (804) 822-3260

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

Common Stock, \$1.00 Par Value

(Title of Class)

Name of each exchange on which registered:

NASDAQ Global Market

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

None

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

Based on the closing price as of June 30, 2018, which was the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the common stock held by non-affiliates of the registrant was \$165.7 million. Based on the closing price as of March 11, 2019, the aggregate market value of common stock held by non-affiliates of the registrant was \$123.6 million. The registrant did not have any non-voting common equity outstanding at either date.

The number of shares outstanding of the registrant's common stock as of March 11, 2019 was 8,964,874.

Documents Incorporated By Reference

Portions of the Proxy Statement for the 2019 annual shareholders' meeting are incorporated by reference into Part III of this Form 10-K.

Synalloy Corporation
Form 10-K
For Period Ended December 31, 2018
Table of Contents

		Page
Part I		
	Item 1 Business	2
	Item 1A Risk Factors	6
	Item 1B Unresolved Staff Comments	14
	Item 2 Properties	15
	Item 3 Legal Proceedings	15
	Item 4 Mine Safety Disclosures	15
Part II		
	Item 5 Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	16
	Item 6 Selected Financial Data	18
	Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations	19
	Item 7A Quantitative and Qualitative Disclosures about Market Risk	28
	Item 8 Financial Statements and Supplementary Data	30
	Notes to Consolidated Financial Statements	34
	Segment Information	49
	Management's Annual Report On Internal Control Over Financial Reporting	58
	Report of Independent Registered Public Accounting Firm - Consolidated Financial Statements - KPMG LLP	59
	Report of Independent Registered Public Accounting Firm - Internal Control - KPMG LLP	60
	Item 9 Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	61
	Item 9A Controls and Procedures	61
	Item 9B Other Information	61
Part III		
	Item 10 Directors, Executive Officers and Corporate Governance	61
	Item 11 Executive Compensation	61
	Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	62
	Item 13 Certain Relationships and Related Transactions, and Director Independence	62
	Item 14 Principal Accounting Fees and Services	62
Part IV		
	Item 15 Exhibits, Financial Statement Schedules	63
	Item 16 Form 10-K Summary	64
Signatures		66
Index to Exhibits		65

Forward-Looking Statements

This Annual Report on Form 10-K includes and incorporates by reference "forward-looking statements" within the meaning of the federal securities laws. All statements that are not historical facts are forward-looking statements. The words "estimate," "project," "intend," "expect," "believe," "should," "anticipate," "hope," "optimistic," "plan," "outlook," "should," "could," "may" and similar expressions identify forward-looking statements. The forward-looking statements are subject to certain risks and uncertainties, including without limitation those identified below, which could cause actual results to differ materially from historical results or those anticipated. Readers are cautioned not to place undue reliance on these forward-looking statements. The following factors could cause actual results to differ materially from historical results or those anticipated: adverse economic conditions; the impact of competitive products and pricing; product demand and acceptance risks; raw material and other increased costs; raw materials availability; employee relations; ability to maintain workforce by hiring trained employees; labor efficiencies; customer delays or difficulties in the production of products; new fracking regulations; a prolonged decrease in nickel and oil prices; unforeseen delays in completing the integrations of acquisitions; risks associated with mergers, acquisitions, dispositions and other expansion activities; financial stability of our customers; environmental issues; negative or unexpected results from tax law changes; unavailability of debt financing on acceptable terms and exposure to increased market interest rate risk; inability to comply with covenants and ratios required by our debt financing arrangements; ability to weather an economic downturn; loss of consumer or investor confidence and other risks detailed in Item 1A, Risk Factors, in this Annual Report on Form 10-K and from time-to-time in Synalloy Corporation's Securities and Exchange Commission filings. Synalloy Corporation assumes no obligation to update any forward-looking information included in this Annual Report on Form 10-K.

PART I

Item 1 Business

Synalloy Corporation, a Delaware corporation, was incorporated in 1958 as the successor to a chemical manufacturing business founded in 1945. Its charter is perpetual. The name was changed on July 31, 1967 from Blackman Uhler Industries, Inc. The Company's executive office is located at 4510 Cox Road, Suite 201, Richmond, Virginia 23060. Unless indicated otherwise, the terms "Synalloy", "Company," "we" "us," and "our" refer to Synalloy Corporation and its consolidated subsidiaries.

The Company's business is divided into two reportable operating segments, the Metals Segment and the Specialty Chemicals Segment. The Metals Segment operates as four reporting units, all International Organization for Standardization ("ISO") certified manufacturers, including Bristol Metals, LLC ("BRISMET"), a wholly-owned subsidiary of Synalloy Metals, Inc., Palmer of Texas Tanks, Inc. ("Palmer"), Specialty Pipe & Tube, Inc. ("Specialty"), and American Stainless Tubing, LLC ("ASTI"), which began operations effective January 1, 2019 pursuant to our acquisition of substantially all of the assets of American Stainless Tubing, Inc. ("American Stainless") (see Note 23 to the Consolidated Financial Statements). BRISMET manufactures stainless steel, galvanized, and other alloy pipe and tube. Palmer manufactures liquid storage solutions and separation equipment. Specialty is a master distributor of seamless carbon pipe and tube. ASTI manufactures ornamental stainless steel tubing. The Metals Segment's markets include the oil and gas, chemical, petrochemical, pulp and paper, mining, power generation (including nuclear), water and waste water treatment, liquid natural gas ("LNG"), brewery, food processing, petroleum, pharmaceutical, automotive & commercial transportation, appliance, architectural, and other heavy industries. The Specialty Chemicals Segment operates as one reporting unit which includes Manufacturers Chemicals, LLC ("MC"), a wholly-owned subsidiary of Manufacturers Soap and Chemical Company ("MS&C"), and CRI Tolling, LLC ("CRI Tolling"). The Specialty Chemicals Segment produces specialty chemicals for the chemical, paper, metals, mining, agricultural, fiber, paint, textile, automotive, petroleum, cosmetics, mattress, furniture, janitorial and other industries. MC manufactures lubricants, surfactants, defoamers, reaction intermediaries and sulfated fats and oils. CRI Tolling provides chemical tolling manufacturing resources to global and regional chemical companies and contracts with other chemical companies to manufacture certain, pre-defined products.

General

Metals Segment – This segment is comprised of four wholly-owned subsidiaries: Synalloy Metals, Inc., which owns 100 percent of the membership interests of BRISMET, located in Bristol, Tennessee and Munhall, Pennsylvania; Palmer, located in Andrews, Texas; Specialty, located in Mineral Ridge, Ohio and Houston, Texas; and ASTI, located in Troutman and Statesville, North Carolina.

BRISMET manufactures welded pipe and tube, primarily from stainless steel, duplex, and nickel alloys. Pipe is produced in sizes from 3/8 inch to 120 inches in diameter and wall thickness up to one and one-half inches. Eighteen-inch and smaller diameter pipe is made on equipment that forms and welds the pipe in a continuous process. Pipe larger than 18 inches in diameter is formed on presses or rolls and welded on batch welding equipment. Pipe is normally produced in standard 20-foot lengths. However, BRISMET has unusual capabilities in the production of long length pipe without circumferential welds. This can reduce the installation cost for the customer. Lengths up to 60 feet can be produced in sizes up to 18 inches in diameter. In larger sizes, BRISMET has a

unique ability among domestic producers to make 48-foot lengths in diameters up to 36 inches. Over the past four years, BRISMET has made substantial capital improvements, installing an energy efficient furnace to anneal pipe quicker while minimizing natural gas usage; system improvements in pickling to maintain the proper chemical composition of the pickling acid; and developing a heavy wall/quick turn welded pipe production shop by adding a 4,000 tonne press along with all necessary ancillary processes. BRISMET's Munhall facility manufactures stainless welded pipe as well as new product offerings in welded tubing in diameters from 5/8 inch to eight inches and gauges from 0.028 inch to 1/4 inch. Additionally, the Munhall facility produces galvanized carbon tubing in custom sizes. Munhall was designed for improved product flow and the latest technology including laser welding and in-line annealing.

Palmer is a manufacturer of fiberglass and steel storage tanks for the oil and gas, waste water treatment and municipal water industries. Located in Andrews, Texas, Palmer is ideally located in the heart of a significant oil and gas production territory. Palmer produces made-to-order fiberglass tanks, utilizing a variety of custom mandrels and application specific materials. Its fiberglass tanks range from two feet to 30 feet in diameter at various heights. Most of these tanks are used for oil field waste water capture and are an integral part of the environmental regulatory compliance of the drilling process. Each fiberglass tank is manufactured to American Petroleum Institute Q1 standards to ensure product quality. Palmer's steel storage tank facility enables efficient, environmentally compliant production with designed-in expansion capability to support future growth. Finished steel tanks range in size predominantly from 50 to 1,500 barrels and are used to store extracted oil.

Specialty is a leading master distributor of hot finish, seamless, carbon steel pipe and tubing, with an emphasis on large outside diameters and exceptionally heavy wall thickness. Specialty's products are primarily used for mechanical and high-pressure applications in the oil and gas, capital goods manufacturing, heavy industrial, construction equipment, paper and chemical industries. Operating from facilities located in Mineral Ridge, Ohio and Houston, Texas, Specialty is well-positioned to serve the major industrial and energy regions and successfully reach other target markets across the United States. Specialty performs value-added processing on approximately 80 percent of products shipped, which would include cutting to length, heat treatment, testing, boring and end finishing and typically processes and ships orders in 24 hours or less. Based upon its short lead times, Specialty plays a critical role in the supply chain, supplying long lead-time items to markets that demand fast deliveries, custom lengths, and reliable execution of orders.

ASTI is a leading manufacturer of high-end ornamental stainless steel tubing, supplying the automotive, commercial transportation, marine, food services, construction, furniture, healthcare, and other industries. Operating facilities are located in Troutman and Statesville, North Carolina. ASTI combines the use of superior metal quality with in-house capabilities in slitting and welding, along with patented and proprietary finishing capabilities and the highest levels of customer service and technical support to provide customers with the highest quality ornamental product available in the market. Product range includes 1/2" OD to 2-1/2" OD up to 5" OD, in a variety of shapes, including squares, rectangles and ellipsicals. Refer to Note 23 to the Consolidated Financial Statements for further details.

In order to maintain strong business relationships, the Metals Segment uses only a few raw material suppliers. 10 suppliers furnish approximately 84 percent of total dollar purchases of raw materials, with one supplier furnishing 31 percent of material purchases. However, the Company does not believe that the loss of this supplier would have a materially adverse effect on the Company as raw materials are readily available from a number of different sources, and the Company anticipates no difficulties in fulfilling its requirements.

Specialty Chemicals Segment – This segment consists of the Company's wholly-owned subsidiary MS&C. MS&C owns 100 percent of the membership interests of MC, which has a production facility in Cleveland, Tennessee. This segment also includes CRI Tolling which is located in Fountain Inn, South Carolina. MC and CRI Tolling are aggregated as one reporting unit and comprise the Specialty Chemicals Segment. Both facilities are fully licensed for chemical manufacture. MC manufactures lubricants, surfactants, defoamers, reaction intermediaries, and sulfated fats and oils. CRI Tolling provides chemical tolling manufacturing resources to global and regional companies and contracts with other chemical companies to manufacture certain pre-defined products.

MC produces over 1,100 specialty formulations and intermediates for use in a wide variety of applications and industries. MC's primary product lines focus on the areas of defoamers, surfactants, and lubricating agents. These three fundamental product lines find their way into a large number of manufacturing businesses. Over the years, the customer list has grown to include end users and chemical companies that supply paper, metal working, surface coatings, water treatment, paint, mining, oil and gas, and janitorial applications. MC's capabilities also include the sulfation of fats and oils. These products are used in a wide variety of applications and represent a renewable resource, animal and vegetable derivatives, as alternatives to more expensive and non-renewable petroleum derivatives.

MC's strategy has been to focus on industries and markets that have good prospects for sustainability in the U.S. in light of global trends. MC's marketing strategy relies on sales to end users through its own sales force, but it also sells chemical intermediates to

other chemical companies and distributors. It also has close working relationships with a significant number of major chemical companies that outsource their production for regional manufacture and distribution to companies like MC. MC has been ISO registered since 1995.

The Specialty Chemicals Segment maintains six laboratories for applied research and quality control which are staffed by eleven employees.

Most raw materials used by the segment are generally available from numerous independent suppliers and approximately 61 percent of total purchases are from its top 15 suppliers. While some raw material needs are met by a sole supplier or only a few suppliers, the Company anticipates no difficulties in fulfilling its raw material requirements.

Please see Note 15 to the Consolidated Financial Statements, which are included in Item 8 of this Form 10-K, for financial information about the Company's segments.

Sales and Distribution

Metals Segment – The Metals Segment utilizes separate sales organizations for its different product groups. Stainless steel pipe is sold worldwide under the BRISMET trade name through authorized stocking distributors at warehouse locations throughout the country. Producing sales and providing service to the distributors and end-user customers are BRISMET's President, two outside sales employees, one independent manufacturers' representative, and eight inside sales employees. Additionally, BRISMET operates international offices in Brussels, Belgium and Shanghai, China, with one person in each office.

Palmer employs three sales professionals that manage the relationship with customers and partnerships to identify and secure new sales. Additionally, the Metals Segment President assists in account relationship management with large customers. Customer feedback and in-field experience generate product enhancements and new product development.

Approximately 80 percent of Specialty's pipe and tube sales are to North American pipe and tube distributors with the remainder comprised of sales to end use customers. In addition to Specialty's President, Specialty utilizes two manufacturers' representatives and nine inside sales employees, whom are located at both locations, to obtain sales orders and service its customers.

ASTI utilizes a four-person inside sales team, along with thirteen commissioned representatives, to cover its U.S. and Canadian markets. In addition, the combined sales team of BRISMET and ASTI are working in a coordinated effort in the sale of ornamental tube at ASTI and BRISMET's Munhall facility.

There were no customers representing more than 10 percent of the Metals Segment's revenues for 2018, 2017 or 2016.

Specialty Chemicals Segment – Specialty chemicals are sold directly to various industries nationwide by five full-time outside sales employees and eight manufacturers' representatives. The Specialty Chemicals Segment has one customer that accounted for approximately 16, 23, and 25 percent of the segment's revenues for 2018, 2017, and 2016, respectively. The concentration of sales to this customer declined as a result of this customer moving production of the products previously produced and sold by the Specialty Chemicals Segment in-house.

Competition

Metals Segment – Welded stainless steel pipe is the largest sales volume product of the Metals Segment. Although information is not publicly available regarding the sales of most other producers of this product, management believes that the Company is one of the largest domestic producers of such pipe. This commodity product is highly competitive with eight known domestic producers, including the Company, and imports from many different countries.

Due to the size of the tanks produced and shipped to its customers, the majority of Palmer's products is sold within a 300-mile radius from its plant in Andrews, Texas. There are currently 18 tank producers, with similar capabilities, servicing that same area.

Specialty is a leader in the specialized products segment of the pipe and tube market by offering an industry-leading in-stock inventory of a broad range of high quality products, including specialized products with limited availability. Specialty's dual branches have both common and regional-specific products and capabilities. There are four known significant pipe and tube distributors with similar capabilities to Specialty.

ASTI is a leading manufacturer of high-end ornamental stainless steel tubing, supplying the automotive, commercial transportation, marine, food services, construction, furniture, healthcare and other industries. ASTI combines the use of superior metal quality with in-house capabilities in slitting and welding, along with patented and proprietary finishing capabilities and the highest levels of customer service and technical support to provide customers with the highest quality ornamental product available in the market. There are three known significant U.S. ornamental tubing manufacturers competing in the markets in which ASTI participates.

Specialty Chemicals Segment – The Company is the sole producer of certain specialty chemicals manufactured for other companies under processing agreements and also produces proprietary specialty chemicals. The Company's sales of specialty products are insignificant compared to the overall market for specialty chemicals. The market for most of the products is highly competitive and many competitors have substantially greater resources than does the Company.

Mergers, Acquisitions and Dispositions

The Company is committed to a long-term strategy of (a) reinvesting capital in our current business segments to foster their organic growth, (b) disposing of underperforming business segments, and (c) completing acquisitions that expand our current business segments or establish new manufacturing platforms. Targeted acquisitions are priced to be economically feasible and focus on achieving positive long-term benefits. These acquisitions may be paid for in the form of cash, stock, debt or a combination thereof. The amount and type of consideration and deal charges paid could have a short-term dilutive effect on the Company's earnings per share. However, such transactions are anticipated to provide long-term economic benefit to the Company.

On July 1, 2018, BRISMET acquired Marcegaglia USA, Inc.'s ("MUSA") galvanized tube assets and operations ("MUSA-Galvanized") located in Munhall, PA. The purpose of the transaction was to enhance the Company's on-going business with additional capacity and technological advantages. The transaction was funded through an increase to the Company's credit facility (refer to Note 5 to the Consolidated Financial Statements). The purchase price for the transaction totaled \$10,378,281. In connection with the MUSA-Galvanized acquisition, the Company is required to make quarterly earn-out payments for a period of four years following closing, based on actual sales levels of galvanized pipe and tube. The tangible assets purchased and liabilities assumed from MUSA include accounts receivable, inventory, equipment, and accounts payable.

On January 1, 2019, the Company's wholly-owned subsidiary, ASTI Acquisition, LLC, completed its purchase of substantially all of American Stainless' assets and operations in Statesville and Troutman, North Carolina. The purpose of the transaction was to extend and enhance the Company's on-going business with additional capacity and new technological advantages in the production of stainless ornamental tubing. The purchase price was approximately \$22,736,854. American Stainless will also receive quarterly earn-out payments for a period of three years following closing. Synalloy funded the acquisition with a new five-year \$20,000,000 term note and a draw against its recently increased \$100,000,000 asset based line of credit, both with Synalloy's current lender (see Note 5 to the Consolidated Financial Statements). The tangible assets purchased and liabilities assumed from American Stainless include accounts receivable, inventory, equipment, and accounts payable.

Environmental Matters

Environmental expenditures that relate to an existing condition caused by past operations and do not contribute to future revenue generation are expensed. Liabilities are recorded when environmental assessments and/or cleanups are probable and the costs of these assessments and/or cleanups can be reasonably estimated. Changes to laws and environmental issues, including climate change, are made or proposed with some frequency and some of the proposals, if adopted, might directly or indirectly result in a material reduction in the operating results of one or more of our operating units. We are presently unable to foresee the future well enough to quantify such risks. See Note 7 to the Consolidated Financial Statements, which are included in Item 8 of this Form 10-K, for further discussion.

Seasonal Nature of the Business

With the exception of Palmer and Specialty's Houston location, which primarily serves the oil and gas industry, the Company's businesses and products are generally not subject to any seasonal impact that results in significant variations in revenues from one quarter to another. Fourth quarter revenue and profit for Palmer and Specialty Houston can be as much as 25 percent below the other three quarters due to vacation schedules for customer field crews working at the drill sites.

Backlogs

The Specialty Chemicals Segment operates primarily on the basis of delivering products soon after orders are received. Accordingly, backlogs are not a factor in this business. The same applies to seamless, carbon steel pipe and tubing sales in the Metals Segment. However, backlogs are important in the Metals Segment's welded stainless-steel pipe and tank manufacturing operations, where both businesses incur significant dollar value of committed orders in advance of production. Its backlog of open orders for welded stainless steel pipe were \$31,200,000 and \$28,783,000 and for tanks were \$20,700,000 and \$17,192,000 at the end of 2018 and 2017, respectively.

Employee Relations

At December 31, 2018, the Company had 607 employees. With the acquisition of ASTI's operations, effective January 1, 2019, approximately 100 employees were added to the Company, which are not included in the December 31, 2018 totals. The Company considers relations with employees to be strong. The number of employees of the Company represented by unions, located at the Bristol, Tennessee, Mineral Ridge, Ohio, and Munhall, Pennsylvania facilities, is 264, or 44 percent of the Company's employees. They are represented by three locals affiliated with the United Steelworkers. Collective bargaining contracts for the Steelworkers expire in July 2019 (Bristol, TN), June 2020 (Mineral Ridge, OH), and January 2023 (Munhall, PA).

Financial Information about Geographic Areas

Information about revenues derived from domestic and foreign customers is set forth in Note 15 to the Consolidated Financial Statements.

Available information

The Company electronically files with the Securities and Exchange Commission ("SEC") its annual reports on Form 10-K, its quarterly reports on Form 10-Q, its periodic reports on Form 8-K, amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 (the "1934 Act"), and proxy materials pursuant to Section 14 of the 1934 Act. The SEC maintains a site on the Internet, www.sec.gov, which contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The Company also makes its filings available, free of charge, through its Web site, www.synalloy.com, as soon as reasonably practical after the electronic filing of such material with the SEC. The information on the Company's Web site is not incorporated into this Annual Report on Form 10-K or any other filing the Company makes with the SEC.

Item 1A Risk Factors

There are inherent risks and uncertainties associated with our business that could adversely affect our operating performance and financial condition. Set forth below are descriptions of those risks and uncertainties that we believe to be material, but the risks and uncertainties described are not the only risks and uncertainties that could affect our business. Reference should be made to "Forward-Looking Statements" above, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 below.

The cyclical nature of the industries in which our customers operate causes demand for our products to be cyclical, creating uncertainty regarding future profitability. Various changes in general economic conditions affect the industries in which our customers operate. These changes include decreases in the rate of consumption or use of our customers' products due to economic downturns. Other factors causing fluctuation in our customers' positions are changes in market demand, capital spending, lower overall pricing due to domestic and international overcapacity, lower priced imports, currency fluctuations, and increases in use or decreases in prices of substitute materials. As a result of these factors, our profitability has been and may in the future be subject to significant fluctuation.

Domestic competition could force lower product pricing and may have an adverse effect on our revenues and profitability. From time-to-time, intense competition and excess manufacturing capacity in the commodity stainless and galvanized steel industry have resulted in reduced selling prices, excluding raw material surcharges, for many of our stainless steel products sold by the Metals Segment. In order to maintain market share, we would have to lower our prices to match the competition. These factors have had and may continue to have an adverse impact on our revenues, operating results and financial condition and may continue to do so in the future.

Our business, financial condition and results of operations could be adversely affected by an increased level of imported products. Our business is susceptible to the import of products from other countries, particularly steel products. Import levels of various products are affected by, among other things, overall world-wide demand, lower cost of production in other countries, the trade practices of foreign governments, government subsidies to foreign producers, the strengthening of the U.S. dollar and governmentally imposed trade restrictions in the United States. Although imports from certain countries have been curtailed by anti-dumping duties, imported products from other countries could significantly reduce prices. Increased imports of certain products, whether illegal dumping or legal imports, could reduce demand for our products in the future and adversely affect our business, financial position, results of operations or cash flows.

The Specialty Chemicals Segment uses significant quantities of a variety of specialty and commodity chemicals in its manufacturing processes, which are subject to price and availability fluctuations that may have an adverse impact on our financial performance. The raw materials we use are generally available from numerous independent suppliers. However, some of our raw material needs are met by a sole supplier or only a few suppliers. If any supplier that we rely on for raw materials ceases or limits production, we may incur significant additional costs, including capital costs, in order to find alternate, reliable raw material suppliers. We may also experience significant production delays while locating new supply sources, which could result in our failure to timely deliver products to our customers. Purchase prices and availability of these critical raw materials are subject to volatility. Some of the raw materials used by the Specialty Chemicals Segment are derived from petrochemical-based feedstock, such as crude oil and natural gas, which have been subject to historical periods of rapid and significant movements in price. These fluctuations in price could be aggravated by factors beyond our control such as political instability, and supply and demand factors, including Organization of the Petroleum Exporting Countries ("OPEC") production quotas and increased global demand for petroleum-based products. At any given time, we may be unable to obtain an adequate supply of these critical raw materials on a timely basis, at prices and other terms acceptable, or at all. If suppliers increase the price of critical raw materials, we may not have alternative sources of supply. We attempt to pass changes in the prices of raw materials along to our customers. However, we cannot always do so, and any limitation on our ability to pass through any price increases could have an adverse effect on our financial performance. Any significant variations in the cost and availability of our specialty and commodity materials may negatively affect our business, financial condition or results of operations, specifically for the Specialty Chemicals Segment.

We rely on a small number of suppliers for our raw materials and any interruption in our supply chain could affect our operations. In order to foster strong business relationships, the Metals Segment uses only a few raw material suppliers. During the year ended December 31, 2018, 10 suppliers furnished approximately 84 percent of our total dollar purchases of raw materials, with one supplier providing 31 percent. However, these raw materials are available from a number of sources, and the Company anticipates no difficulties in fulfilling its raw materials requirements for the Metals Segment. Raw materials used by the Specialty Chemicals Segment are generally available from numerous independent suppliers and approximately 61 percent of total purchases were made from our top 15 suppliers during the year ended December 31, 2018. Although some raw material needs are met by a single supplier or only a few suppliers, the Company anticipates no difficulties in fulfilling its raw material requirements for the Specialty Chemicals Segment. While the Company believes that raw materials for both segments are readily available from numerous sources, the loss of one or more key suppliers in either segment, or any other material change in our current supply channels, could have an adverse effect on the Company's ability to meet the demand for its products, which could impact our operations, revenues and financial results.

A substantial portion of our overall sales is dependent upon a limited number of customers, and the loss of one or more of such customers would have a material adverse effect on our business, results of operation and profitability. The products of the Specialty Chemicals Segment are sold to various industries nationwide. The Specialty Chemicals Segment has one customer that accounted for approximately 16 percent, 23 percent, and 25 percent of revenues for 2018, 2017, and 2016, respectively. The concentration of sales to this customer declined as a result of this customer moving production of the products previously produced and sold by the Specialty Chemicals Segment in house. The loss of this customer would have a material adverse effect on the revenues of the Specialty Chemicals Segment of the Company.

There were no customers representing more than ten percent of the Metals Segment's revenues in 2018, 2017, or 2016. Palmer and Specialty, which are a part of the Metals Segment, sell much of their products to the oil and gas industry. Any change in this industry, or any change in this industry's demand for their products, would have a material adverse effect on the profits of the Metals Segment and the Company.

Our operating results are sensitive to the availability and cost of energy and freight, which are important in the manufacture and transport of our products. Our operating costs increase when energy or freight costs rise. During periods of increasing energy and freight costs, we might not be able to fully recover our operating cost increases through price increases without reducing demand for our products. In addition, we are dependent on third party freight carriers to transport many of our products, all of which are dependent on fuel to transport our products. The prices for and availability of electricity, natural gas, oil, diesel fuel and other energy resources are subject to volatile market conditions. These market conditions often are affected by political and economic factors beyond our control. Disruptions in the supply of energy resources could temporarily impair the ability to manufacture products for customers and may result in the decline of freight carrier capacity in our geographic markets, or make freight carriers unavailable. Further, increases in energy or freight costs that cannot be passed on to customers, or changes in costs relative to energy and freight costs paid by competitors, has adversely affected, and may continue to adversely affect, our profitability.

Oil prices are extremely volatile. A substantial or extended decline in the price of oil could adversely affect our financial condition and results of operations. Prices for oil can fluctuate widely. Our Palmer and Specialty (Houston, Texas) units' revenues are highly dependent on our customers adding oil well drilling and pumping locations. Should oil prices decline such that drilling becomes unprofitable for our customers, such customers will likely cap many of their current wells and cease or curtail expansion. This will decrease the demand for our tanks and pipe and tube and adversely affect the results of our operations.

Significant changes in nickel prices could have an impact on the sales of the Metals Segment. The Metals Segment uses nickel in a number of its products. Nickel prices are currently at a relatively low level, which reduces our manufacturing costs for certain products. When nickel prices increase, many of our customers increase their orders in an attempt to avoid future price increases, resulting in increased sales for the Metals Segment. Conversely, when nickel prices decrease, many of our customers wait to place orders in an attempt to take advantage of subsequent price decreases, resulting in reduced sales for the Metals Segment. On average, the Metals Segment turns its inventory of commodity pipe every six months, but the nickel surcharge on sales of commodity pipe is established on a monthly basis. The difference, if any, between the price of nickel on the date of purchase of the raw material and the price, as established by the surcharge, on the date of sale has the potential to create an inventory price change gain or loss. If the price of nickel steadily increases over time, as it did from 2005 to 2007, the Metals Segment is the beneficiary of the increase in nickel price in the form of metal price change gains. Conversely, if the price of nickel steadily decreases over time, as it did from 2011 to 2016, the Metals Segment suffers metal price change losses. 2017 was a highly volatile year, with nickel prices starting at a peak in January, and declining through the first nine months, with a steep trough during the third quarter (average down 25 percent from the first quarter), before rebounding to almost beginning of year levels by December. This volatile pattern did result in average nickel prices being up 48 percent for the full year of 2017 and up 38 percent for the fourth quarter 2017, when compared to the same periods of the prior year; however, substantial declines within the year generated cumulative inventory price change losses that exceeded inventory price change gains by \$2,634,000 for the year. Conversely, in 2018 nickel prices started at a low point in January, and increased for the first seven months, before declining for the remainder of the year, ending at a level approximately 15 percent above the start of the year. This pattern did result in average nickel prices being up 25 percent for the full year of 2018 and up nine percent for the fourth quarter 2018 when compared to the same periods of the prior year, resulting in substantial gains within the year that generated cumulative inventory price change gains that exceeded inventory price change losses by \$4,959,000. We will incur inventory price losses in the future if nickel prices decrease. Any material changes in the cost of nickel could impact our sales and result in fluctuations in the profits of the Metals Segment.

The Company began hedging its nickel exposure effective in the beginning of 2016 to provide coverage against extreme downside product pricing exposure related to the content of nickel alloy contained in purchased stainless steel inventory. The sales price of stainless steel product (containing nickel alloy) is subject to a variable pricing component for alloys (nickel, chrome, molybdenum, and iron) contained in the product. Each month, industry pricing indices are published which set the following month's price surcharges for those alloys. The Company typically holds approximately six to seven months of inventory, with fixed priced purchase orders (where the alloy pricing index is "locked", eliminating the Company's exposure) consisting of approximately 50 percent of held stainless steel inventories. As a result, the eventual sales prices for approximately 50 percent of held stainless steel inventories will vary until a customer order commitment is received, and the selling price is established. In the past, the Company fully absorbed the potential negative market volatility that resulted from sales prices declining during the inventory hold period. In 2018 the cumulative favorable impact during the inventory hold period totaled \$4,959,000 due to a year of nickel commodity net pricing increases, while in 2017, the cumulative negative impact during the inventory hold period totaled \$2,634,000, due to a period of nickel commodity net pricing declines.

The Company's nickel hedge program covers approximately three months of pricing exposure, via forward option contracts, to sell nickel at fixed prices. Other alloys do not have hedge contracts available in the marketplace. The Company reviews the current nickel pricing level and if it believes there is significant downside exposure in future pricing, management will protect against these projected declines by purchasing contracts to "Put" nickel pounds to the trading party, with strike prices at 15 percent below the three-month forward price at the time of the contract. As a result, there is zero hedge coverage for the first 15 percent of nickel price decline, but dollar-for-dollar coverage for 100 percent of any decline below that level.

As of December 31, 2018, the Company had no such hedging programs in place. At December 31, 2017, the Company had a hedge position equal to 1,351,000 pounds of nickel, representing 53 percent of the Company's total nickel content of stainless steel pounds in inventory. The Company does not utilize hedge accounting for these transactions but marks to market the value of the outstanding contracts with all adjustments being included in cost of sales in the Consolidated Statements of Operations. The fair value of the nickel contracts at December 31, 2017 was an asset of approximately \$9,000. The Company's downside exposure is limited to the potential that the total of the fair value of the nickel contracts would be reduced to zero, if nickel pricing does not decline to the contracted strike prices. The program is designed to mitigate but not eliminate the Company's nickel pricing exposure.

We encounter significant competition in all areas of our businesses and may be unable to compete effectively, which could result in reduced profitability and loss of market share. We actively compete with companies producing the same or similar products and, in some instances, with companies producing different products designed for the same uses. We encounter competition from both domestic and foreign sources in price, delivery, service, performance, product innovation and product recognition and quality, depending on the product involved. For some of our products, our competitors are larger and have greater financial resources than we do. As a result, these competitors may be better able to withstand a change in conditions within the industries in which we operate, a change in the prices of raw materials or a change in the economy as a whole. Our competitors can be expected to continue to develop and introduce new and enhanced products and more efficient production capabilities, which could cause a decline in market acceptance of our products. Current and future consolidation among our competitors and customers also may cause a loss of market share as well as put downward pressure on pricing. Our competitors could cause a reduction in the prices for some of our products as a result of intensified price competition. Competitive pressures can also result in the loss of major customers. If we cannot compete successfully, our business, financial condition and profitability could be adversely affected.

Our lengthy sales cycle for the Specialty Chemicals Segment makes it difficult to predict quarterly revenue levels and operating results. Purchasing the products of the Specialty Chemicals Segment is a major commitment on the part of our customers. Before a potential customer determines to purchase products from the Specialty Chemicals Segment, the Company must produce test product material so that the potential customer is satisfied that we can manufacture a product to their specifications. The production of such test materials is a time-consuming process. Accordingly, the sales process for products in the Specialty Chemicals Segment is a lengthy process that requires a considerable investment of time and resources on our part. As a result, the timing of our revenues is difficult to predict, and the delay of an order could cause our quarterly revenues to fall below our expectations and those of the public market analysts and investors.

Our operations expose us to the risk of environmental, health and safety liabilities and obligations, which could have a material adverse effect on our financial condition, results of operations or cash flows. We are subject to numerous federal, state and local environmental protection and health and safety laws governing, among other things:

- the generation, use, storage, treatment, transportation, disposal and management of hazardous substances and wastes;
- emissions or discharges of pollutants or other substances into the environment;
- investigation and remediation of, and damages resulting from, releases of hazardous substances; and
- the health and safety of our employees.

Under certain environmental laws, we can be held strictly liable for hazardous substance contamination of any real property we have ever owned, operated or used as a disposal site. We are also required to maintain various environmental permits and licenses, many of which require periodic modification and renewal. Our operations entail the risk of violations of those laws and regulations, and we cannot assure you that we have been or will be at all times in compliance with all of these requirements. In addition, these requirements and their enforcement may become more stringent in the future.

We have incurred, and expect to continue to incur, additional capital expenditures in addition to ordinary costs to comply with applicable environmental laws, such as those governing air emissions and wastewater discharges. Our failure to comply with applicable environmental laws and permit requirements could result in civil and/or criminal fines or penalties, enforcement actions, and regulatory or judicial orders enjoining or curtailing operations or requiring corrective measures such as the installation of pollution control equipment, which could have a material adverse effect on our financial condition, results of operations or cash flows.

We are currently, and may in the future be, required to investigate, remediate or otherwise address contamination at our current or former facilities. Many of our current and former facilities have a history of industrial usage for which additional investigation, remediation or other obligations could arise in the future and that could materially adversely affect our business, financial condition, results of operations or cash flows. In addition, we are currently, and could in the future be, responsible for costs to address contamination identified at any real property we used as a disposal site.

Although we cannot predict the ultimate cost of compliance with any of the requirements described above, the costs could be material. Non-compliance could subject us to material liabilities, such as government fines, third-party lawsuits or the suspension of non-compliant operations. We also may be required to make significant site or operational modifications at substantial cost. Future developments also could restrict or eliminate the use of or require us to make modifications to our products, which could have a significant negative impact on our results of operations and cash flows. At any given time, we are involved in claims, litigation, administrative proceedings and investigations of various types involving potential environmental liabilities, including cleanup costs associated with hazardous waste disposal sites at our facilities. We cannot assure you that the resolution of these environmental matters will not have a material adverse effect on our results of operations or cash flows. The ultimate costs and timing of environmental liabilities are difficult to predict. Liability under environmental laws relating to contaminated sites can

be imposed retroactively and on a joint and several basis. We could incur significant costs, including cleanup costs, civil or criminal fines and sanctions and third-party claims, as a result of past or future violations of, or liabilities under, environmental laws.

We could be subject to third party claims for property damage, personal injury, nuisance or otherwise as a result of violations of, or liabilities under, environmental, health or safety laws in connection with releases of hazardous or other materials at any current or former facility. We could also be subject to environmental indemnification claims in connection with assets and businesses that we have acquired or divested.

There can be no assurance that any future capital and operating expenditures to maintain compliance with environmental laws, as well as costs to address contamination or environmental claims, will not exceed any current estimates or adversely affect our financial condition and results of operations. In addition, any unanticipated liabilities or obligations arising, for example, out of discovery of previously unknown conditions or changes in laws or regulations, could have an adverse effect on our business, financial condition, results of operations or cash flows.

We are dependent upon the continued operation of our production facilities, which are subject to a number of hazards. In both of our business segments, but especially in the Specialty Chemicals Segment, our production facilities are subject to hazards associated with the manufacture, handling, storage and transportation of chemical materials and products, including leaks and ruptures, explosions, fires, inclement weather and natural disasters, unscheduled downtime and environmental hazards which could result in liability for workplace injuries and fatalities. In addition, some of our production capabilities are highly specialized, which limits our ability to shift production to another facility in the event of an incident at a particular facility. If a production facility, or a critical portion of a production facility, were temporarily shut down, we likely would incur higher costs for alternate sources of supply for our products. We cannot assure you that we will not experience these types of incidents in the future or that these incidents will not result in production delays, failure to timely fulfill customer orders or otherwise have a material adverse effect on our business, financial condition or results of operations.

Certain of our employees in the Metals Segment are covered by collective bargaining agreements, and the failure to renew these agreements could result in labor disruptions and increased labor costs. As of December 31, 2018, we had 264 employees represented by unions at our Bristol, Tennessee, Mineral Ridge, Ohio, and Munhall, Pennsylvania facilities, which is 44 percent of the aggregate number of Company employees. These employees are represented by three local unions affiliated with the United Steelworkers (the "Steelworkers Union"). The collective bargaining contracts for the Steelworkers Unions will expire in July 2019 (Bristol, TN), June 2020 (Mineral Ridge, OH), and January 2023 (Munhall, PA). Although we believe that our present labor relations are strong, our failure to renew these agreements on reasonable terms as the current agreements expire could result in labor disruptions and increased labor costs, which could adversely affect our financial performance.

Our current capital structure includes indebtedness, which is secured by all or substantially all of our assets and which contains restrictive covenants that may prevent us from obtaining adequate working capital, making acquisitions or capital improvements. Our existing credit facility contains restrictive covenants that limit our ability to, among other things, borrow money or guarantee the debts of others, use assets as security in other transactions, make investments or other restricted payments or distributions, change our business or enter into new lines of business, and sell or acquire assets or merge with or into other companies. In addition, our credit facility requires us to meet a minimum fixed charge coverage ratio which could limit our ability to plan for or react to market conditions or meet extraordinary capital needs and could otherwise restrict our financing activities. Our ability to comply with the covenants and other terms of our credit facility will depend on our future operating performance. If we fail to comply with such covenants and terms, we will be in default and the maturity of any then outstanding related debt could be accelerated and become immediately due and payable. In addition, in the event of such a default, our lender may refuse to advance additional funds, demand immediate repayment of our outstanding indebtedness, and elect to foreclose on our assets that secure the credit facility.

There were no events of default under our credit facility at December 31, 2018. Although we believe we will remain in compliance with these covenants in the foreseeable future and that our relationship with our lender is strong, there is no assurance our lender would consent to an amendment or waiver in the event of noncompliance; or that such consent would not be conditioned upon the receipt of a cash payment, revised principal payout terms, increased interest rates or restrictions in the expansion of the credit facility for the foreseeable future, or that our lender would not exercise rights that would be available to them, including, among other things, demanding payment of outstanding borrowings. In addition, our ability to obtain additional capital or alternative borrowing arrangements at reasonable rates may be adversely affected. All or any of these adverse events would further limit our flexibility in planning for, or reacting to, downturns in our business.

We may need new or additional financing in the future to expand our business or refinance existing indebtedness, and our inability to obtain capital on satisfactory terms or at all may have an adverse impact on our operations and our financial results. If we are unable to access capital on satisfactory terms and conditions, we may not be able to expand our business or meet our payment requirements under our existing credit facility. Our ability to obtain new or additional financing will depend on a variety of factors,

many of which are beyond our control. We may not be able to obtain new or additional financing because we may have substantial debt, our current receivable and inventory balances do not support additional debt availability or because we may not have sufficient cash flows to service or repay our existing or future debt. In addition, depending on market conditions and our financial performance, equity financing may not be available on satisfactory terms or at all. If we are unable to access capital on satisfactory terms and conditions, this could have an adverse impact on our operations and our financial results.

Our existing property and liability insurance coverages contain exclusions and limitations on coverage. We maintain various forms of insurance, including insurance covering claims related to our properties and risks associated with our operations. From time-to-time, in connection with renewals of insurance, we have experienced additional exclusions and limitations on coverage, larger self-insured retentions and deductibles and higher premiums, primarily from the operations of the Specialty Chemicals Segment. As a result, our existing coverage may not be sufficient to cover any losses we may incur and in the future our insurance coverage may not cover claims to the extent that it has in the past and the costs that we incur to procure insurance may increase significantly, either of which could have an adverse effect on our results of operations or cash flows.

We may not be able to make the operational and product changes necessary to continue to be an effective competitor. We must continue to enhance our existing products and to develop and manufacture new products with improved capabilities in order to continue to be an effective competitor in our business markets. In addition, we must anticipate and respond to changes in industry standards that affect our products and the needs of our customers. We also must continue to make improvements in our productivity in order to maintain our competitive position. When we invest in new technologies, processes or production capabilities, we face risks related to construction delays, cost over-runs and unanticipated technical difficulties.

The success of any new or enhanced products will depend on a number of factors, such as technological innovations, increased manufacturing and material costs, customer acceptance and the performance and quality of the new or enhanced products. As we introduce new products or refine existing products, we cannot predict the level of market acceptance or the amount of market share these new or enhanced products may achieve. Moreover, we may experience delays in the introduction of new or enhanced products. Any manufacturing delays or problems with new or enhanced product launches will adversely affect our operating results. In addition, the introduction of new products could result in a decrease in revenues from existing products. Also, we may need more capital for product development and enhancement than is available to us, which could adversely affect our business, financial condition or results of operations. We sell our products in industries that are affected by technological changes, new product introductions and changing industry standards. If we do not respond by developing new products or enhancing existing products on a timely basis, our products will become obsolete over time and our revenues, cash flows, profitability and competitive position will suffer.

In addition, if we fail to accurately predict future customer needs and preferences, we may invest heavily in the development of new or enhanced products that do not result in significant sales and revenue. Even if we successfully innovate in the development of new and enhanced products, we may incur substantial costs in doing so, and our profitability may suffer. Our products must be kept current to meet the needs of our customers. To remain competitive, we must develop new and innovative products on an on-going basis. If we fail to make innovations, or the market does not accept our new or enhanced products, our sales and results could suffer.

Our inability to anticipate and respond to changes in industry standards and the needs of our customers, or to utilize changing technologies in responding to those changes, could have a material adverse effect on our business and our results of operations.

Our strategy of using acquisitions and dispositions to position our businesses may not always be successful, which may have a material adverse impact on our financial results and profitability. We have historically utilized acquisitions and dispositions in an effort to strategically position our businesses and improve our ability to compete. We plan to continue to do this by seeking specialty niches, acquiring businesses complementary to existing strengths and continually evaluating the performance and strategic fit of our existing business units. We consider acquisitions, joint ventures and other business combination opportunities as well as possible business unit dispositions. From time-to-time, management holds discussions with management of other companies to explore such opportunities. As a result, the relative makeup of the businesses comprising our Company is subject to change. Acquisitions, joint ventures and other business combinations involve various inherent risks, such as: assessing accurately the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition or other transaction candidates; the potential loss of key personnel of an acquired business; significant transaction costs that were not identified during due diligence; our ability to achieve identified financial and operating synergies anticipated to result from an acquisition or other transaction; impairments of goodwill; and unanticipated changes in business and economic conditions affecting an acquisition or other transaction. If acquisition opportunities are not available or if one or more acquisitions are not successfully integrated into our operations, this could have a material adverse impact on our financial results and profitability.

The loss of key members of our management team, or difficulty attracting and retaining experienced technical personnel, could reduce our competitiveness and have an adverse effect on our business and results of operations. The successful implementation of our strategies and handling of other issues integral to our future success will depend, in part, on our experienced management team. The loss of key members of our management team could have an adverse effect on our business. Although we have entered into employment agreements with key members of our management team including Craig C. Bram, President and Chief Executive Officer, Dennis M. Loughran, Senior Vice President and Chief Financial Officer, Sally M. Cunningham, Vice President of Corporate Administration, J. Kyle Pennington, President of Metals Segment, James G. Gibson, General Manager and President of Specialty Chemicals Segment, Steven J. Baroff, President and General Manager of Specialty, K. Dianne Beck, Vice President of Specialty, Christopher D. Sitka, Vice President of Specialty, Kevin Van Zandt, Vice President of Bristol Metals-Munhall, Maria Haughton Roberson, President of ASTI (acquired effective January 1, 2019 - see Note 23 to the Consolidated Financial Statements), and Rex Haughton, Vice President-Operations of ASTI, employees may resign from the Company at any time and seek employment elsewhere, subject to certain non-competition and confidentiality restrictions. Additionally, if we cannot retain our technical personnel or attract additional experienced technical personnel, our ability to compete could be harmed.

Federal, state and local legislative and regulatory initiatives relating to hydraulic fracturing, as well as governmental reviews of such activities could result in delays or eliminate new wells from being started, thus reducing the demand for our fiberglass and steel storage tanks, pressure vessels and heavy walled pipe and tube. Hydraulic fracturing (“fracking”) is currently an essential and common practice to extract oil from dense subsurface rock formations and this lower cost extraction method is a significant driving force behind the surge of oil exploration and drilling in several locations in the United States. However, the Environmental Protection Agency, U.S. Congress and state legislatures have considered adopting legislation to provide additional regulations and disclosures surrounding this process. In the event that new legal restrictions surrounding the fracking process are adopted in the areas in which our customers operate, we may see a dramatic decrease in Palmer's and Specialty - Texas' profitability which could have an adverse impact on our financial results.

Our allowance for doubtful accounts may not be adequate to cover actual losses. An allowance for doubtful accounts is maintained for estimated losses resulting from the inability of our customers to make required payments. This allowance may not be adequate to cover actual losses, and future provisions for losses could materially and adversely affect our operating results. The allowance for doubtful accounts is based on an evaluation of the outstanding receivables and existing economic conditions. The amount of future losses is susceptible to changes in economic, operating and other outside forces and conditions, all of which are beyond our control, and these losses may exceed current estimates. Although management believes that the allowance for doubtful accounts is adequate to cover current estimated losses, management cannot make assurances that we will not further increase the allowance for doubtful accounts. A significant increase in the allowance for doubtful accounts could adversely affect our earnings.

We depend on third parties to distribute certain of our products and because we have no control over such third parties we are subject to adverse changes in such parties' operations or interruptions of service, each of which may have an adverse effect on our operations. We use third parties over which we have only limited control to distribute certain of our products. Our dependency on these third party distributors has increased as our business has grown. Because we rely on these third parties to provide distribution services, any change in our ability to access these third party distribution services could have an adverse impact on our revenues and put us at a competitive disadvantage with our competitors.

Freight costs for products produced in our Palmer facility restrict our sales area for this facility. The freight and other distribution costs for products sold from our Palmer facility are extremely high. As a result, the market area for these products is restricted, which limits the geographic market for Palmer's tanks and the ability to significantly increase revenues derived from sales of products from the Palmer facility.

New regulations related to “conflict minerals” may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers. On August 22, 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”), the SEC adopted new requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These regulations require companies to conduct annual due diligence and disclose whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. Tungsten and tantalum are designated as conflict minerals under the Dodd-Frank Act. These metals are used to varying degrees in our welding materials and are also present in specialty alloy products. These new requirements could adversely affect the sourcing, availability and pricing of minerals used in our products. In addition, we could incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Since our supply chain is complex, we may not be able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who could require that all of the components of our products are conflict mineral-free.

Our inability to sufficiently or completely protect our intellectual property rights could adversely affect our business, prospects, financial condition and results of operations. Our ability to compete effectively in both of our business segments will depend on our ability to maintain the proprietary nature of the intellectual property used in our businesses. These intellectual property rights consist largely of trade-secrets and know-how. We rely on a combination of trade secrets and non-disclosure and other contractual agreements and technical measures to protect our rights in our intellectual property. We also depend upon confidentiality agreements with our officers, directors, employees, consultants and subcontractors, as well as collaborative partners, to maintain the proprietary nature of our intellectual property. These measures may not afford us sufficient or complete protection, and others may independently develop intellectual property similar to ours, otherwise avoid our confidentiality agreements or produce technology that would adversely affect our business, prospects, financial condition and results of operations.

Our internal controls over financial reporting could fail to prevent or detect misstatements. Because of its inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Any failure to maintain effective internal controls or to timely effect any necessary improvement in our internal controls and disclosure controls could, among other things, result in losses from fraud or error, harm our reputation or cause investors to lose confidence in our reported financial information, all of which could have a material adverse effect on our financial condition, results of operations and cash flows.

Cyber security risks and cyber incidents could adversely affect our business and disrupt operations. Cyber incidents can result from deliberate attacks or unintentional events. These incidents can include, but are not limited to, gaining unauthorized access to digital systems for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption. The result of these incidents could include, but are not limited to, disrupted operations, misstated financial data, liability for stolen assets or information, increased cyber security protection costs, litigation and reputational damage adversely affecting customer or investor confidence.

Loss of key supplier authorizations, lack of product availability, or changes in supplier distribution programs could adversely affect our sales and earnings. Our business depends on maintaining an immediately available supply of various products to meet customer demand. Many of our relationships with key product suppliers are longstanding, but are terminable by either party. The loss of key supplier authorizations, or a substantial decrease in the availability of their products, could put us at a competitive disadvantage and have a material adverse effect on our business. Supply interruptions could arise from raw material shortages, inadequate manufacturing capacity or utilization to meet demand, financial problems, labor disputes or weather conditions affecting suppliers' production, transportation disruptions or other reasons beyond our control.

In addition, as a master distributor, we face the risk of key product suppliers changing their relationships with distributors generally, or Specialty in particular, in a manner that adversely impacts us. For example, key suppliers could change the following: the prices we must pay for their products relative to other distributors or relative to competing products; the geographic or product line breadth of distributor authorizations; supplier purchasing incentive or other support programs; or product purchase or stock expectations.

The purchasing incentives we earn from product suppliers can be impacted if we reduce our purchases in response to declining customer demand. Certain of our product and raw material suppliers have historically offered to their customers and distributors, including us, incentives for purchasing their products. In addition to market or customer account-specific incentives, certain suppliers pay incentives to the customer or distributor for attaining specific purchase volumes during the program period. In some cases, in order to earn incentives, we must achieve year-over-year growth in purchases with the supplier. When the demand for our products declines, we may be less willing to add inventory to take advantage of certain incentive programs, thereby potentially adversely impacting our profitability.

Federal income tax reform could have unforeseen effects on our financial condition and results of operations. On December 22, 2017, the Tax Cuts and Jobs Act ("The Tax Act") was signed into law by the President of the United States, enacting significant changes to the Internal Revenue Code effective January 1, 2018. Since the passing of The Tax Act, additional guidance in the form of notices and proposed regulations which interpret various aspects of The Tax Act have been issued. As of the filing of this document, additional guidance is expected. Changes could be made to the proposed regulations as they become finalized, future legislation could be enacted, more regulations and notices could be issued, all of which may impact our financial results. We will continue to monitor all of these changes and will reflect the impact as appropriate in future financial statements. Many state and local tax jurisdictions are still determining how they will interpret elements of The Tax Act. Final state and local governments' conformity, legislation and guidance relating to The Tax Act may impact our financial results.

We may be adversely affected by changes in LIBOR reporting practices or the method in which LIBOR is determined. As of December 31, 2018, we had outstanding long-term debt of approximately \$76.4 million that was indexed to the London Interbank Offered Rate (“LIBOR”). On July 27, 2017, the Financial Conduct Authority (the “FCA”) announced its intention to phase out LIBOR rates by the end of 2021. It is not possible to predict the further effect of the rules of the FCA, any changes in the methods by which LIBOR is determined, or any other reforms to LIBOR that may be enacted in the United Kingdom, the European Union or elsewhere. Any such developments may cause LIBOR to perform differently than in the past, or cease to exist. In addition, any other legal or regulatory changes made by the FCA, ICE Benchmark Administration Limited, the European Money Markets Institute (formerly Euribor-EBF), the European Commission or any other successor governance or oversight body, or future changes adopted by such body, in the method by which LIBOR is determined or the transition from LIBOR to a successor benchmark may result in, among other things, a sudden or prolonged increase or decrease in LIBOR, a delay in the publication of LIBOR, and changes in the rules or methodologies in LIBOR, which may discourage market participants from continuing to administer or to participate in LIBOR’s determination, and, in certain situations, could result in LIBOR no longer being determined and published. If a published U.S. dollar LIBOR rate is unavailable after 2021, the interest rates on our debt which is indexed to LIBOR will be determined using various alternative methods, any of which may result in interest obligations which are more than or do not otherwise correlate over time with the payments that would have been made on such debt if U.S. dollar LIBOR was available in its current form. Further, the same costs and risks that may lead to the discontinuation or unavailability of U.S. dollar LIBOR may make one or more of the alternative methods impossible or impracticable to determine. Any of these proposals or consequences could have a material adverse effect on our financing costs.

Item 1B Unresolved Staff Comments

None.

Item 2 Properties

The Company operates the major plants and facilities listed below, all of which are in adequate condition for their current usage. All facilities throughout the Company are believed to be adequately insured. The buildings are of various types of construction including brick, steel, concrete, concrete block and sheet metal. All have adequate transportation facilities for both raw materials and finished products. In September 2016, the Company sold its real estate properties previously owned in Tennessee, South Carolina, Texas and Ohio to Store Master Funding XII, LLC ("Store Funding") and concurrently leased back these real properties; see Note 12 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

On February 28, 2017, the Company purchased certain stainless steel pipe and tube assets of MUSA in Munhall, PA ("MUSA-Stainless"). As part of this acquisition, the Company entered into a 15-month lease with the sellers for the current manufacturing facility. The lease was amended to extend the term of the lease to May 31, 2023. On July 1, 2018, the Company completed the MUSA-Galvanized acquisition. In connection with this acquisition, the Company entered into an Amended and Restated Master Lease Agreement (the "Master Lease") on June 29 2018, pursuant to which the Company will lease the Munhall, PA facility, purchased by Store Funding from MUSA for the remainder of the initial term of 20 years set forth in the Master Lease.

On January 1, 2019, the Company's wholly-owned subsidiary, ASTI Acquisition, LLC, completed its purchase of substantially all of American Stainless' assets and operations in Statesville and Troutman, North Carolina. In connection with the acquisition, the Company and Store Funding entered into a second Amended and Restated Master Lease Agreement, pursuant to which the Company will lease the properties purchased by Store from American Stainless on January 1, 2019, for the remainder of the initial term of 20 years set forth in the Master Lease.

A parcel of land in Mineral Ridge, OH used for inventory storage, the corporate headquarters located in Richmond, VA, and the former shared service center located in Spartanburg, SC continue to be leased by the Company from other parties.

Location	Principal Operations	Building Square Feet	Land Acres
Munhall, PA	Manufacturing stainless steel pipe	284,000	20.0
Bristol, TN	Manufacturing stainless steel pipe	275,000	73.1
Cleveland, TN	Chemical manufacturing and warehousing facilities	143,000	18.8
Fountain Inn, SC	Chemical manufacturing and warehousing facilities	136,834	16.9
Andrews, TX	Manufacturing liquid storage solutions and separation equipment	122,662	19.6
Troutman, NC	Manufacturing ornamental stainless steel tubing	106,657	26.5
Statesville, NC	Manufacturing ornamental stainless steel tubing	83,000	26.8
Houston, TX	Cutting facility and storage yard for heavy walled pipe	29,821	10.0
Mineral Ridge, OH	Cutting facility and storage yard for heavy walled pipe	12,000	12.0
Mineral Ridge, OH	Storage yard for heavy walled pipe	—	4.6
Richmond, VA	Corporate headquarters	5,911	—
Spartanburg, SC	Former office space for corporate employees and shared service center ⁽¹⁾	4,858	—
Augusta, GA	None ⁽²⁾	—	46.0

(1) Property leased by Company; office was closed in 2018 and all furniture and equipment have been removed.

(2) Property owned by Company; plant was closed in 2001 and all structures and manufacturing equipment have been removed.

Item 3 Legal Proceedings

For a discussion of legal proceedings, see Notes 7 and 13 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

Item 4 Mine Safety Disclosures

Not applicable.

PART II

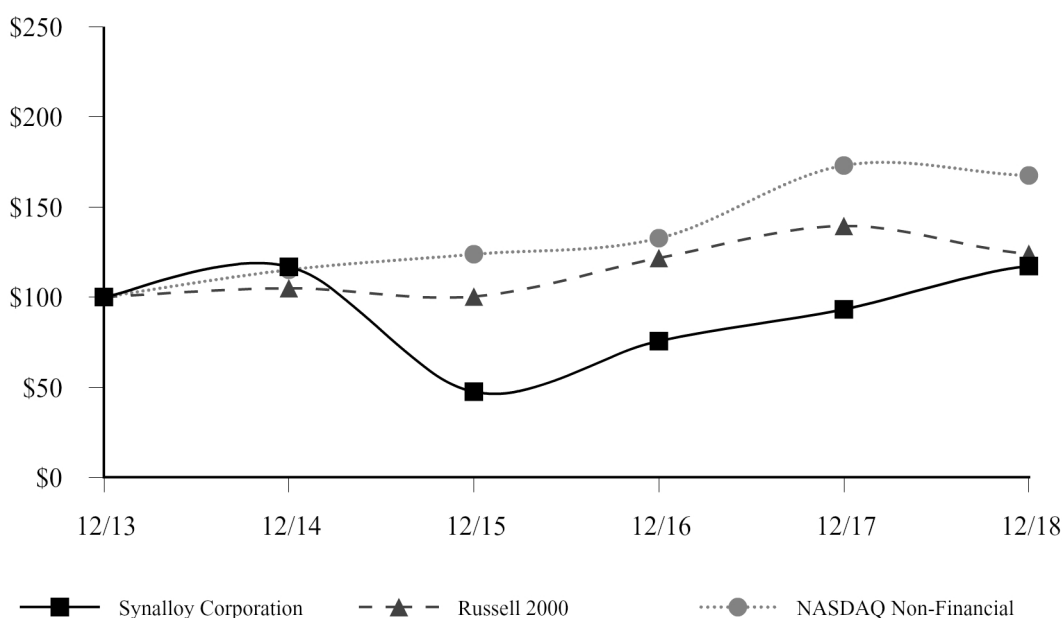
Item 5 Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The Company had 442 common shareholders of record at March 12, 2019. The Company's common stock trades on the Nasdaq Global Market under the trading symbol SYNL. The Company's credit agreement restricts the payment of dividends indirectly through a minimum fixed charge coverage covenant. The Company paid a \$0.25 cash dividend on December 12, 2018 and a \$0.13 cash dividend on November 6, 2017. No dividends were declared or paid in 2016. The prices shown below are the high and low sales prices for the common stock for each full quarterly period in the last two fiscal years as quoted on the NASDAQ Global Market.

Quarter	2018		2017	
	High	Low	High	Low
1st	\$ 15.25	\$ 12.60	\$ 13.35	\$ 9.75
2nd	20.95	13.65	13.75	10.40
3rd	24.55	19.80	13.10	10.30
4th	22.88	15.01	15.30	11.88

The information required by Item 201(d) of Regulation S-K is set forth in Part III, Item 12 of this Annual Report on Form 10-K.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Synalloy Corporation, the Russell 2000 Index, and the NASDAQ Non Financial Index



*\$100 invested on 12/31/13 in stock or index, including reinvestment of dividends.
 Fiscal year ending December 31.

Source: Russell Investment Group

Comparison of 5 Year Cumulative Total Return Graph

	12/13	12/14	12/15	12/16	12/17	12/18
Synalloy Corporation	\$ 100.00	\$ 116.80	\$ 47.45	\$ 75.51	\$ 93.23	\$ 117.20
Russell 2000	100.00	104.89	100.26	121.63	139.44	124.09
NASDAQ Non-Financial	100.00	115.17	123.77	132.61	172.98	167.51

This graph and related information shall not be deemed to be “filed” with the Securities and Exchange Commission or “soliciting material” or subject to Regulation 14A, or the liabilities of Section 18 of the 1934 Act, except to the extent the Company specifically requests that such information be treated as soliciting material or specifically incorporates it by reference into a filing under the Securities Act of 1933 or the 1934 Act.

Unregistered Sales of Equity Securities

Pursuant to the compensation arrangement with directors discussed under Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" in this Form 10-K, on May 17, 2018, the Company issued an aggregate of 14,857 shares of restricted stock to non-employee directors in lieu of \$276,000 of their annual cash retainer fees. Issuance of these shares was not registered under the Securities Act of 1933 based on the exemption provided by Section 4(a)(2) thereof because no public offering was involved.

The Company also issued 51,767 shares of common stock in 2018 to management and key employees that vested pursuant to the 2005 and 2015 Stock Awards Plans. Issuance of these shares was not registered under the Securities Act of 1933 based on the exemption provided by Section 4(a)(2) thereof because no public offering was involved.

Neither the Company, nor any affiliated purchaser (as defined in Rule 10b-18(a)(3) of the 1934 Act) on behalf of the Company repurchased any of the Company's securities during the year ended December 31, 2018.

Item 6 Selected Financial Data

Selected Financial Data and Other Financial Information

(Dollar amounts in thousands except for per share data)

	2018	2017	2016	2015	2014
Operations					
Net sales	\$ 280,841	\$ 201,148	\$ 138,566	\$ 175,460	\$ 199,505
Gross profit	51,237	28,081	16,904	25,319	32,929
Selling, general & administrative expense	27,692	24,875	22,673	21,938	16,530
Goodwill impairment	—	—	—	17,158	—
Operating income (loss)	21,237	2,057	(8,246)	(13,031)	16,098
Net income (loss) - continuing operations	13,097	1,341	(6,994)	(10,269)	12,619
Net loss - discontinued operations	—	—	(99)	(1,251)	(7,157)
Net income (loss)	13,097	1,341	(7,093)	(11,520)	5,462
Financial Position					
Total assets	228,399	159,874	138,638	149,043	187,633
Working capital	130,233	74,396	64,868	58,310	64,580
Long-term debt, less current portion	76,405	25,914	8,804	23,410	27,039
Shareholders' equity	102,484	89,700	88,593	95,154	109,454
Financial Ratios					
Current ratio	4.5:1	3.2:1	3.0:1	3.2:1	2.6:1
Gross profit to net sales	18%	14%	12 %	14 %	17%
Long-term debt to capital	43%	22%	9 %	20 %	20%
Return on average assets	7%	1%	(4)%	(6)%	7%
Return on average equity	14%	2%	(7)%	(10)%	12%
Per Share Data (Income/(Loss) – Diluted)					
Net income (loss) - continuing operations	\$ 1.48	\$ 0.15	\$ (0.81)	\$ (1.18)	\$ 1.45
Net loss - discontinued operations	—	—	(0.01)	(0.14)	(0.82)
Net income (loss)	1.48	0.15	(0.82)	(1.32)	0.63
Dividends declared and paid	0.25	0.13	—	0.30	0.30
Book value	11.54	10.28	10.22	11.02	12.57
Other Data					
Depreciation and amortization	\$ 8,775	\$ 7,738	\$ 6,695	\$ 6,634	\$ 5,132
Capital expenditures	7,355	5,279	3,044	10,905	8,066
Employees at year end	607	533	412	411	464
Shareholders of record at year end	442	488	527	540	575
Average shares outstanding - diluted	8,878	8,727	8,650	8,710	8,715
Stock Price					
Price range of common stock					
High	\$ 24.55	\$ 15.30	\$ 11.70	\$ 18.49	\$ 18.84
Low	12.60	9.75	6.42	6.20	13.14
Close	16.59	13.40	10.95	6.88	17.67

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

Critical Accounting Policies and Estimates

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments based on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Management believes the following critical accounting policies, among others, affect its more significant judgments and estimates used in the preparation of the Company's consolidated financial statements.

Allowance for Doubtful Accounts

The Company maintained an allowance for doubtful accounts of approximately \$169,000 as of December 31, 2018, for estimated losses resulting from the inability of its customers to make required payments. The allowance is based upon a review of outstanding receivables, historical collection information, and existing economic conditions. The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. Receivables are generally due within 30 to 60 days. Delinquent receivables are written off based on individual credit evaluations and specific circumstances of the customer.

Inventory Adjustments and Reserves

At the end of each quarter, all facilities review recent sales reports to identify sales price trends that would indicate products or product lines that are being sold below our cost. This would indicate that an adjustment would be required.

During the years ended December 31, 2018 and December 31, 2017, adjustments of \$106,000 and \$254,000, respectively, to inventory cost were required by our storage tank facility as lower demand for oil and gas products caused the net realizable value to fall below inventory cost for certain tanks.

Stainless steel, both in its raw material (coil or plate) or finished goods (pipe) state is purchased/sold using a base price plus an additional surcharge which is dependent on current nickel prices. As raw materials are purchased, it is priced to the Company based upon the surcharge at that date. When the selling price of the finished pipe is set for the customer, approximately three months later, the then-current nickel surcharge is used to determine the proper selling prices. A lower of cost or net realizable value ("LCNRV") adjustment is recorded when the Company's inventory cost, based upon a historical nickel price, is greater than the current selling price of that product due to a reduction in the nickel surcharge. During the years ended December 31, 2018 and December 31, 2017, no material LCNRV adjustments were required by our Metals Segment.

The Company establishes inventory reserves for:

- Estimated obsolete or unmarketable inventory. As of December 31, 2018 and December 31, 2017, the Company identified inventory items with no sales or expected sales activity for finished goods or no usage for raw materials for a certain period of time. For those inventory items that are not currently being marketed and unable to be sold, a reserve was established for 100 percent of the inventory cost less any estimated scrap proceeds. The Company reserved \$317,000 and \$411,000 at December 31, 2018 and December 31, 2017, respectively.
- Estimated quantity losses. The Company performs an annual physical inventory during the fourth quarter each year. For those facilities that complete their physical inventory before the end of December, a reserve is established for the potential quantity losses that could occur subsequent to their physical. This reserve is based upon the most recent physical inventory results. At December 31, 2018 and December 31, 2017, the Company had \$360,000 and \$286,000, respectively, reserved for expected physical inventory quantity losses.

Impairment of Long-Lived Assets

The Company continually reviews the recoverability of the carrying value of long-lived assets. Long-lived assets are reviewed for impairment when events or changes in circumstances, also referred to as "triggering events", indicate that the carrying value of a long-lived asset or group of assets (the "Assets") may no longer be recoverable. Triggering events include: a significant decline in the market price of the Assets; a significant adverse change in the operating use or physical condition of the Assets; a significant adverse change in legal factors or in the business climate impacting the Assets' value, including regulatory issues such as

environmental actions; the generation by the Assets of historical cash flow losses combined with projected future cash flow losses; or the expectation that the Assets will be sold or disposed of significantly before the end of the useful life of the Assets.

Business Combinations

Acquisitions are accounted for using the acquisition method of accounting for business combinations in accordance with GAAP. Under this method, the total consideration transferred to consummate the acquisition is allocated to the identifiable tangible and intangible assets acquired and liabilities assumed based on their respective fair values as of the closing date of the acquisition. The acquisition method of accounting requires extensive use of estimates and judgments to allocate the consideration transferred to the identifiable tangible and intangible assets, if any, acquired and liabilities assumed.

Goodwill

Goodwill, which represents the excess of purchase price over fair value of net assets acquired, is tested for impairment at the reporting unit level, annually in the fourth quarter and whenever circumstances indicate that the carrying value may not be recoverable. The evaluation of impairment involves using either a step zero qualitative approach or a quantitative approach, if required, as outlined in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 350. The step zero approach allows an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If an entity cannot make this determination, then the quantitative approach will be followed. The quantitative approach involves a comparison of the fair value of the reporting unit in which the goodwill is recorded to its carrying amount. If the reporting unit's fair value exceeds its carrying value, no impairment loss is recognized. However, if the reporting unit's carrying value exceeds its fair value, an impairment charge equal to the difference in the carrying value of the goodwill and reporting unit's fair value is recorded. The Company performed the qualitative analysis during the fourth quarter of 2018 which resulted in no impairment of the goodwill recognized of \$1,355,000 for the Specialty Chemicals Segment or the goodwill recognized of \$8,445,000 for the Metals Segment for the year ended December 31, 2018.

When the quantitative approach is used, in making our determination of fair value of the reporting unit, we rely on the discounted cash flow method. This method uses projections of cash flows from the reporting unit. This approach requires significant judgments including the Company's projected net cash flows, the weighted average cost of capital used to discount the cash flows and terminal value assumptions. We derive these assumptions used in the testing from several sources. Many of these assumptions are derived from our internal budgets, which would include existing sales data based on current product lines and assumed production levels, manufacturing costs and product pricing. We believe that our internal forecasts are consistent with those that would be used by a potential buyer in valuing our reporting units.

Earn-Out Liabilities

In connection with the MUSA-Stainless acquisition, the Company is required to make contingent earn-out payments to the prior owners based on actual sales levels of stainless steel pipe and tube (outside diameter of ten inches or less). In accordance with ASC Topic 805, Business Combinations, the Company determined the fair value of the MUSA-Stainless earn-out liability on the acquisition date using a Monte Carlo simulation model. Future changes to the fair value of the earn-out liability will be determined each quarter-end and charged to income or expense in the "Earn-Out Adjustments" line item in the Consolidated Statements of Operations and Comprehensive Income.

In connection with the MUSA-Galvanized acquisition, the Company is required to make contingent earn-out payments to the prior owners based on actual sales levels of galvanized pipe and tube. In accordance with ASC Topic 805, Business Combinations, the Company determined the fair value of the MUSA-Galvanized earn-out liability on the acquisition date by applying a probability-weighted expected return method, using management's projection of pounds to be shipped and future price per unit. Future changes to the fair value of the earn-out liability will be determined each quarter-end and charged to income or expense in the "Earn-Out Adjustments" line item in the Consolidated Statements of Operations and Comprehensive Income.

Liquidity and Capital Resources

The Company used cash flows for continuing operating activities during 2018 that totaled \$21,221,000; cash flows provided by continuing operating activities in 2017 totaled \$2,235,000, a year-over-year decrease of \$23,456,000. The significant components of those results are as follows:

- Net income for 2018 was \$13,097,000. Adding back non-cash, non-operating items, including a) depreciation and amortization expense of \$8,775,000, b) the earn-out adjustments of \$1,431,000 and c) the unrealized loss on investments in equity securities of \$2,573,000, resulted in favorable cash generation from continuing operations of \$25,876,000, an increase of \$16,418,000 from \$9,458,000 for the prior year. That prior year amount includes net income of \$1,341,000,

plus add backs for non-cash, non-operating items of a) depreciation and amortization of \$7,739,000, b) the earn-out adjustment of \$689,000 and c) a deduction for the gain on the sale of available for sale securities of \$310,000.

- Accounts receivable used \$10,413,000 of cash from operations during 2018 as sales increased 38 percent for November and December 2018 compared to the same two months of 2017. Accounts receivable days outstanding remained relatively stable, increasing from 51 days at the end of 2017 to 52 days at the end of 2018.
- Inventory used \$41,158,000 of cash from operations as the Company consciously increased inventory levels in 2018. The year-over-year increase, primarily related to the Metals Segment, included higher levels of pounds due to business activity (37 percent of the total or \$14,545,000), stainless steel surcharges (\$4.5 million), higher special alloy content due to strong backlog (\$4.6 million), advance buys of seamless carbon steel pipe and tube inventory to ensure supply in the face of strong demand (\$14.2 million), and generally higher replacement costs during 2018 as compared to 2017. Inventory turns decreased from 2.51 turns at December 31, 2017, calculated on a three-month average basis, to 1.81 turns at December 31, 2018.
- Accounts payable used \$234,000 of cash from operations in 2018, excluding the impact of the MUSA-Galvanized acquisition completed on July 1, 2018, as increased levels of business activity, which would normally increase the accounts payable balance, were offset by a return to a more normalized accounts payable days outstanding of approximately 46 days at December 31, 2018 compared to temporarily elevated 60 days at December 31, 2017, due to timing of higher 2017 year-end inventory purchases.

In 2018, the Company's current assets and current liabilities increased \$59,824,000 and \$3,987,000, respectively, from the year ended 2017 amounts, which caused working capital for 2018 to increase by \$55,837,000 to \$130,233,000 from the 2017 total of \$74,396,000. The current ratio for the year ended December 31, 2018, increased to 4.5:1 compared to the 2017 year-end ratio of 3.2:1.

The Company used cash from investing activities during 2018 of \$22,703,000. The MUSA-Galvanized acquisition during the third quarter 2018 used \$10,378,000 and the Company incurred capital asset purchases of \$7,355,000. Financing activities during 2018 generated \$46,151,000 of cash as the Company borrowed funds during 2018 for the aforementioned acquisition and capital purchases. The Company declared a \$0.25 per share dividend during the fourth quarter 2018 which resulted in a use of cash of \$2,215,000.

On October 30, 2017, the Company amended its Credit Agreement with its bank to increase the limit of its asset-based line of credit (the "Line") by \$20,000,000 to a maximum of \$65,000,000 and extended the maturity date to October 30, 2020. Interest under the Credit Agreement is calculated using the One Month LIBOR Rate (as defined in the Credit Agreement), plus a pre-defined spread. Borrowings under the Credit Agreement are limited to an amount equal to a Borrowing Base calculation (as defined in the Credit Agreement) that includes eligible accounts receivable and inventory. On June 29, 2018, the Company amended its Credit Agreement with its bank to increase the limit of the Line by \$15,000,000 to a maximum of \$80,000,000. As a result of the amendment, the interest rate on the Line is now calculated using One Month LIBOR plus a spread of 1.65 percent. None of the other provisions of the Credit Agreement were changed as a result of this amendment. On December 20, 2018, the Company amended its Credit Agreement with its bank to refinance and increase the Line from \$80,000,000 to \$100,000,000 and to create a new 5-year term loan in the principal amount of \$20,000,000 (the "Term Loan"). The Term Loan was used to finance the purchase of substantially all of the assets of American Stainless Tubing, Inc., a North Carolina corporation ("American Stainless") (see Note 23 to the Consolidated Financial Statements).

The Company determined that each refinancing should be accounted for as a debt modification. The Company incurred lender and third party costs associated with the debt restructuring that were capitalized on the balance sheet while certain other third party costs were expensed.

Pursuant to the Credit Agreement, the Company was required to pledge all of its tangible and intangible properties, including the stock and membership interests of its subsidiaries. In the Credit Agreement, the Company's bank agreed to release its liens on the real estate properties covered by the Purchase and Sale Agreement with Store Funding, as described in Note 12.

Covenants under the amended Credit Agreement include maintaining a minimum fixed charge coverage ratio, maintaining a minimum tangible net worth, and a limitation on the Company's maximum amount of capital expenditures per year, which is in line with currently projected needs. At December 31, 2018, the Company was in compliance with all debt covenants. The Company believes that its current liquidity position is sufficient to meet its needs going forward.

Results of Operations

Comparison of 2018 to 2017 – Consolidated

For the full-year 2018, net income totaled \$13,097,000, or \$1.48 per diluted earnings per share. This compared to full-year 2017 net income of \$1,341,000, or \$0.15 diluted earnings per share. For the fourth quarter of 2018 the Company recorded net income of \$549,436, or \$0.06 diluted earnings per share. This compares to net income of \$1,017,000, or \$0.11 diluted earnings per share for fourth quarter of 2017.

The full-year and fourth quarter of 2018 were negatively impacted by mark-to-market valuation losses on investments in equity securities totaling \$2,573,000 and \$2,050,000, respectively, compared to a valuation gain of \$310,000 for the full year of 2017 and no such gain or loss in the fourth quarter of 2017. The full-year and fourth quarter 2018 operating results include an operating profit of \$65,000 and \$96,000, respectively, due to Munhall-Galvanized's operations which were acquired in the third quarter 2018.

Full-year 2018 consolidated gross profit increased 82 percent to \$51,237,000, or 18 percent of sales, compared to \$28,081,000, or 14 percent of sales, in 2017. For the fourth quarter of 2018, consolidated gross profit was \$10,259,000, an increase of 34 percent from the fourth quarter of 2017 of \$7,663,000. Consolidated gross profit was 14 percent of sales for the fourth quarter of 2018 and 15 percent of sales for same period of 2017. The increases in dollars and in percentage of sales were attributable to the Metals Segment as discussed in the Metals Segment Comparison of 2018 to 2017 below.

Consolidated selling, general and administrative expense for 2018 increased by \$2,817,000 to \$27,692,000, or 10 percent of sales, compared to \$24,875,000, or 12 percent of sales for 2017. These costs increased \$1,307,000 during the fourth quarter of 2018 to \$7,262,000 compared to \$5,955,000 for the same period of 2017 and were 10 percent of sales for the fourth quarter of 2018 compared to 11 percent of sales for the fourth quarter of 2017. The most significant dollar increase for both the full year and fourth quarter of 2018 when compared to the same periods of 2017 resulted from higher incentive based bonuses, increases of \$2,009,000 and \$463,000, respectively. The inclusion of Munhall-Galvanized's selling, general and administrative expenses for the second half and fourth quarter of 2018, added \$328,000 and \$156,000, respectively. Because the MUSA-Galvanized acquisition occurred in July of 2018, none of Munhall-Galvanized's selling, general, and administrative expenses were included in the prior year. The Company also incurred lower lease expense of \$404,000 related to the inclusion of the Munhall facility into the Master Lease Agreement with Store Funding (see Note 12 to the Consolidated Financial Statements). The remainder of the increase for the year resulted primarily from:

- Higher personnel costs due to annual merit increases and growth-related staffing increases (\$767,000 higher for the full year and \$349,000 higher for the fourth quarter);
- Sales commissions related to higher sales (\$165,000 higher for the full year and \$169,000 higher for the fourth quarter)

In addition, the Company incurred \$1,212,000 for one-time acquisition costs associated with the 2018 MUSA-Galvanized acquisition and 2019 ASTI acquisition, compared to \$795,000 of acquisition costs in 2017. These costs were \$341,000 and \$13,000 for the fourth quarters of 2018 and 2017, respectively. These items will be discussed in greater detail in the respective sections below.

Comparison of 2017 to 2016 – Consolidated

For the full-year 2017, the net income from continuing operations totaled \$1,341,000, or \$0.15 per share. This compared to full-year 2016 net loss from continuing operations of \$6,994,000, or \$0.81 loss per share. For the fourth quarter of 2017 the Company recorded net income from continuing operations of \$1,017,000, or \$0.11 per share. This compares to net loss from continuing operations of \$1,436,000, or \$0.17 loss per share for fourth quarter of 2016. The full-year and fourth quarter 2017 operating results include an operating loss of \$245,000 and an operating profit of \$14,000, respectively, due to Munhall-Stainless' operations which were acquired in the first quarter 2017.

Consolidated gross profit from continuing operations increased 66 percent to \$28,081,000 in 2017, compared to \$16,904,000 in 2016, and, as a percent of sales, increased to 14 percent of sales in 2017 compared to twelve percent of sales in 2016. For the fourth quarter of 2017, consolidated gross profit from continuing operations was \$7,663,000, an increase of 108 percent from the fourth quarter of 2016 of \$3,684,000. Consolidated gross profit from continuing operations was 15 percent of sales for the fourth quarter of 2017 and eleven percent of sales for same period of 2016. The increases in dollars and in percentage of sales were attributable to the Metals Segment as discussed in the Metals Segment Comparison of 2017 to 2016 below.

Consolidated selling, general and administrative expense from continuing operations for 2017 increased by \$2,202,000 to \$24,875,000, or 12 percent of sales, compared to \$22,673,000, or 16 percent of sales for 2016. These costs increased \$407,000 during the fourth quarter of 2017 to \$5,955,000 compared to \$5,548,000 for the same period of 2016 and were 11 percent of sales

for the fourth quarter 2017 compared to 17 percent of sales for the fourth quarter of 2016. The dollar increase for both the year and fourth quarter of 2017 when compared to the same periods of 2016 resulted primarily from the inclusion of Munhall-Stainless' selling, general and administrative expenses for the entire year and fourth quarter for 2017. Since the MUSA-Stainless acquisition in February 2017, none of Munhall-Stainless' selling, general, and administrative expenses were included in 2016 results. This accounted for \$1,139,000 and \$356,000 of the annual and fourth quarter increase in selling, general and administrative costs for 2017. The remainder of the increase for the year resulted from higher incentive based bonuses, bad debt expense, stock compensation costs and personnel costs, partly offset by lower amortization and one-time sale-leaseback closing costs which were incurred in the prior year. In addition, the Company incurred \$795,000 for one-time acquisition related costs mainly associated with the MUSA-Stainless acquisition in 2017 compared to \$106,000 of one-time acquisition costs associated with this acquisition in 2016. These costs were \$13,000 and \$30,000 for the fourth quarters of 2017 and 2016, respectively. All of these items will be discussed in greater detail in the respective sections below.

Metals Segment

The following table summarizes operating results from continuing operations and backlogs for the three years indicated. Reference should be made to Note 15 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

(in thousands)	2018		2017		2016	
	Amount	%	Amount	%	Amount	%
Net sales	\$ 222,242	100.0 %	\$ 152,957	100.0 %	\$ 90,215	100.0 %
Cost of goods sold	178,766	80.4 %	133,452	87.2 %	82,676	91.6 %
Gross profit	43,476	19.6 %	19,505	12.8 %	7,539	8.4 %
Selling, general and administrative expense	15,932	7.2 %	14,081	9.2 %	12,360	13.7 %
(Gain) loss on sale-leaseback	(240)	— %	(240)	(0.1)%	2,166	2.4 %
Operating income (loss)	\$ 27,784	12.5 %	\$ 5,664	3.7 %	\$ (6,987)	(7.7)%

Comparison of 2018 to 2017 - Metals Segment

The Metals Segment's net sales totaled \$222,242,000 for the full year of 2018, an increase of 45 percent compared to the same period of 2017. Net sales for the fourth quarter of 2018 totaled \$59,351,000, an increase of 44 percent compared to the fourth quarter 2017 net sales of \$41,136,000. Excluding Munhall-Galvanized, acquired in the third quarter of 2018, full-year 2018 sales increased 38 percent compared to the same period of 2017 and fourth quarter 2018 sales were 31 percent greater than the same period for 2017.

Stainless and galvanized steel pipe net sales from continuing operations increased 58 percent and 61 percent for the full-year and fourth quarter of 2018, respectively, when compared to the same periods of the prior year. Excluding Munhall-Galvanized, net sales would have increased 46 percent and 41 percent for the full year and fourth quarter of 2018, respectively. The total sales increase for the year resulted from a 60 percent increase in unit volumes partially offset by a two percent decrease in average selling price. For the fourth quarter, unit volumes increased 72 percent while the average selling price decreased six percent for 2018 compared to 2017. The lower average selling price for the full-year and fourth quarter resulted from the incremental sales of Munhall-Galvanized, as their sales of more commodity galvanized pipe and tube had an unfavorable effect on average selling prices. Excluding the impact of Munhall-Galvanized, the average selling price of stainless steel pipe and tube increased 19 percent and 29 percent for the full year and fourth quarter of 2018, respectively, compared to the same periods of 2017.

Seamless heavy-wall carbon steel pipe and tube sales increased 29 percent and 23 percent for the full-year and fourth quarter, respectively, of 2018 compared to the same periods of 2017. The full year sales increase was comprised of a six percent increase in unit volumes combined with a 21 percent increase in average selling price. For the fourth quarter, unit volumes decreased four percent while average selling prices increased 26 percent. Heavier demand in 2018, primarily related to stable demand in the oil and gas sector, improvements in demand in the general industrial sector, as well as tariff induced price increases, drove the sales increase.

Storage tank sales increased 15 percent and two percent for the full-year and fourth quarter, respectively, of 2018 when compared to the same periods for the prior year. The full-year increase was comprised of a 25 percent increase in the average selling price, offset by a 15 percent decline in the number of tanks sold. With a significant portion of the average price increase related to an increase in both size and complexity of tanks being purchased, the decline in units sold relates primarily to throughput capabilities rather than any decline in overall demand. As of December 31, 2018, backlog for storage tanks totaled \$20.7 million, an improvement of 20 percent over levels as of December 31, 2017. For the fourth quarter, the storage tank sales increase resulted from a 28 percent decrease in the number of tanks sold combined with a 44 percent increase in average selling price. The results highlight strong

demand and activity in the Permian Basin and other Palmer delivery areas, even as West Texas Intermediate ("WTI") pricing and other economic indicators have shown some variability during 2018.

The Metals Segment's operating income increased \$22,120,000 to \$27,784,000 for the full-year 2018 compared to operating income of \$5,664,000 for 2017. Fourth quarter 2018 operating income increased \$1,687,000 to \$4,692,000 compared to operating income of \$3,005,000 for the fourth quarter of 2017. Current year operating results were affected by the following factors:

- The addition of Munhall-Galvanized operations as noted above. The full-year 2018 and fourth quarter of 2018 operating results includes \$65,000 and \$95,000, respectively, for Munhall-Galvanized operations. These amounts do not reflect the earn-out adjustment for the year since that expense is not included in the Metals Segment's operating results.
- Nickel prices and resulting surcharges for 304 and 316 alloys ended the fourth quarter of 2018 lower than the previous quarter, with surcharges for both alloys decreasing by \$0.11 and \$0.13 per pound, respectively; average nickel prices for the quarter generated a net unfavorable operating impact of \$174,000 related to metal pricing, compared to an unfavorable net impact of \$998,000 for the fourth quarter of 2017. The current quarter's metal price change loss brought the full year metal price change gain to \$4,959,000, compared to the full year 2017 metal price change loss of \$2,634,000.
- Year over year changes in volume, pricing and product mix, as noted above, combined for a 53 percent improvement in gross profit margins in 2018 compared to 2017.
- Operating income from seamless carbon pipe and tube showed a significant 246 percent improvement over the prior year.

Selling, general and administrative expense increased \$1,852,000, or 13 percent, for the full-year 2018 when compared to 2017. This expense category was seven percent of sales for 2018 and nine percent of sales for 2017. For the fourth quarter, selling, general and administrative expense was \$4,109,000 (seven percent of sales) in 2018, an increase of \$746,000 from \$3,363,000 (eight percent of sales) for the same period of 2017. The dollar increase for both the year and fourth quarter of 2018 when compared to the same periods of 2017 were impacted by the inclusion of Munhall-Galvanized's selling, general and administrative expenses. Because the MUSA-Galvanized acquisition occurred in July of 2018, none of Munhall-Galvanized's selling, general and administrative expenses were included in the prior year. This accounted for \$328,000 and \$156,000 of the full-year and fourth quarter increase in selling, general and administrative costs for 2018. The remaining changes in selling, general and administrative expense resulted from:

- Higher incentive bonus expense (\$1,208,000 higher and \$160,000 higher for the full-year and fourth quarter, respectively);
- Lower lease expenses related to the inclusion of the Munhall facility into the Master Agreement with Store Funding (\$404,000 lower for the full year - see Note 12 to the Consolidated Financial Statements);
- Allocated administrative costs (higher by \$384,000 and \$96,000 for the full-year and fourth quarter, respectively);
- Compensation expenses primarily related to merit increases and higher direct sales headcount (higher by \$678,000 and \$260,000 for the full-year and fourth quarter, respectively), which were offset by lower commissions on a full year basis by \$303,000;
- Higher travel costs (higher by \$204,000 and \$67,000 for the full-year and fourth quarter, respectively);
- Higher bad debt expense (higher by \$184,000 and \$165,000 for full-year and fourth quarter, respectively); and
- Lower amortization expense (lower by \$63,000 and \$10,000 for the full-year and fourth quarter, respectively)

Comparison of 2017 to 2016 – Metals Segment

The Metals Segment's net sales from continuing operations increased 70 percent for the full-year 2017 as compared to the same period of 2016 and net sales for the fourth quarter of 2017 totaled \$41,136,000, an increase of 88 percent compared to 2016 net sales of \$21,883,000. Excluding Munhall-Stainless, full-year 2017 sales increased 41 percent compared to the same period of 2016 and fourth quarter 2017 sales were 48 percent greater than the same period for 2016.

Stainless steel pipe net sales from continuing operations increased 79 percent and 114 percent for the full-year and fourth quarter, respectively, of 2017 when compared to the same periods of the prior year. Excluding Munhall-Stainless, net sales would have

increased 33 percent and 46 percent for the full-year and fourth quarter, respectively, of 2017. The total pipe sales increase for the year resulted from a 88 percent increase in average unit volumes partially offset by a nine percent decrease in average selling price. For the fourth quarter, average unit volumes increased 131 percent while the average selling price decreased 17 percent for 2017 compared to 2016. The lower average selling price for the full-year and fourth quarter resulted from the incremental sales of Munhall-Stainless as their sales of smaller diameter pipe and tube had an unfavorable effect on average selling prices.

Seamless heavy-wall carbon steel pipe and tube sales increased 68 percent and 53 percent for the full-year and fourth quarter, respectively, of 2017 compared to the same periods of the prior year. The full year sales induction was comprised of a 63 percent increase in average unit volumes combined with a five percent increase in average selling price. For the fourth quarter, average unit volumes increased 45 percent while average selling prices increased eight percent. Heavier demand in 2017, primarily related to improvements in the oil and gas sector, drove the sales increase.

Storage tank sales increased 43 percent and 52 percent for the full-year and fourth quarter, respectively, of 2017 when compared to the same periods for the prior year. The full-year increase was comprised of a 15 percent increase in the number of tanks sold and 29 percent increase in average selling price. For the fourth quarter, the storage tank increase resulted from a 21 percent increase in the number of tanks sold combined with a 31 percent decrease in average selling price. The results highlight a move toward higher levels of activity in the Permian Basin and other Palmer delivery areas, as WTI pricing and other economic indicators have risen throughout the second half of 2017.

The Metals Segment's operating results from continuing operations increased \$12,651,000 to an operating profit of \$5,664,000 for the full-year 2017 compared to an operating loss of \$6,987,000 for 2016. For the fourth quarter, the Metals Segment's operating results from continuing operations increased \$4,331,000 to an operating profit of \$3,005,000 compared to a loss of \$1,326,000 for 2017 compared to 2016, respectively. Current year operating results were affected by the following factors:

- The addition of Munhall-Stainless operations as noted above. The full-year 2017 and fourth quarter of 2017 operating results includes \$443,000 and \$558,000, respectively, for Munhall-Stainless operations. These amounts do not reflect the earn-out adjustment for the year since that expense is not included in the Metals Segment's operating results.
- Nickel prices and resulting surcharges for 304 and 316 alloys experienced a rebound in the fourth quarter when compared to the third quarter of 2017. Surcharges for both alloys increased by \$0.14 per pound in the fourth quarter; however, the increase was not sufficient to offset the cumulative impact of third quarter declines, with the Metals Segment experiencing a metal price change loss of \$925,000 for the quarter, up from the prior year's fourth quarter metal price change loss of \$194,000. The current quarter's metal price change loss brought the full year metal price change loss to \$2,633,000, compared to the full year 2016 metal price change loss of \$5,751,000.
- Year over year changes in volume, pricing and product mix, as noted above, combined for a 36 percent improvement in gross profit margins in 2017 compared to 2016.
- Operating income from both seamless carbon pipe and tube and storage tanks and vessels continued to show solid improvement over the prior year.

Selling, general and administrative expense from continuing operations increased \$1,720,000, or 14 percent for the full-year 2017 when compared to 2016. This expense category was nine percent of sales for 2017 and 14 percent of sales for 2016. For the fourth quarter, selling, general and administrative expense was \$3,363,000 (eight percent of sales) in 2017, an increase of \$163,000 from \$3,200,000 (15 percent of sales) for the same period of 2016. The dollar increase for both the year and fourth quarter of 2017 when compared to the same periods of 2016 resulted primarily from the inclusion of Munhall-Stainless selling, general and administrative expenses. Since the MUSA-Stainless acquisition in February 2017, none of Munhall-Stainless' selling, general, and administrative expenses were included in the prior year. This accounted for \$1,139,000 and \$356,000 of the annual and fourth quarter increase in selling, general and administrative costs for 2017.

The remaining changes in selling, general and administrative expense resulted from:

- Incentive bonus expense (\$510,000 higher and \$6,000 lower for the full-year and fourth quarter, respectively);
- Allocated administrative costs (higher by \$312,000 and \$78,000 for the full-year and fourth quarter, respectively);
- Professional fees (lower by \$284,000 and \$23,000 for the full-year and fourth quarter, respectively);
- Loss on sale of fixed assets (higher by \$191,000 and \$30,000 for the full-year and fourth quarter, respectively);
- Travel costs (lower by \$161,000 and \$89,000 for the full-year and fourth quarter, respectively);
- Amortization expense (lower by \$120,000 and \$30,000 for the full-year and fourth quarter, respectively); and
- Salaries and wages (\$86,000 higher and \$103,000 lower for the full-year and fourth quarter, respectively).

Specialty Chemicals Segment

The following tables summarize operating results for the three years indicated. Reference should be made to Note 15 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

(Amounts in thousands)	2018		2017		2016	
	Amount	%	Amount	%	Amount	%
Net sales	\$ 58,599	100.0 %	\$ 48,191	100.0 %	\$ 48,351	100.0%
Cost of goods sold	50,393	86.0 %	39,217	81.4 %	38,884	80.4%
Gross profit	8,206	14.0 %	8,974	18.6 %	9,467	19.6%
Selling, general and administrative expense	4,327	7.4 %	4,679	9.7 %	4,579	9.5%
(Gain) loss on sale-leaseback	(95)	(0.2)%	(95)	(0.2)%	206	0.4%
Operating income	\$ 3,974	6.8 %	\$ 4,390	9.1 %	\$ 4,682	9.7%

Comparison of 2018 to 2017 – Specialty Chemicals Segment

Sales for the Specialty Chemicals Segment increased by 22 percent or \$10,408,000 to \$58,599,000 for 2018 compared to \$48,191,000 in 2017. For the fourth quarter of 2018, sales were \$13,323,000, representing a 14 percent increase from \$11,701,000 for the same quarter of 2017. Pounds shipped during the full-year decreased by one percent for 2018 compared to 2017. For the fourth quarter of 2018, pounds shipped increased eight percent. Overall selling prices increased 23 percent and six percent for the full-year and fourth quarter, respectively, of 2018 compared to the same periods of 2017. Net sales were favorably impacted during the full year and fourth quarter of 2018 from the initial ramp up of seven significant customers, a new fire retardant and new asphalt additive customers at our subsidiary, CRI Tolling (a one-time sourcing not planned to repeat in 2019), two new oil and gas customers and two new pulp/paper customers at our subsidiary, MC, and a new product launch from an existing customer at MC.

The Specialty Chemicals Segment's operating income for the full-year of 2018 decreased nine percent to \$3,974,000. The fourth quarter of 2018 increased 10 percent from the prior year quarter to \$649,000. While the fourth quarter showed modest improvement, the full second-half 2018 operating income results outperformed the prior year second-half by \$260,000, or 15 percent. During the second half of 2018, margins were realigned as new higher margin products were added to the portfolio. However, that strong second-half performance could not overcome a first-half shortfall of \$675,000, or 26 percent, compared to the prior year, yielding a net decline on both a dollar basis and operating margin percent basis for the full-year.

Selling, general and administrative expense decreased \$350,000 or seven percent, to \$4,327,000 in 2018 when compared to 2017 expense of \$4,679,000, which represented seven percent of sales and ten percent of sales, respectively. For the fourth quarter, selling, general and administrative expense was \$1,061,000 (eight percent of sales) in 2018, an increase of \$184,000 when compared to \$877,000 (seven percent of sales) for the same period of 2017.

The full-year decreases in selling, general and administrative expenses resulted from:

- Lower wages and benefits in 2018 (\$186,000 and \$38,000 lower for the full-year and fourth quarter, respectively);
- Lower professional fees and allocated expenses (\$361,000 and \$141,000 lower for the full-year and fourth quarter, respectively);
- Lower bad debt expenses (\$241,000 and \$15,000 lower for the full-year and fourth quarter, respectively); and
- A \$300,000 gain related to a legal settlement in 2018;

The full-year decreases were offset by:

- Higher sales commissions (\$468,000 and \$157,000 higher for the full-year and fourth quarter, respectively); and
- Higher incentive based bonuses (\$282,000 and \$220,000 higher for the full-year and fourth quarter, respectively)

Comparison of 2017 to 2016 – Specialty Chemicals Segment

Sales for the Specialty Chemicals Segment decreased \$161,000 to \$48,190,000 for 2017 compared to \$48,351,000 in 2016. For the fourth quarter of 2017, sales were \$11,701,000, representing a five percent increase from \$11,167,000 for the same quarter of 2016. Pounds shipped during the full-year decreased by nine percent for 2017 compared to 2016. For the fourth quarter of 2017, pounds shipped decreased 17 percent. Overall selling prices increased nine percent and 22 percent for the full-year and fourth quarter, respectively, of 2017 compared to the same periods of 2016. Net sales were negatively impacted during the full year and fourth quarter of 2017 by:

- The loss of a single customer in the second half of 2016 reduced sales in 2017 by approximately \$2,100,000;
- 2017 volume was negatively impacted by the slower than anticipated ramp up of our new fire retardant customer at CRI Tolling. Shipments did commence in the second half of the third quarter and continued to build into the fourth quarter to approximately 60 percent of expected volumes. Our agreement with this customer calls for an annual volume of 3,000,000 pounds, the run rate, which we now expect to achieve in the first quarter of 2018; and
- We experienced some delays in customer deliveries due to weather conditions and an industry wide diminished trucking capacity.

The Specialty Chemicals Segment's operating income for the full-year of 2017 decreased six percent to \$4,390,000. The fourth quarter of 2017 decreased 38 percent from the prior year quarter to \$594,000. Operating income for the full year 2017 was negatively impacted by an increase to the allowance for doubtful accounts of \$239,000 for one customer that became financially unstable and became uncollectable, and \$184,000 for the year and \$93,000 for the fourth quarter for one-time legal expenses. The decrease in operating income was partially offset by lower incentive based bonuses of \$223,000 for the year and \$255,000 for the fourth quarter along with a \$206,000 charge in the third quarter 2016 associated with the book loss on two Specialty Chemicals Segment properties sold as part of the sale-leaseback transaction closed in 2016 with no comparable loss recognized in 2017.

Selling, general and administrative expense increased \$99,000 or two percent in 2017 when compared to 2016, which represented 10 percent of sales and nine percent of sales, respectively. For the fourth quarter, selling, general and administrative expense was \$877,000 (seven percent of sales) in 2017, a decrease of \$191,000 when compared to \$1,068,000 (ten percent of sales) for the same period of 2016.

The full-year decreases in selling, general and administrative expenses resulted from:

- Lower wages and benefits in 2017 (\$265,000 and \$48,000 lower for the full-year and fourth quarter, respectively);
- Lower incentive based bonuses (\$223,000 and \$255,000 lower for the full-year and fourth quarter, respectively)

The full-year decreases were offset by:

- Higher bad debt expense (\$289,000 and \$15,000 higher for the full-year and fourth quarter, respectively);
- Higher professional fees (\$167,000 and \$93,000 higher for the full-year and fourth quarter, respectively); and
- Additional corporate costs allocated to the segment (\$192,000 and \$48,000 higher for the full-year and fourth quarter, respectively).

Comparison of 2018 to 2017 - Corporate

Corporate expenses increased \$1,364,000 to \$7,878,000, or three percent of sales, in 2018 up from \$6,514,000, three percent of sales, in 2017. The full-year increase resulted primarily from:

- Performance based bonuses increased \$520,000 from the prior year. Pre-defined Adjusted EBITDA targets were achieved in both 2018 and 2017;
- Acquisition costs increased \$417,000 from the prior year due to the MUSA-Galvanized acquisition in the third quarter of 2018 (see Note 18 to the Consolidated Financial Statements), as well as fourth quarter costs incurred due to the acquisition of American Stainless' assets, which transaction closed on January 1, 2019 (see Note 23 to the Consolidated Financial Statements); and
- Personnel costs were \$294,000 higher as a result of normal annual rate increases;

Interest expense was \$2,211,000 and \$985,000 for the full-years of 2018 and 2017, respectively. The increase was primarily related to higher average debt outstanding in the fourth quarter and full year of 2018, as additional borrowings were primarily related to acquisitions and to support working capital requirements associated with increased business activity.

Comparison of 2017 to 2016 – Corporate

Corporate expenses increased \$384,000 to \$6,514,000, or three percent of sales, in 2017 up from \$5,835,000, four percent of sales, in 2016. The full-year increase resulted primarily from:

- Professional fees increased \$148,000 from the prior year resulting from higher audit and banking fees in the current year;
- Personnel costs were \$145,000 higher as a result of normal annual rate increases;
- Performance based bonuses increased \$537,000 from the prior year. Pre-defined Adjusted EBITDA targets were achieved in 2017 but were not achieved in 2016; and

- Stock grant compensation expense increased \$147,000 as a result of awards granted in 2017 in addition to the amendment of the vesting schedules for the May 5, 2016 and February 8, 2017 stock grants awarded pursuant to the 2015 Stock Awards Plan.

These increases above were partially offset by:

- Shelf registration fees of \$145,000 and one-time closing costs associated with the sale-leaseback transaction of \$165,000 incurred in 2016 that did not recur in 2017;
- Lower rent expense as a result of an early lease termination fee of \$34,000 incurred in 2016 to move the location of the corporate office located in Richmond, VA; and
- Lower directors' fees of \$32,000 as a result of one director who did not renew his term for the 2017 year.

Acquisition costs of \$795,000 for 2017 and \$106,000 for 2016 resulted from costs associated with the MUSA-Stainless acquisition. See Note 18 to the consolidated financial statements.

Interest expense was \$985,000 and \$933,000 for the full-years of 2017 and 2016, respectively. The increase in interest expense during 2017 resulted from an increase in the average debt outstanding as a result of funds used for the MUSA-Stainless acquisition in the first quarter of 2017.

During the third quarter of 2016, the Company completed a sale-leaseback transaction whereby all of the Company's operating real estate assets were sold to a third party and are being leased back by the Company. The Company received gross sales proceeds of \$22,000,000, or approximately \$4,230,000 in excess of net book value of total assets sold. Pursuant to the applicable accounting standards, the Company was required to calculate the gain or loss associated with the transaction on a property by property basis. As a result, losses associated with three of the properties in this transaction, totaling \$2,455,000, were charged against earnings during the third quarter of 2016. Gains associated with the remaining three properties, totaling approximately \$6,685,000, were deferred and are being amortized on the straight-line method over the initial lease term of 20 years.

Contractual Obligations and Other Commitments:

As of December 31, 2018, the Company's contractual obligations and other commitments were as follows:

(Amounts in thousands)

	Total	Payment Obligations for the Year Ended					
		2019	2020	2021	2022	2023	Thereafter
Obligations:							
Revolving credit facility	\$ 76,405	\$ —	\$ —	\$ 76,405	\$ —	\$ —	\$ —
Interest on bank debt	9,285	3,446	3,446	2,393	—	—	—
Capital lease	1,077	354	358	347	18	—	—
Operating leases	61,355	3,207	3,244	3,239	3,225	3,103	45,337
Deferred compensation ⁽¹⁾	179	21	21	21	17	17	82
Total	\$ 148,301	\$ 7,028	\$ 7,069	\$ 82,405	\$ 3,260	\$ 3,120	\$ 45,419

⁽¹⁾ For a description of the deferred compensation obligation, see Note 8 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

Current Conditions and Outlook

While 2018 set records for sales and earnings, our expectations for 2019 are even higher. As is typical after completing an acquisition, our pipeline of opportunities continues to increase as we are contacted by investment bankers with new prospects. Our leverage following the ASTI acquisition was higher than our historical metrics, but we expect to be well positioned by mid-year to take on another acquisition, should we find a suitable partner.

Item 7A Quantitative and Qualitative Disclosures about Market Risk

The Company is exposed to market risks from adverse changes in interest rates and nickel prices.

Changes in United States interest rates affect the interest earned on the Company's cash and cash equivalents as well as interest paid on its indebtedness. Except as described below, the Company does not engage in speculative or leveraged transactions, nor does it hold or issue financial instruments for trading purposes. The Company is exposed to changes in interest rates primarily as a result of its borrowing activities used to maintain liquidity and fund business operations.

Fair value of the Company's debt obligations, which approximated the recorded value, consisted of:

At December 31, 2018

- \$76,405,000 under a revolving line of credit with an availability of \$17,455,000, expiring on December 20, 2021 with a variable interest rate of 4.19 percent.
- An interest rate swap contract with a notional amount of \$8,250,000 which fixes the term loan interest rate at 3.74 percent. The fair value of the interest rate swap contract was an asset to the Company of \$147,000.

The Company hedges its nickel exposure to provide coverage against extreme downside product pricing exposure related to the content of nickel alloy contained in purchased stainless steel inventory. The sales price of stainless steel product (containing nickel alloy) is subject to a variable pricing component for alloys (nickel, chrome, molybdenum and iron) contained in the product. Each month, industry pricing indices are published which set the following month's price surcharges for those alloys. The Company typically holds approximately six to seven months of inventory, with fixed priced purchase orders (where the alloy pricing index is "locked", eliminating the Company's exposure) consisting of approximately 50 percent of held stainless steel inventories. As a result, the eventual sales prices for approximately 50 percent of held stainless steel inventories will vary until a customer order commitment is received, and the selling price is established. The Company's downside exposure is limited to the potential that the total of the fair value of the nickel contracts would be reduced to zero, if nickel pricing does not decline to the contracted strike prices. The program is designed to mitigate but not eliminate the Company's nickel pricing exposure. At December 31, 2018, the Company had no such contracts in place. The Company had a hedge position equal to 1,351,000 of pounds of nickel, representing 53 percent of the Company's total nickel content of stainless steel pounds in inventory at December 31, 2017. The fair value of the nickel contracts at December 31, 2017 was an asset of approximately \$9,000.

Item 8 Financial Statements and Supplementary Data

The Company's consolidated financial statements, related notes, report of management and report of the independent registered public accounting firm follow on subsequent pages of this report.

Consolidated Balance Sheets

As of December 31, 2018 and 2017

	2018	2017
Assets		
<i>Current assets</i>		
Cash and cash equivalents	\$ 2,220,272	\$ 14,706
Accounts receivable, less allowance for doubtful accounts of \$169,107 and \$35,000, respectively	41,065,251	28,704,481
<i>Inventories, net</i>		
Raw materials	59,778,767	37,748,316
Work-in-process	21,033,532	9,491,408
Finished goods	33,389,087	24,885,457
Total inventories, net	114,201,386	72,125,181
Prepaid expenses and other current assets	9,983,416	6,802,072
Total current assets	167,470,325	107,646,440
Property, plant and equipment, net	40,924,455	35,080,009
Goodwill	9,799,992	6,003,525
Intangible assets, net	9,696,112	10,880,521
Deferred charges, net and other non-current assets	507,962	263,655
Total assets	\$ 228,398,846	\$ 159,874,150
Liabilities and Shareholders' Equity		
<i>Current liabilities</i>		
Accounts payable	\$ 25,073,698	\$ 24,256,812
Accrued expenses	12,163,686	8,993,454
Total current liabilities	37,237,384	33,250,266
Long-term debt	76,405,458	25,913,557
Long-term portion of earn-out liability	4,702,562	3,170,099
Long-term deferred sale-leaseback gain	5,599,077	5,933,350
Deferred income taxes	252,988	635,910
Other long-term liabilities	1,717,291	1,270,542
<i>Shareholders' equity</i>		
Common stock, par value \$1 per share - authorized 24,000,000 shares; issued 10,300,000 shares	10,300,000	10,300,000
Capital in excess of par value	36,520,840	35,193,152
Retained earnings	68,965,410	58,129,382
Accumulated other comprehensive loss	—	(10,864)
	115,786,250	103,611,670
Less cost of common stock in treasury - 1,424,279 and 1,566,769 shares, respectively	13,302,164	13,911,244
Total shareholders' equity	102,484,086	89,700,426
<i>Commitments and contingencies – see Note 13</i>		
Total liabilities and shareholders' equity	\$ 228,398,846	\$ 159,874,150

See accompanying notes to consolidated financial statements.

Consolidated Statements of Operations and Comprehensive Income
Years ended December 31, 2018, 2017, and 2016

	2018	2017	2016
Net sales	\$ 280,841,419	\$ 201,147,682	\$ 138,565,782
Cost of sales	229,604,080	173,066,732	121,661,303
Gross profit	51,237,339	28,080,950	16,904,479
Selling, general and administrative expense	27,691,874	24,874,589	22,672,872
Acquisition related costs	1,211,797	794,983	106,227
Earn-out adjustments	1,430,682	688,523	—
(Gain) loss on sale-leaseback	(334,273)	(334,273)	2,371,778
Operating income (loss)	21,237,259	2,057,128	(8,246,398)
Other (income) and expense			
Interest expense	2,210,506	985,366	932,572
Change in fair value of interest rate swap	(19,484)	(96,696)	12,997
Other, net	2,572,598	(310,043)	—
Income (loss) before income taxes	16,473,639	1,478,501	(9,191,967)
Provision for (benefit from) income taxes	3,376,210	137,139	(2,198,000)
Net income (loss) from continuing operations	13,097,429	1,341,362	(6,993,967)
Net loss from discontinued operations, net of tax	—	—	(99,334)
Net income (loss)	\$ 13,097,429	\$ 1,341,362	\$ (7,093,301)
Other comprehensive loss, net of tax:			
Unrealized gains on available for sale securities, net of tax of \$186,384	—	355,482	—
Reclassification adjustment for gains included in net income, net of tax of \$189,633	—	(366,346)	—
Comprehensive income (loss)	\$ 13,097,429	\$ 1,330,498	\$ (7,093,301)
Net income (loss) per common share from continuing operations:			
Basic	\$ 1.49	\$ 0.15	\$ (0.81)
Diluted	\$ 1.48	\$ 0.15	\$ (0.81)
Net loss per diluted common share from discontinued operations:			
Basic	\$ —	\$ —	\$ (0.01)
Diluted	\$ —	\$ —	\$ (0.01)

See accompanying notes to consolidated financial statements.

Consolidated Statements of Shareholders' Equity

	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Cost of Common Stock in Treasury	Total
Balance at December 31, 2015	\$ 10,300,000	\$ 34,476,240	\$ 65,029,474	\$ —	\$ (14,651,420)	\$ 95,154,294
Net loss	—	—	(7,093,301)	—	—	(7,093,301)
Dividend on stock grant forfeiture	—	—	360	—	—	360
Issuance of 62,124 shares of common stock from the treasury	—	(221,507)	—	—	547,125	325,618
Stock options exercised for 666 shares, net	—	—	—	—	—	—
Employee stock option and grant compensation	—	459,473	—	—	—	459,473
Purchase of 29,500 shares of common stock	—	—	—	—	(253,889)	(253,889)
Balance at December 31, 2016	10,300,000	34,714,206	57,936,533	—	(14,358,184)	88,592,555
Net income	—	—	1,341,362	—	—	1,341,362
Other comprehensive loss	—	—	—	(10,864)	—	(10,864)
Payment of dividends, \$0.13 per share	—	—	(1,148,513)	—	—	(1,148,513)
Stock options exercised for 5,389 shares, net	—	68,469	—	—	(68,469)	—
Issuance of 58,532 shares of common stock from the treasury	—	(227,939)	—	—	515,409	287,470
Employee stock option and grant compensation	—	638,416	—	—	—	638,416
Balance at December 31, 2017	10,300,000	35,193,152	58,129,382	(10,864)	(13,911,244)	89,700,426
Net income	—	—	13,097,429	—	—	13,097,429
Cumulative adjustment due to adoption of ASU 2016-01 (see Note 1)	—	—	(10,864)	10,864	—	—
Payment of dividends, \$0.25 per share	—	—	(2,250,537)	—	—	(2,250,537)
Issuance of 66,632 shares of common stock from the treasury	—	(316,705)	—	—	592,705	276,000
Stock options exercised for 31,488 shares, net	—	246,757	—	—	(395,508)	(148,751)
Employee stock option and grant compensation	—	826,998	—	—	—	826,998
44,378 shares issued in connection with at-the-market offering	—	570,638	—	—	411,883	982,521
Balance at December 31, 2018	<u>\$ 10,300,000</u>	<u>\$ 36,520,840</u>	<u>\$ 68,965,410</u>	<u>\$ —</u>	<u>\$ (13,302,164)</u>	<u>\$ 102,484,086</u>

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows
Years ended December 31, 2018, 2017 and 2016

	2018	2017	2016
Operating activities			
Net income (loss)	\$ 13,097,429	\$ 1,341,362	\$ (7,093,301)
Income from discontinued operations, net of tax	—	—	99,334
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation expense	6,411,900	5,294,695	4,235,203
Amortization expense	2,363,277	2,443,117	2,459,787
Amortization of debt issuance costs	132,030	60,529	72,290
Unrealized loss on equity securities	2,572,703	—	—
Deferred income taxes	(382,922)	(1,037,183)	(1,407,462)
Gain on sale of available for sale securities	—	(310,043)	—
Earn-out adjustments	1,430,682	688,523	—
Payments of MUSA-Stainless earn-out liability in excess of acquisition date fair value	(194,462)	—	—
Provision for (reduction of) losses on accounts receivable	239,851	201,641	(45,151)
Provision for losses on inventories	1,827,574	1,196,428	983,505
(Gain) loss on sale of property, plant and equipment	(17,762)	25,730	2,294,917
Amortization of deferred gain on sale-leaseback	(334,273)	(334,273)	(83,569)
Straight line lease cost	445,230	397,071	101,633
Change in cash value of life insurance	—	—	1,502
Change in fair value of interest rate swap	(19,484)	(96,696)	12,997
Issuance of treasury stock for director fees	276,000	287,500	330,000
Employee stock option and grant compensation	826,998	638,416	459,473
Dividend on stock grant forfeiture	—	—	360
Changes in operating assets and liabilities:			
Accounts receivable	(10,413,480)	(10,877,176)	(37,676)
Inventories	(41,157,779)	(7,088,100)	2,032,621
Other assets and liabilities	(1,523,569)	11,229,799	(11,767,808)
Accounts payable	(234,353)	7,572,308	4,418,578
Accrued expenses	2,093,353	(9,424,395)	9,582,445
Accrued income taxes	1,339,561	26,197	(1,294,557)
Net cash (used in) provided by continuing operating activities	(21,221,496)	2,235,450	5,355,121
Net cash used in discontinued operating activities	—	—	(3,843,137)
Net cash (used in) provided by operating activities	(21,221,496)	2,235,450	1,511,984
Investing activities			
Purchases of property, plant and equipment	(7,354,737)	(5,278,608)	(3,044,411)
Proceeds from sale of property, plant and equipment	—	72,789	22,215,362
Purchases of equity securities	(4,970,470)	(4,382,865)	—
Proceeds from available for sale securities	—	4,141,564	—
Acquisition of the stainless pipe and tube assets of Marcegaglia USA, Inc. ("MUSA")	—	(11,953,513)	(3,000,000)
Acquisition of the galvanized pipe and tube assets of MUSA	(10,378,282)	—	—
Proceeds from life insurance policies	—	—	1,502,283
Net cash (used in) provided by investing activities	(22,703,489)	(17,400,633)	17,673,234
Financing activities			
Net borrowings from line of credit	50,491,901	17,109,351	6,928,640
Net proceeds from at-the-market offering	982,519	—	—
Payments on long-term debt	—	—	(26,068,228)
Payments on capital lease obligation	(336,711)	(124,999)	(65,966)
Payments on earn-out liabilities to MUSA sellers	(2,260,984)	(518,456)	—
Payments of debt issuance costs	(382,206)	(200,367)	(54,326)
Proceeds from exercised stock options	141,853	—	—
Dividends paid	(2,215,215)	(1,148,513)	—
Tax withholdings related to net share settlements of exercised stock options	(290,606)	—	—
Purchase of common stock	—	—	(253,889)
Net cash provided by (used in) financing activities	46,130,551	15,117,016	(19,513,769)
Increase (decrease) in cash and cash equivalents	2,205,566	(48,167)	(328,551)
Cash and cash equivalents at beginning of year	14,706	62,873	391,424
Cash and cash equivalents at end of year	\$ 2,220,272	\$ 14,706	\$ 62,873

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 Summary of Significant Accounting Policies

Description of Business

Synalloy Corporation (the "Company") was incorporated in Delaware in 1958 as the successor to a chemical manufacturing business founded in 1945. Its charter is perpetual. The name was changed on July 31, 1967 from Blackman Uhler Industries, Inc. The Company's executive office is located at 4510 Cox Road, Suite 201, Richmond, Virginia 23060.

The Company's business is divided into two reportable operating segments, the Metals Segment and the Specialty Chemicals Segment. As of December 31, 2018, the Metals Segment operated as three reportable units including BRISMET, Palmer, and Specialty. As of January 1, 2019, the Metals Segment also includes ASTI; see Note 23 to the consolidated financial statements. Two other operations, Bristol Fab (a division of BRISMET) and Ram-Fab, LLC, were sold or closed during 2014; see Note 19. BRISMET manufactures stainless steel and special alloy pipe and tube, Palmer manufactures liquid storage solutions and separation equipment and Specialty is a master distributor of seamless carbon pipe and tube. The Specialty Chemicals Segment operates as one reportable unit and is comprised of MC and CRI Tolling, and produces specialty chemicals.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly-owned. The Metals Segment is comprised of three subsidiaries: Synalloy Metals, Inc. which owns 100 percent of BRISMET, located in Bristol, Tennessee and Munhall, Pennsylvania; Palmer, located in Andrews, Texas and Specialty, located in Mineral Ridge, Ohio and Houston, Texas. The Specialty Chemicals Segment consists of two subsidiaries: MS&C which owns 100 percent of MC, located in Cleveland, Tennessee and CRI Tolling, located in Fountain Inn, South Carolina. All significant intercompany transactions have been eliminated.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Accounts Receivable

Accounts receivable from the sale of products are recorded at net realizable value and the Company generally grants credit to customers on an unsecured basis. Substantially all of the Company's accounts receivable are due from companies located throughout the United States. The Company provides an allowance for doubtful accounts for projected uncollectable amounts. The allowance is based upon a review of outstanding receivables, historical collection information and existing economic conditions. The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. Receivables are generally due within 30 to 60 days. Delinquent receivables are written off based on individual credit evaluations and specific circumstances of the customer.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined by either specific identification or weighted average methods.

Inventory cost is adjusted when its recorded cost is below net realizable value. At the end of each quarter, all facilities review recent sales reports to identify sales price trends that would indicate products or product lines that are being sold below cost. This would indicate that an adjustment would be required.

In addition, the Company establishes inventory reserves for:

- Estimated obsolete or unmarketable inventory. The Company identified inventory items with no sales activity for finished goods or no usage for raw materials for a certain period of time. For those inventory items not currently being marketed and unable to be sold, a reserve was established for 100 percent of the inventory cost less any estimated scrap proceeds. The Company reserved \$316,903 and \$411,157 at December 31, 2018 and December 31, 2017, respectively.
- Estimated quantity losses. The Company performs an annual physical count of inventory during the fourth quarter each year. For those facilities that complete their physical inventory counts before the end of December, a reserve is established for the potential quantity losses that could occur subsequent to their physical inventory. This reserve is based upon the most recent physical inventory results. At December 31, 2018 and December 31, 2017, the Company had \$359,505 and \$285,627, respectively, reserved for physical inventory quantity losses.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is provided on the straight-line method over the estimated useful life of the assets. Leasehold improvements are depreciated over the shorter of their useful lives or the remaining non-cancellable lease term, buildings are depreciated over a range of ten years to 40 years, and machinery, fixtures and equipment are depreciated over a range of three years to 20 years. The costs of software licenses are amortized over five years using the straight-line method. The Company continually reviews the recoverability of the carrying value of long-lived assets. The Company also reviews long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of such assets may not be recoverable. When the future undiscounted cash flows of the operation to which the assets relate do not exceed the carrying value of the asset, the assets are written down to fair value.

Business Combinations

Acquisitions are accounted for using the acquisition method of accounting for business combinations. Under this method, the total consideration transferred to consummate the acquisition is allocated to the identifiable tangible and intangible assets acquired and liabilities assumed based on their respective fair values as of the closing date of the acquisition. The acquisition method of accounting requires extensive use of estimates and judgments to allocate the consideration transferred to the identifiable tangible and intangible assets acquired, if any, and liabilities assumed.

Goodwill, Intangible Assets and Deferred Charges

Goodwill, arising from the excess of purchase price over fair value of net assets of businesses acquired, is not amortized but is reviewed annually, at the reporting unit level, in the fourth quarter for impairment and whenever events or circumstances indicate that the carrying value may not be recoverable. No goodwill impairment was identified as a result of the testing procedures performed for the years ended December 31, 2018 and December 31, 2017.

Intangible assets represent the fair value of intellectual, non-physical assets resulting from business acquisitions. Deferred charges represent other intangible assets and debt issuance costs. Intangible assets are amortized over their estimated useful lives using either an accelerated or straight-line method. Deferred charges are amortized over their estimated useful lives using the straight-line method. Deferred charges are amortized over a period ranging from three to ten years and intangible assets are amortized over a period ranging from eight to 15 years. The weighted average amortization period for the customer relationships is approximately eleven years.

Deferred charges and intangible assets totaled \$23,247,498 and \$21,837,351 at December 31, 2018 and December 31, 2017, respectively. Accumulated amortization of deferred charges and intangible assets as of December 31, 2018 and December 31, 2017 totaled \$13,043,424 and \$10,693,175, respectively.

Estimated amortization expense for the next five fiscal years based on existing intangible assets, excluding deferred charges is as follows:

2019	2,297,570
2020	2,129,528
2021	2,021,486
2022	1,790,631
2023	328,416
Thereafter	1,128,754

The Company recorded amortization expense of \$2,363,277, \$2,443,117 and \$2,459,787 for 2018, 2017 and 2016, respectively, which excludes amortization expense of debt issuance costs, which is reflected in the consolidated financial statements as interest expense.

Earn-Out Liability

In connection with the MUSA-Stainless acquisition on February 28, 2017, the Company is required to make contingent earn-out payments to the prior owners based on actual sales levels of stainless steel pipe and tube (outside diameter of ten inches or less). The Company determined the fair value of the earn-out liability on the acquisition date using a Monte Carlo simulation model. Changes to the fair value of the earn-out liability are determined each quarter-end and charged to income or expense in the "Earn-Out Adjustments" line item in the Consolidated Statements of Operations and Comprehensive Income.

In connection with the MUSA-Galvanized acquisition on July 1, 2018, the Company is required to make quarterly earn-out payments for a period of four years following closing, based on actual sales levels of galvanized pipe and tube. The fair value of

the contingent consideration was estimated by applying the probability-weighted expected return method using management's estimates of pounds to be shipped and future price per unit. Changes to the fair value of the earn-out liability are determined each quarter-end and charged to income or expense in the "Earn-Out Adjustments" line item in the Consolidated Statements of Operations and Comprehensive Income.

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers upon shipment, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Substantially all of the Company's revenues are derived from contracts with customers where performance obligations are satisfied at a point-in-time. Our contracts with customers may include multiple performance obligations. For such arrangements, revenue for each performance obligation is based on its standalone selling price and revenue is recognized as each performance obligation is satisfied. The Company generally determines standalone selling prices based on the prices charged to customers using the adjusted market assessment approach or expected cost plus margin. Deferred revenues are recorded when cash payments are received in advance of satisfying the performance obligation, including amounts which are refundable.

Shipping Costs

Shipping costs of approximately \$9,846,616, \$7,502,945 and \$4,488,041 in 2018, 2017 and 2016, respectively, are recorded in cost of goods sold.

Research and Development Expenses

The Company incurred research and development expense of approximately \$548,464, \$556,181 and \$603,067 in 2018, 2017 and 2016, respectively.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing accounts and their respective tax basis and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets unless it is more likely than not that such assets will be realized.

Additionally, the Company maintains reserves for uncertain tax provisions.

Earnings Per Share of Common Stock

Earnings per share of common stock are computed based on the weighted average number of basic and diluted shares outstanding during each period.

Fair Market Value

The Company makes estimates of fair value in accounting for certain transactions, in testing and measuring impairment and in providing disclosures of fair value in its consolidated financial statements. The Company determines the fair values of its financial instruments for disclosure purposes by maximizing the use of observable inputs and minimizing the use of unobservable inputs when measuring fair value. Fair value disclosures for assets and liabilities are grouped in three levels. The levels prioritize the inputs used to measure the fair value of the assets or liabilities. These levels are:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 - Inputs other than quoted prices that are observable for assets and liabilities, either directly or indirectly. These inputs include quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in markets that are less active.

Level 3 - Unobservable inputs that are supported by little or no market activity for assets or liabilities and includes certain pricing models, discounted cash flow methodologies and similar techniques.

Estimates of fair value using levels 2 and 3 may require judgments as to the timing and amount of cash flows, discount rates, and other factors requiring significant judgment, and the outcomes may vary widely depending on the selection of these assumptions. The Company's most significant fair value estimates as of December 31, 2018 and December 31, 2017 relate to the purchase price allocation relating to the 2017 MUSA-Stainless and 2018 MUSA-Galvanized acquisitions, earn-out liabilities, nickel forward

option contracts, estimating the fair value of the reporting units in testing goodwill for impairment, estimating the fair value of the interest rate swap, and providing disclosures of the fair values of financial instruments.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions, primarily for testing goodwill for impairment, determining balances for the earn-out liabilities, estimating fair value of identifiable assets acquired and liabilities assumed as a result of business acquisitions and for establishing reserves on accounts receivable, inventories and environmental issues, that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash deposits and trade accounts receivable.

Recent accounting pronouncements

Recently Issued Accounting Standards - Adopted

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, *"Revenue from Contracts with Customers (Topic 606)"*. Topic 606 supersedes the revenue recognition requirements in Topic 605 "Revenue Recognition" (Topic 605), and requires entities to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company adopted Topic 606 as of January 1, 2018 using the modified retrospective transition method. The adoption of this Topic did not have an effect on the Company's consolidated financial statements. See Note 22 for further details.

In January 2016, the FASB issued ASU No. 2016-01, *"Financial Instruments (Topic 825)"*, to address certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. The standard requires equity investments (except for those under the equity method of accounting) to be measured at fair value, with changes in fair value recognized in net income. The amendments in the update supersede the guidance to classify equity securities with readily determinable fair values into different categories, and require equity securities to be measured at fair value with changes recognized in net income as opposed to comprehensive income. The Company adopted ASU 2016-01 effective January 1, 2018 and the effects of this standard are included in the accompanying consolidated financial statements. The Company applied the standard by means of a cumulative effective adjustment to the balance sheet as of January 1, 2018, which resulted in a reclassification of \$10,864 from Accumulated Other Comprehensive Loss to Retained Earnings. The adoption of this standard also resulted in a \$2,573,000 mark-to-market valuation loss on investments in equity securities recognized in net income in 2018, which would have previously been recorded to Comprehensive Income.

In January 2017, the FASB issued ASU No. 2017-01 *"Business Combinations (Topic 805): Clarifying the Definition of a Business."* ASU 2017-01 provides guidance to evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. If substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single asset or a group of similar assets, the assets acquired (or disposed of) are not considered a business. The Company adopted ASU 2017-01 as of January 1, 2018 on a prospective basis. The adoption of this Topic did not have an effect on the Company's consolidated financial statements as of December 31, 2018.

In May 2017, the FASB issued ASU 2017-09, *"Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting,"* which amends the scope of modification accounting for share-based payment arrangements, provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting under ASC 718. The Company adopted ASU 2017-09 as of January 1, 2018 on a prospective basis. The adoption of this Topic did not have an effect on the Company's consolidated financial statements as of December 31, 2018.

Recently Issued Accounting Standards - Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02 *"Leases (Topic 842)"*, as amended, which generally requires lessees to recognize operating and financing lease liabilities and corresponding right-of-use assets on the balance sheet and to provide enhanced disclosures surrounding the amount, timing and uncertainty of cash flows arising from leasing arrangements. We will adopt the new standard effective January 1, 2019 on a modified retrospective basis and will not restate comparative periods. We will elect the package of practical expedients permitted under the transition guidance, which allows us to carry forward our historical lease classification, our assessment on whether a contract is or contains a lease, and our initial direct costs for any leases that exist prior to adoption of the new standard. We did not elect the hindsight practical expedient to determine the reasonably certain lease

term for existing leases. We also elected to combine lease and non-lease components and elected the short-term lease recognition exemption for all leases that qualify. On adoption, we currently expect to recognize additional operating liabilities ranging from \$32,000,000 to \$36,000,000 with corresponding right-of-use assets of a materially similar amount based on the present value of the remaining minimum rental payments under current leasing standards for existing operating leases. The Company will also record a cumulative-effect adjustment to equity totaling approximately \$6,000,000 related to the derecognition of the existing deferred gain for a sale leaseback transaction that occurred in 2016 (see note 12 to the Consolidated Financial Statements). We do not expect the new standard to have a material impact on the consolidated statement of operations.

In August 2018, the FASB issued ASU No. 2018-13 "*Fair Value Measurement (Topic 820)*". The updated guidance improves the disclosure requirements on fair value measurements. The updated guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted for any removed or modified disclosures. The Company is currently assessing the impact of adopting the updated provisions.

Note 2 Fair Value of Financial Instruments

The Company's financial instruments include cash and cash equivalents, accounts receivable, derivative instruments, accounts payable, earn-out liabilities, revolving line of credit and equity investments.

Level 1 Financial Instruments

For short-term instruments, other than those required to be reported at fair value on a recurring basis and for which additional disclosures are included below, management concluded the historical carrying value is a reasonable estimate of fair value because of the short period of time between the origination of such instruments and their expected realization. Therefore as of December 31, 2018 and December 31, 2017, the carrying amount for cash and cash equivalents, accounts receivable, accounts payable and the Company's revolving line of credit, which is based on a variable interest rate, approximates their fair value.

During 2018, the Company recorded an unrealized loss on its Level 1 investment in equity securities of \$2,572,703 which is included in "Other expense (income)" on the accompanying Consolidated Statement of Operations. The fair value of equity securities held by the Company as of December 31, 2018 and December 31, 2017 was \$2,935,000 and \$537,233, respectively, and is included in "Prepaid expenses and other current assets" on the accompanying Consolidated Balance Sheets. The equity securities are classified as Level 1 financial instruments. The Company did not have any equity securities at December 31, 2016.

During 2017, the Company sold shares of its equity securities investments. Proceeds from the sale totaled \$4,141,564 which resulted in a realized gain of \$310,043 which is included in other income on the accompanying consolidated statements of operations. As a result of the sale, unrealized gains of \$555,979, \$366,346 net of taxes, were reclassified out of accumulated other comprehensive income ("AOCI") with the realized gain on sale included in earnings. The Company used the average cost method to determine the realized gain or loss for each transaction.

Level 2 Financial Instruments

The Company has one interest rate swap contract, which is classified as a Level 2 financial instrument as it is not actively traded and is valued using pricing models that use observable market inputs. The fair value of the interest rate swap contract entered into on August 21, 2012 was an asset of \$147,465 and \$127,981 at December 31, 2018 and December 31, 2017, respectively. The interest rate swap was priced using discounted cash flow techniques. Changes in its fair value were recorded to other income (expense) with corresponding offsetting entries to current assets or liabilities, as appropriate. Significant inputs to the discounted cash flow model include projected future cash flows based on projected one-month LIBOR and the average margin for companies with similar credit ratings and similar maturities. See Note 17 for further discussion of interest rate swap.

To manage the impact on earnings of fluctuating nickel prices, the Company occasionally enters into three-month forward option contracts, which are classified as Level 2. At December 31, 2018, the Company had no such contracts in place. At December 31, 2017, the Company had contracts in place with notional quantities totaling 1,351,494 pounds with strike prices ranging from \$3.75 to \$4.64 per pound. The fair value of the option contracts was an asset of \$9,027 at December 31, 2017. The fair value of the contracts was priced using discounted cash flow techniques based on forward curves and volatility levels by asset class determined on the basis of observable market inputs, when available. Changes in their fair value were recorded to "Other expense (income)" with corresponding offsetting entries to other current assets.

Level 3 Financial Instruments

The fair value of contingent consideration liabilities ("earn-out") resulting from the 2017 MUSA-Stainless acquisition and 2018 MUSA-Galvanized acquisition are classified as Level 3. The fair value of the MUSA-Stainless earn-out was estimated by applying the Monte Carlo Simulation approach using management's projection of pounds to be shipped and future price per unit. The fair value of the MUSA-Galvanized earn-out was estimated by applying the probability-weighted expected return method, using

management's projection of pounds to be shipped and future price per unit. Each quarter-end, the Company re-evaluates its assumptions for both earn-out liabilities and adjusts to reflect the updated fair values. Changes in the estimated fair value of the earn-out liabilities are reflected in the results of operations in the periods in which they are identified. Changes in the fair value of the earn-out liabilities may materially impact and cause volatility in the Company's operating results. There were no changes in the carrying amount of the earn-out liability for the year ended December 31, 2016.

The following table presents a summary of changes in fair value of the Company's Level 3 liabilities measured on a recurring basis for 2018:

MUSA Earn-Out Liabilities

Balance at December 31, 2016	\$	—
Fair value of the earn-out liability associated with the MUSA-Stainless acquisition		4,663,783
Earn-out payments to MUSA		(518,456)
Changes in fair value during the period		688,523
Balance at December 31, 2017	\$	4,833,850
Fair value of the earn-out liability associated with the MUSA-Galvanized acquisition		3,800,298
Earn-out payments to MUSA		(2,455,446)
Changes in fair value during the period		1,430,682
Balance at December 31, 2018	\$	<u>7,609,384</u>

There were no transfers of assets or liabilities between Level 1, Level 2 and Level 3 in the years ended December 31, 2018 or December 31, 2017. There have also been no changes in the fair value methodologies used by the Company during the years ended December 31, 2018 or December 31, 2017.

Note 3 Property, Plant and Equipment

Property, plant and equipment consist of the following:

	2018	2017
Land	\$ 62,916	\$ 62,916
Leasehold improvements	1,162,942	544,186
Buildings	412,301	412,301
Machinery, fixtures and equipment	91,514,620	81,229,311
Machinery and equipment under capital lease	1,416,114	401,077
Construction-in-progress	3,643,795	2,881,654
	<u>98,212,688</u>	<u>85,531,445</u>
Less accumulated depreciation	57,288,233	50,451,436
Property, plant and equipment, net	<u>\$ 40,924,455</u>	<u>\$ 35,080,009</u>

The Company recorded depreciation expense of \$6,411,900, \$5,294,695, and \$4,235,203 for 2018, 2017 and 2016, respectively. Accumulated depreciation includes \$707,112 and \$86,357 at December 31, 2018 and December 31, 2017, respectively, for assets acquired under capital leases.

Note 4 Goodwill

Changes in the carrying amount of goodwill by segment for the year ended December 31, 2018 and December 31, 2017 are as follows:

	Specialty Chemicals Segment	Metals Segment	Total
Balance at December 31, 2016	\$ 1,354,730	\$ —	\$ 1,354,730
MUSA-Stainless Acquisition	—	4,648,795	4,648,795
Balance at December 31, 2017	\$ 1,354,730	\$ 4,648,795	\$ 6,003,525
MUSA-Galvanized Acquisition	—	3,796,467	3,796,467
Balance at December 31, 2018	\$ 1,354,730	\$ 8,445,262	\$ 9,799,992

Note 5 Long-term Debt

	2018	2017
\$100,000,000 Revolving line of credit, due December 20, 2021	\$ 76,405,458	\$ 25,913,557

On August 31, 2016, the Company amended its Credit Agreement with its bank to create a new credit facility in the form of an asset-based revolving line of credit (the "Line") in the amount of \$45,000,000. The Line was used to refinance and consolidate all previous debt agreements. The maturity date of the Line was February 28, 2019. Interest on the Line was calculated using the One Month LIBOR Rate (as defined in the Credit Agreement), plus a pre-defined spread. Borrowings under the Line were limited to an amount equal to a Borrowing Base calculation (as defined in the Credit Agreement) that includes eligible accounts receivable and inventory.

Pursuant to the Credit Agreement, the Company was required to pledge all of its tangible and intangible properties, including the stock and membership interests of its subsidiaries. In the Credit Agreement, the Company's bank agreed to release its liens on the real estate properties covered by the Purchase and Sale Agreement with Store Funding, as described in Note 12.

On October 30, 2017, the Company amended its Credit Agreement with its bank to increase the limit of the Line by \$20,000,000 to a maximum of \$65,000,000 and extended the maturity date to October 30, 2020. None of the other provisions of the Credit Agreement were changed as a result of this amendment.

On June 29, 2018, the Company amended its Credit Agreement with its bank to increase the limit of the Line by \$15,000,000 to a maximum of \$80,000,000. As a result of the amendment, the interest rate on the Line is now calculated using One Month LIBOR plus a spread of 1.65 percent. None of the other provisions of the Credit Agreement were changed as a result of this amendment.

On December 20, 2018, the Company amended its Credit Agreement with its bank to refinance and increase its Line from \$80,000,000 to \$100,000,000 and to create a new 5-year term loan in the principal amount of \$20,000,000 (the "Term Loan"). The Term Loan was used to finance the purchase of substantially all of the assets of American Stainless (see Note 23). The Term Loan's maturity date is February 1, 2024, and shall be repaid in 60 consecutive monthly installments. Interest on the Term Loan is calculated using the One Month LIBOR Rate (as defined in the Credit Agreement), plus 1.90 percent. The Line will be used for working capital needs and as a source for funding future acquisitions. The maturity date has been extended to December 20, 2021. Interest on the Line remains unchanged and is calculated using the One Month LIBOR Rate, plus 1.65 percent. Borrowings under the Line are limited to an amount equal to a Borrowing Base calculation that includes eligible accounts receivable and inventory.

Covenants under the Credit Agreement include maintaining a minimum fixed charge coverage ratio, maintaining a minimum tangible net worth, and a limitation on the Company's maximum amount of capital expenditures per year, which is in line with currently projected needs. The Company evaluated this transaction and determined the restructuring should be accounted for as a debt modification. The Company incurred lender and third party costs associated with the debt restructuring that were capitalized on the balance sheet in non-current assets. At December 31, 2018, the Company was in compliance with all debt covenants.

The Line interest rate was 4.19 percent and 3.44 percent at December 31, 2018 and December 31, 2017, respectively. Additionally, the Company is required to pay a fee equal to 0.15 percent on the average daily unused amount of the Line on a quarterly basis. As of December 31, 2018, the amount available for borrowing under the Line was \$93,860,450 of which \$76,405,458 was borrowed, leaving \$17,454,992 of availability. Average Line borrowings outstanding during fiscal 2018 and 2017 were \$49,030,098 and \$27,895,901 with weighted average interest rates of 4.51 percent and 3.09 percent, respectively.

The Company made interest payments on all credit facilities of \$1,725,150 in 2018, \$856,651 in 2017 and \$826,478 in 2016.

Note 6 Accrued Expenses

Accrued expenses consist of the following:

	2018	2017
Salaries, wages, and commissions	5,208,495	3,219,190
Taxes, other than income taxes	852,116	921,476
Current portion of earn-out liability	2,906,822	1,663,751
Advances from customers	177,518	184,874
Insurance	321,000	372,000
Professional fees	256,296	343,706
Warranty reserve	38,020	37,771
Benefit plans	265,605	208,717
Insurance financing liability	347,440	224,961
Current portion, capital lease obligation	267,028	76,198
Customer rebate liability	701,361	439,912
Current portion, environmental reserves	—	549,000
Current portion, deferred gain sale-leaseback	334,273	334,273
Other accrued items	487,712	417,625
Total accrued expenses	\$ 12,163,686	\$ 8,993,454

Note 7 Environmental Compliance Costs

Prior to 1987, the Company utilized certain products at its chemical facilities that are currently classified as hazardous materials. Testing of the groundwater in the areas of the former wastewater treatment impoundments at these facilities disclosed the presence of certain contaminants. In addition, several solid waste management units ("SWMUs") at the plant sites have been identified. During 2014, at the former Augusta, GA plant site, the Georgia Department of Natural Resources, Environmental Protection Division ("EPD") closed the surface impoundment regulated unit since the Company met post-closure clean-up goals and the Company renewed the Corrective Action Permit, which includes a site-wide corrective action plan, long-term monitoring and institutional controls; such actions were completed in the second quarter of 2018. In the first quarter of 2019, the Company and EPD executed an Environmental Covenant with respect to the Augusta, GA plant site. Because the Company does not anticipate material future costs associated with the corrective action efforts, no reserve was deemed necessary at December 31, 2018. At December 31, 2017, the Company had accrued \$474,000 for the completion of the site-wide corrective action plan. As a result of the evolving nature of the environmental regulations, the difficulty in estimating the extent and remedy of environmental contamination and the availability and application of technology, the estimated costs for future environmental compliance and remediation are subject to uncertainties and it is not possible to predict the amount or timing of future costs of environmental matters which may subsequently be determined.

The Company does not anticipate any insurance recoveries to offset the environmental remediation costs it has incurred. Due to the uncertainty regarding court and regulatory decisions, and possible future legislation or rulings regarding the environment, many insurers will not cover environmental impairment risks, particularly in the chemical industry. Hence, the Company has been unable to obtain this coverage at an affordable price.

There can be no assurance that any future capital and operating expenditures to maintain compliance with environmental laws, as well as costs to address contamination or environmental claims, will not exceed any current estimates or adversely affect our financial condition and results of operations. In addition, any unanticipated liabilities or obligations arising, for example, out of discovery of previously unknown conditions or changes in laws or regulations, could have an adverse effect on our business, financial condition, results of operations or cash flows.

Note 8 Deferred Compensation

The Company has deferred compensation agreements with certain former officers providing for payments for the longer of ten years or life from age 65. The present value of such vested future payments, \$116,785 at December 31, 2018 and \$159,080 at December 31, 2017, has been accrued.

Note 9 Stock Options, Stock Grants and New Stock Issues

A summary of activity in the Company's stock option plans is as follows:

	Weighted Average Exercise Price	Options Outstanding	Weighted Average Contractual Term (in years)	Intrinsic Value of Options	Options Available
At January 01, 2016	\$ 12.79	173,985	6.4	\$ —	152,028
Expired	\$ 16.01	(937)			937
At December 31, 2016	\$ 12.77	173,048	5.4	\$ —	152,965
Exercised	\$ 11.55	(25,632)		\$ 78,818	
Expired	\$ 15.26	(1,905)			1,905
At December 31, 2017	\$ 12.96	145,511	4.6	\$ 156,445	154,870
Exercised	\$ 12.09	(85,440)		\$ 842,742	
Expired	\$ 16.01	(975)			975
At December 31, 2018	\$ 14.16	59,096	4.8	\$ 143,737	155,845
Exercisable options	\$ 13.82	49,127	4.5	\$ 136,123	
Options expected to vest:					
				Grant Date Fair Value	
At December 31, 2016	\$ 14.72	43,286	7.1	\$ 6.24	
Vested	\$ 14.35	(17,574)		\$ 5.96	
Forfeited options	\$ 15.38	(62)			
At December 31, 2017	\$ 14.72	25,650	6.5	\$ 6.41	
Vested	\$ 14.78	(15,380)		\$ 6.38	
Forfeited options	\$ 16.01	(301)			
At December 31, 2018	\$ 15.83	9,969	6.0	\$ 6.44	

The following table summarizes information about stock options outstanding at December 31, 2018:

Range of Exercise Prices	Outstanding Stock Options			Exercisable Stock Options	
	Shares	Weighted Average		Shares	Weighted Average Exercise Price
		Exercise Price	Remaining Contractual Life in Years		
\$ 11.35	13,402	\$ 11.35	3.10	13,402	\$ 11.35
\$ 13.70	15,933	\$ 13.70	4.10	15,933	\$ 13.70
\$ 14.76	8,109	\$ 14.76	5.14	6,643	\$ 14.76
\$ 16.01	21,652	\$ 16.01	6.11	13,149	\$ 16.01
	<u>59,096</u>			<u>49,127</u>	

The 2011 Long-Term Incentive Stock Option Plan (the "2011 Plan") is an incentive stock option plan; therefore, there are no income tax consequences to the Company when an option is granted or exercised. The stock options will vest in 20 percent increments annually on a cumulative basis, beginning one year after the date of grant. In order for the options to vest, the employee must be in the continuous employment of the Company since the date of the grant. Any portion of the grant that has not vested will be forfeited upon termination of employment. Shares representing grants that have not yet vested will be held in escrow by the Company. An employee will not be entitled to any voting rights with respect to any shares not yet vested, and the shares are not transferable. On February 10, 2015, the Company granted options to purchase 32,532 shares of its common stock at an exercise price of \$16.01 per share to participants in the 2011 Plan. The per share weighted-average fair value of this stock option grant was \$6.39. The Black-Scholes model for this grant was based on a risk-free interest rate of two percent, an expected life of seven years, an expected volatility of 0.46 and a dividend yield of two percent.

In 2018 and 2017, options for 85,440 and 25,632 shares, respectively, were exercised by employees and directors for an aggregate exercise price of \$1,033,110 and \$296,050, respectively. The proceeds received by the Company were generated from the surrender of 10,578 shares previously owned from employees and directors in 2018 and from cash received of \$141,855 in 2018. No options were exercised by employees or directors in 2016. At the 2018, 2017 and 2016 respective year ends, options to purchase 49,127, 119,861 and 129,762 shares, respectively, with weighted average exercise prices of \$13.82, \$12.45 and \$12.12, respectively, were fully exercisable. Compensation cost charged against income before taxes for the options was approximately \$46,529 for 2018, \$80,966 for 2017 and \$135,085 for 2016. As of December 31, 2018, there was \$36,420 of unrecognized compensation cost related to unvested stock options granted under the Company's stock option plans. The weighted average period over which the stock option compensation cost is expected to be recognized is 1.06 years.

The Compensation & Long-Term Incentive Committee ("Compensation Committee") of the Board of Directors of the Company approved stock grants under the Company's 2005 Stock Awards Plan to certain management employees of the Company. The stock grants will vest in 20 percent increments annually on a cumulative basis, beginning one year after the date of grant. In order for the grants to vest, the employee must be in the continuous employment of the Company since the date of the grant. Any portion of the grant that has not vested will be forfeited upon termination of employment. Shares representing grants that have not yet vested will be held in escrow by the Company. An employee will not be entitled to any voting rights with respect to any shares not yet vested, and the shares are not transferable.

The 2015 Stock Awards Plan was approved by the Compensation Committee and authorizes the issuance of up to 250,000 shares which can be awarded for a period of 10 years from the effective date of the plan. Prior to May 9, 2017, as discussed below, the stock awards vest in 20 percent increments annually on a cumulative basis, beginning one year after the date of grant from shares held in treasury with the Company. In order for the awards to vest, the employee must be in the continuous employment of the Company since the date of the award. Any portion of an award that has not vested is forfeited upon termination of employment. The Company may terminate any portion of the award that has not vested upon an employee's failure to comply with all conditions of the award or the 2015 Stock Awards Plan. An employee is not entitled to any voting rights with respect to any shares not yet vested, and the shares are not transferable.

On February 19, 2016, the Compensation Committee approved stock grants under the Company's 2015 Stock Awards Plan to certain management employees of the Company where 50,062 shares with a market price of \$7.51 per share were granted under the Plan. On May 5, 2016, the Compensation Committee approved stock grants under the Company's 2015 Stock Awards Plan to certain management employees of the Company where 42,193 shares with a market price of \$8.05 per share were granted under the Plan.

On February 8, 2017, the Compensation Committee approved stock grants under the Company's 2015 Stock Awards Plan to certain management employees of the Company where 44,687 shares with a market price of \$12.30 per share were granted under the Plan.

On February 7, 2018, the Compensation Committee approved stock grants under the Company's 2015 Stock Awards Plan to certain management employees of the Company where 65,527 shares with a market price of \$12.47 per share were granted under the Plan. These stock awards vest in either 20 percent or 33 percent increments annually on a cumulative basis, beginning one year after the date of grant.

Effective May 1, 2017, the Company's Board of Directors approved the First Amendment to the 2015 Stock Awards Plan. The amendment grants the Compensation Committee the authority to establish and amend vesting schedules for stock awards made pursuant to the 2015 Stock Awards Plan. On May 9, 2017, the Committee approved the amendment of the vesting schedules for the May 5, 2016 and February 8, 2017 stock grants reducing the vesting period from five years to three years. As a result of this amendment, compensation expense increased in 2017 by \$75,756 and \$67,180, for the five employees receiving grants on May 5, 2016 and eight employees receiving grants on February 8, 2017, respectively.

On May 17, 2018, a majority of the shareholders of the Company, upon the recommendation of the Company's Board of Directors, voted to amend and restate the 2015 Stock Awards Plan to increase the authorization of issuances from 250,000 shares to 500,000 shares.

A summary of plan activity for the 2005 and 2015 Stock Awards Plans is as follows:

	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2015	51,440	\$ 15.57
Granted February 19, 2016	50,062	\$ 7.51
Granted May 5, 2016	42,193	\$ 8.05
Vested	(21,133)	\$ 13.12
Forfeited	(1,260)	\$ 17.73
Outstanding at December 31, 2016	121,302	\$ 10.03
Granted February 8, 2017	44,687	\$ 12.30
Vested	(34,322)	\$ 10.45
Outstanding at December 31, 2017	131,667	\$ 10.69
Granted February 7, 2018	65,527	\$ 12.47
Vested	(51,775)	\$ 10.84
Forfeited	(3,245)	\$ 10.96
Outstanding at December 31, 2018	<u>142,174</u>	\$ 11.45

Compensation expense on the grants issued is charged against earnings equally before forfeitures, if any, over a period of 60 months from the date of the grants for grants prior to May 5, 2016, with the offset recorded in Shareholders' Equity. Compensation expense on grants issued after that date is charged against earnings over 36 months. Compensation cost charged against income for the awards was approximately \$780,469, \$616,571 net of income taxes, or \$0.07 per share for 2018, \$557,450, \$354,538 net of income taxes, or \$0.04 per share for 2017 and \$324,388, \$206,311 net of income taxes, or \$0.02 per share, for 2016. As of December 31, 2018, there was \$1,077,095 of total unrecognized compensation cost related to unvested stock grants under the Company's Stock Awards Plan. The weighted average period over which the stock grant compensation cost is expected to be recognized is 1.88 years.

Each year, the Company allows each non-employee director to elect to receive up to 100 percent of their annual retainer in restricted stock. The number of restricted shares issued is determined by the average of the high and low common stock price on the day prior to the Annual Meeting of Shareholders or the date prior to the appointment to the Board for those individuals that are appointed mid-term. On May 17, 2018, May 18, 2017 and May 5, 2016, non-employee directors received an aggregate of 14,857, 24,209 and 40,991 shares, respectively, of restricted stock in lieu of total retainer fees of \$276,000, \$287,500 and \$330,000, respectively. The shares granted to the directors are not registered under the Securities Act of 1933 and are subject to forfeiture in whole or in part upon the occurrence of certain events.

Note 10 Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax liabilities and assets are as follows at the respective year ends:

	2018	2017
Deferred income tax assets:		
Sale leaseback deferred gain	\$ 1,310,850	\$ 1,382,270
Inventory valuation reserves	174,377	209,745
Allowance for doubtful accounts	35,955	7,944
Inventory capitalization	1,500,710	943,203
Environmental reserves	—	124,029
Warranty accrual	8,084	8,132
Deferred compensation	28,090	36,617
Accrued bonus	910,824	483,238
Accrued expenses	22,957	24,749
State net operating loss carryforwards	1,934,071	2,069,258
Equity security mark to market	622,189	3,248
Straight line lease	230,841	123,570
Other	507,997	352,520
Total deferred income tax assets	7,286,945	5,768,523
Valuation allowance	(1,765,993)	(2,087,860)
Total net deferred income tax assets	5,520,952	3,680,663
Deferred income tax liabilities:		
Tax over book depreciation and amortization	5,120,533	3,971,816
Prepaid expenses	377,498	174,322
Interest rate swap	103,708	87,016
Other	172,201	83,419
Total deferred income tax liabilities	5,773,940	4,316,573
Deferred income taxes	\$ (252,988)	\$ (635,910)

Significant components of the provision for income taxes from continuing operations are as follows:

	2018	2017	2016
Current:			
Federal	\$ 3,468,673	\$ 1,067,490	\$ (980,495)
State	290,459	106,832	190,230
Total current	3,759,132	1,174,322	(790,265)
Deferred:			
Federal	(107,879)	(1,043,384)	(1,329,302)
State	(275,043)	6,201	(78,433)
Total deferred	(382,922)	(1,037,183)	(1,407,735)
Total	\$ 3,376,210	\$ 137,139	\$ (2,198,000)

Tax benefit from discontinued operations amounted to \$51,000 for the fiscal year ended December 31, 2016. The Company did not have any discontinued operations for 2018 and 2017.

The reconciliation of income tax computed at the U. S. federal statutory tax rates to income tax expense is:

	2018		2017		2016	
	Amount	%	Amount	%	Amount	%
Tax at U.S. statutory rates	\$ 3,459,464	21.0 %	\$ 502,690	34.0 %	\$ (3,125,382)	34.0 %
State income taxes, net of federal tax benefit	268,924	1.6 %	65,546	4.4 %	(48,842)	0.5 %
State valuation allowance	(314,505)	(1.9)%	8,498	0.6 %	95,961	(1.0)%
Life insurance cash surrender value	—	— %	—	— %	503,700	(5.5)%
Manufacturing exemption	—	— %	(116,980)	(7.9)%	—	— %
Stock option compensation	(39,401)	(0.2)%	226	— %	45,929	(0.5)%
Rate change effects	—	— %	(380,961)	(25.8)%	—	— %
Other, net	1,728	— %	58,120	4.0 %	330,634	(3.6)%
Total	\$ 3,376,210	20.5 %	\$ 137,139	9.3 %	\$ (2,198,000)	23.9 %

Income tax payments of \$2,419,009, \$2,576,515 and \$991,888 were made in 2018, 2017 and 2016, respectively. The Company had state net operating loss carryforwards at the end of fiscal years 2018 and 2017 of \$46,511,086 and \$49,711,027, respectively. The majority of these losses will expire between the years of 2018 and 2037, while various losses are not subject to expiration. A valuation allowance has been set up against \$41,742,152 of these state net operating loss carryforwards because it is not more likely than not that the losses will be realized in the foreseeable future. The portion of the valuation allowance for the state net operating loss carryforwards was \$1,689,246 and \$2,064,674 at December 31, 2018 and December 31, 2017, respectively. In addition, a \$76,747 and \$23,186 valuation allowance was established at December 31, 2018 and 2017 respectively, for other deferred tax assets. This resulted in a valuation allowance decrease of \$321,867 all related to continuing operations.

The Company and its subsidiaries are subject to U.S. federal income tax as well as income tax of multiple state jurisdictions. The Company is no longer subject to U.S. federal examinations for years before 2014 or state income tax examinations for years before 2013.

The Company had no uncertain tax position activity during 2018 or 2017. The Company's continuing practice is to recognize interest and/or penalties related to income tax matters in the provision for income taxes. The Company had no accruals for uncertain tax positions including interest and penalties at the end of 2018.

On December 22, 2017, the Tax Cuts and Jobs Act ("The Tax Act") was signed into law by the President of the United States, enacting significant changes to the Internal Revenue Code effective January 1, 2018. The Tax Act includes a number of provisions including, but not limited to, a permanent reduction of the U.S. corporate tax rate from 35 percent to 21 percent, eliminating the deduction for domestic production activities, limiting the tax deductibility of interest expense, accelerating the expensing of certain business assets and reducing the amount of executive pay that could qualify as a tax deduction. Many effects of The Tax Act are international in nature, such as the one-time transition tax, base erosion anti-abuse tax and the global intangible low-taxed income tax, and thus would not pertain to the Company as it has no international operations.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of The Tax Act. During the fourth quarter ended December 31, 2018 the Company completed the accounting of certain income tax effects upon filing of the U.S. corporate income tax return. As a result, the Company recorded an insignificant amount of income tax expense to complete its accounting for The Tax Act, allowed under SAB 118.

Note 11 Benefit Plans and Collective Bargaining Agreements

The Company has a 401(k) Employee Stock Ownership Plan (the "401(k)/ESOP Plan") covering all non-union employees. Employees could contribute to the 401(k)/ESOP Plan up to 100 percent of their wages with a maximum of \$18,500 for 2018. Under the Economic Growth and Tax Relief Reconciliation Act, employees who are age 50 or older could contribute an additional \$6,000 per year for a maximum of \$24,500 for 2018. Contributions by the employees are invested in one or more funds at the direction of the employee; however, employee contributions cannot be invested in Company stock. For the year ended December 31, 2015, contributions by the Company were made in cash and then used by the 401(k)/ESOP Plan Trustee to purchase Company stock. Effective January 1, 2016, contributions by the Company are made in accordance with the investment elections made by each participant for his or her deferral contributions. The Company contributes on behalf of each eligible participant a matching contribution equal to a percentage determined each year by the Board of Directors. For 2018, 2017 and 2016 the maximum was 100 percent of employee contributions up to a maximum of four percent of their eligible compensation. The matching contribution is applied to the employee accounts after each payroll. Matching contributions of approximately \$694,795, \$608,473 and \$516,991 were made for 2018, 2017 and 2016, respectively. The Company may also make a discretionary contribution, which if made, would be distributed to all eligible participants regardless of whether they contribute to the 401(k)/ESOP Plan. No discretionary contributions were made to the 401(k)/ESOP Plan in 2018, 2017 or 2016.

The Company also has a 401(k) and Profit Sharing Plan (the "Bristol Plan") covering all employees as part of the United Steel Workers of America, Local Union 4586 Collective Bargaining Agreement ("Bristol CBA"). Employees could contribute to the Bristol Plan up to 60 percent of pretax annual compensation, as defined in the Bristol Plan, with a maximum of \$18,500 for 2018. Under the Economic Growth and Tax Relief Reconciliation Act, employees who are age 50 or older could contribute an additional \$6,000 per year for a maximum of \$24,500 for 2018. The Company contributes three percent of a participant's eligible compensation for the plan year, regardless of whether the participants contribute to the Bristol Plan. The Company's contributions were \$215,778, \$174,229 and \$136,763 for 2018, 2017 and 2016, respectively. Additional profit sharing amounts may also be contributed at the option of the Company's Board of Directors, which if made, would be allocated to participants based on the ratio of the participant's compensation to the total compensation of all participants eligible to participate in the Bristol Plan. No discretionary contributions were made to the Bristol Plan in 2018, 2017 or 2016.

In connection with the MUSA-Stainless acquisition discussed in Note 18, the Company assumed the rights and obligations pursuant to the Collective Bargaining Agreement (the "Munhall CBA") between MUSA and the United Steel Workers of America, Local Union 5852-22 (the "Munhall Union"). As a part of this Munhall CBA, the Company assumed the obligation of participating in the Steelworkers Pension Trust, a union-sponsored multi-employer defined benefit plan (the "Munhall Plan"), which covers all the Company's eligible Munhall Union employees. The Munhall Plan has a calendar plan year. Per the most recent available annual funding notice, the plan was at least 80 percent funded for the plan year ended December 31, 2017. Per the terms of the Munhall CBA the Company contributes 4 percent of each participant's eligible compensation for the 2018 plan year. Munhall Union employees make no contributions to the Munhall Plan. The Company's contributions are less than 5 percent of total contributions to the plan based on contributions for the plan year ended December 31, 2016. The Company's contributions to the Munhall Plan totaled \$129,403 and \$69,245 for the years ended December 31, 2018 and December 31, 2017, respectively. Additionally, as part of the Munhall CBA, members of the union are eligible to make deferral contributions to the Company's 401(k)/ESOP Plan per the plan guidelines; however they do not receive matching contributions of the 401(k)/ESOP Plan.

The Company also maintains a Collective Bargaining Agreement (the "Mineral Ridge CBA") with the United Steel Workers of America, Local Union 4564-07, which represents employees at the Specialty-Mineral Ridge facility. In connection with the Mineral Ridge CBA, the Company contributes to union-sponsored defined contribution retirement plans. Contributions relating to these plans were approximately \$32,034, \$29,042 and \$22,256 for 2018, 2017 and 2016, respectively.

Note 12 Leases

On August 31, 2016, the Company and its operating subsidiaries (collectively the "Synalloy Companies") entered into a Purchase and Sale Agreement ("PSA") with Store Capital Acquisitions, LLC, a Delaware limited liability company and an affiliate of Store Capital Corporation ("Store"). Store Capital Acquisitions assigned its rights under the PSA to Store Funding prior to closing.

On September 30, 2016, pursuant to the terms and conditions of the PSA, the Synalloy Companies completed the sale of their real estate properties in Tennessee, South Carolina, Texas and Ohio to Store Funding for a purchase price of \$22,000,000. The net book value of the real estate properties sold totaled \$17,769,883 and the Company recognized a loss on the sale of certain locations of \$2,455,347. The Company also recognized a deferred gain of \$6,685,464 on the sale of certain locations which is being amortized on the straight-line method over the initial lease term of 20 years. The deferred gain recognized during the fourth quarter of 2016 totaled \$83,568 and reduced the net loss recognized at December 31, 2016 in the accompanying consolidated statements of operations to \$2,371,778. The deferred gain in each of the years ended 2018 and 2017 was \$334,273. Concurrent with the sale of its real properties, the Company leased back all real properties sold to Store Funding pursuant to a Master Lease Agreement dated September 30, 2016 (the "Master Lease"). The closing of the sale-leaseback transaction provided the Company with net proceeds

(after transaction-related costs) of \$21,925,000. The net proceeds were used to pay down debt under the Company's Credit Agreement, as described in Note 5.

The initial non-cancellable term of the lease was 20 years, with two renewal options of 10 years each. The lease includes a rent escalator equal to the lesser of 1.25 times the percentage increase in the Consumer Price Index since the previous increase or two percent. The lease met the operating lease requirements and has been accounted for as such.

On June 29, 2018, the Company and Store Funding amended and restated the Master Lease, pursuant to which the Company will lease the Munhall, PA facility, purchased by Store from MUSA on June 29, 2018, for the remainder of the initial term of 20 years set forth in the Master Lease, with two renewal options of 10 years each. The amended Master Lease includes a rent escalator equal to the lesser of 1.25 times the percentage increase in the Consumer Price Index since the previous increase or two percent.

The Company leases office space in Spartanburg, South Carolina and Richmond, Virginia, property for a storage yard in Mineral Ridge, Ohio, manufacturing and warehouse space in Munhall, Pennsylvania and various manufacturing and office equipment at each of its locations, all under operating leases.

The amount of future minimum lease payments under operating leases are as follows:

2019	3,207,053
2020	3,243,694
2021	3,238,745
2022	3,224,810
2023	3,102,815
Thereafter	45,337,403

Rent expense related to operating leases was \$3,994,012, \$3,339,600 and \$1,143,895 in 2018, 2017 and 2016, respectively.

The Company leases machinery and equipment for its manufacturing facilities in Cleveland, Tennessee and Andrews, Texas under capital leases. Future minimum commitments for capital leases are as follows:

2019	\$	354,299
2020		357,733
2021		346,570
2022		18,407
2023		—
Total minimum lease payments		1,077,009
Less imputed interest costs		164,826
Present value of net minimum lease payments	\$	912,183

The current portion due under the capital lease is included in accrued expenses and the long-term portion is included in other long-term liabilities in the accompanying consolidated balance sheets as of December 31, 2018 and December 31, 2017.

Note 13 Commitments and Contingencies

Management is not currently aware of any asserted or unasserted matters which could have a significant effect on the financial condition or results of operations of the Company.

Note 14 Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per share:

	2018	2017	2016
Numerator:			
Net income (loss) from continuing operations	\$ 13,097,429	\$ 1,341,362	\$ (6,993,967)
Net loss from discontinued operations, net of income taxes	\$ —	\$ —	\$ (99,334)
Denominator:			
Denominator for basic earnings per share - weighted average shares	8,806,079	8,704,730	8,649,745
Effect of dilutive securities:			
Employee stock options and stock grants	71,530	22,757	—
Denominator for diluted earnings per share - weighted average shares	8,877,609	8,727,487	8,649,745
Net earnings (loss) per share from continuing operations:			
Basic	\$ 1.49	\$ 0.15	\$ (0.81)
Diluted	\$ 1.48	\$ 0.15	\$ (0.81)
Net loss per share from discontinued operations:			
Basic	\$ —	\$ —	\$ (0.01)
Diluted	\$ —	\$ —	\$ (0.01)

The diluted earnings per share calculations exclude the effect of potentially dilutive shares when the inclusion of those shares in the calculation would have an anti-dilutive effect. The Company had weighted average shares of common stock of 600 in 2018, 86,524 in 2017 and 295,287 in 2016, which were not included in the diluted earnings per share calculation as their effect was anti-dilutive.

Note 15 Industry Segments

The Company's business is divided into two operating segments: Metals and Specialty Chemicals. The Company identifies such segments based on products and services, long-term financial performance and end markets targeted. The Metals Segment operates as three reporting units including Synalloy Metals, Inc., a wholly-owned subsidiary which owns 100 percent of BRISMET, Palmer and Specialty, both wholly-owned subsidiaries of the Company. BRISMET manufactures pipe and tube from stainless steel and other alloys, Palmer produces fiberglass and steel storage tanks and Specialty is a master distributor of seamless carbon pipe and tube. The Metal Segment's products, some of which are custom-produced to individual orders and required for corrosive and high-purity processes, are used principally by the chemical, petrochemical, pulp and paper, mining, power generation (including nuclear), water and wastewater treatment, liquid natural gas, brewery, food processing, petroleum, pharmaceutical and other industries. Products include pipe, storage tanks, pressure vessels and a variety of other components. The Specialty Chemicals Segment operates as one reporting unit which includes MS&C, a wholly owned subsidiary of the Company which owns 100 percent of MC, and CRI Tolling, a wholly owned subsidiary of the Company. The Specialty Chemicals Segment manufactures a wide variety of specialty chemicals for the carpet, chemical, paper, metals, mining, agricultural, fiber, paint, textile, automotive, petroleum, cosmetics, mattress, furniture, janitorial and other industries. MC manufactures lubricants, surfactants, defoamers, reaction intermediaries and sulfated fats and oils. CRI Tolling provides chemical tolling manufacturing resources to global and regional companies and contracts with other chemical companies to manufacture certain pre-defined products.

The chief operating decision maker evaluates performance and determines resource allocations based on a number of factors, the primary measure being operating income (loss). The accounting policies of the segments are the same as those described in the summary of significant accounting policies.

Segment operating income is the segment's total revenue less operating expenses. Identifiable assets, all of which are located in the United States, are those assets used in operations by each segment. The Metals Segment's identifiable assets did not include any goodwill in 2016. In relation to 2017 MUSA-Stainless and 2018 MUSA-Galvanized acquisitions (see Note 18), the Metals Segment recognized goodwill of \$4,648,795 in 2017 and \$3,796,467 in 2018, respectively. The Specialty Chemicals Segment's identifiable assets include goodwill of \$1,354,730 in 2018 and 2017. Centralized data processing and accounting expenses are

allocated to the two segments based upon estimates of their percentage of usage. Unallocated corporate expenses include environmental charges of \$50,617, \$37,748 and \$48,000 for 2018, 2017 and 2016, respectively. Corporate assets consist principally of cash, certain investments and equipment.

Segment Information:

All values are for continuing operations only.

	2018	2017	2016
Net sales			
Metals Segment	\$ 222,242,145	\$ 152,957,195	\$ 90,214,537
Specialty Chemicals Segment	58,599,274	48,190,487	48,351,245
	<u>\$ 280,841,419</u>	<u>\$ 201,147,682</u>	<u>\$ 138,565,782</u>
Operating income (loss)			
Metals Segment	\$ 27,543,907	\$ 5,424,624	\$ (4,820,374)
Gain (loss) on sale-leaseback	239,604	239,604	(2,166,136)
Total Metals Segment	<u>27,783,511</u>	<u>5,664,228</u>	<u>(6,986,510)</u>
Specialty Chemicals Segment	3,879,405	4,295,576	4,887,143
Gain (loss) on sale-leaseback	94,669	94,669	(205,642)
Total Specialty Chemicals Segment	<u>3,974,074</u>	<u>4,390,245</u>	<u>4,681,501</u>
	<u>31,757,585</u>	<u>10,054,473</u>	<u>(2,305,009)</u>
Unallocated corporate expenses	7,877,847	6,513,839	5,835,162
Earn-out adjustments	1,430,682	688,523	—
Acquisition related costs	1,211,797	794,983	106,227
Operating income (loss)	<u>21,237,259</u>	<u>2,057,128</u>	<u>(8,246,398)</u>
Interest expense	2,210,506	985,366	932,572
Change in fair value of interest rate swap	(19,484)	(96,696)	12,997
Other income, net	2,572,598	(310,043)	—
Income (loss) before income taxes	<u>\$ 16,473,639</u>	<u>\$ 1,478,501</u>	<u>\$ (9,191,967)</u>
Identifiable assets			
Metals Segment	\$ 192,195,733	\$ 130,456,857	
Specialty Chemicals Segment	28,174,675	25,394,078	
Corporate	8,028,438	4,023,215	
	<u>\$ 228,398,846</u>	<u>\$ 159,874,150</u>	
Depreciation and amortization			
Metals Segment	\$ 7,197,814	\$ 6,280,681	\$ 5,132,506
Specialty Chemicals Segment	1,427,629	1,302,579	1,449,437
Corporate	149,734	154,552	113,047
	<u>\$ 8,775,177</u>	<u>\$ 7,737,812</u>	<u>\$ 6,694,990</u>
Capital expenditures			
Metals Segment	\$ 5,969,216	\$ 3,405,552	\$ 2,198,535
Specialty Chemicals Segment	1,297,762	1,649,967	475,703
Corporate	87,759	223,089	370,173
	<u>\$ 7,354,737</u>	<u>\$ 5,278,608</u>	<u>\$ 3,044,411</u>
Sales by product group			
Specialty chemicals	\$ 58,599,274	\$ 48,190,487	\$ 48,351,245
Stainless steel pipe	146,237,630	100,253,823	56,065,642
Seamless carbon steel pipe and tube	32,473,950	25,103,641	14,913,133
Liquid storage tanks and separation equipment	31,653,832	27,599,731	19,235,762
Galvanized pipe and tube	11,876,733	—	—
	<u>\$ 280,841,419</u>	<u>\$ 201,147,682</u>	<u>\$ 138,565,782</u>
Geographic sales			
United States	\$ 273,244,175	\$ 196,172,279	\$ 132,313,157
Elsewhere	7,597,244	4,975,403	6,252,625
	<u>\$ 280,841,419</u>	<u>\$ 201,147,682</u>	<u>\$ 138,565,782</u>

Note 16 Quarterly Results (Unaudited)

The following is a summary of quarterly operations for 2018 and 2017:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2018				
Net sales	\$58,480,602	\$71,893,763	\$77,792,878	\$72,674,176
Gross profit	11,233,418	15,716,322	14,028,366	10,259,233
Net income	3,835,163	3,677,272	5,035,558	549,436
Per common share				
Basic	0.44	0.42	0.57	0.06
Diluted	0.44	0.41	0.56	0.06
2017				
Net sales	\$42,203,579	\$51,511,045	\$54,595,924	\$52,837,134
Gross profit	7,403,579	8,177,927	4,836,620	7,662,824
Net income (loss)	701,542	829,879	(1,206,752)	1,016,693
Other comprehensive income (loss)	—	366,346	(366,346)	(10,864)
Comprehensive income (loss)	—	1,196,225	(1,573,098)	1,005,829
Per common share				
Basic	0.08	0.10	(0.14)	0.11
Diluted	0.08	0.10	(0.14)	0.11

Note 17 Interest Rate Swap

As discussed in Note 5, the Company has an interest rate swap associated with its current credit facility which effectively is expected to offset variable interest in the borrowing; hedge accounting was not utilized. The notional amount of the swap was \$8,250,000 and \$10,500,000 at December 31, 2018 and December 31, 2017, respectively. The fair value is recorded in current assets or liabilities, as appropriate, with corresponding changes to fair value recorded to other income (expense). The interest rate swap will remain in place for the remainder of the current credit facility's term. The Company recorded an asset of \$147,465 and \$127,981 for the fair value of the swap at December 31, 2018 and December 31, 2017, respectively.

Note 18 Acquisitions

Acquisition of the Galvanized Pipe and Tube Assets of Marcegaglia USA, Inc.

On July 1, 2018, BRISMET completed the MUSA-Galvanized acquisition. The purpose of the transaction was to enhance the Company's on-going business with additional capacity and technological advantages. The transaction was funded through an increase to the Company's current credit facility (refer to Note 5). The purchase price for the transaction totaled \$10,378,281. The tangible assets purchased and liabilities assumed from MUSA include accounts receivable, inventory, equipment, and accounts payable.

MUSA will receive quarterly earn-out payments for a period of four years following closing. Earn-out payments will equate to three percent of BRISMET's galvanized steel pipe and tube revenue. As of July 1, 2018, the Company forecasted earn-out payments to be \$4,244,939, for which the Company established a fair value of \$3,800,298 using a probability-weighted expected return method and a discount rate applicable to future revenue of five percent. In determining the appropriate discount rate to apply to the contingent payments, the risk associated with the functional form of the earn-out, and the credit risk associated with the payment of the earn-out were all considered. The fair value of the contingent consideration was estimated by applying the probability-weighted expected return method using management's estimates of pounds to be shipped and future price per unit. At December 31, 2018 the fair value of the earn-out totaled \$3,357,800 with \$990,823 of this liability classified as a current liability because the payments will be made quarterly.

In the fourth quarter of 2018, management adjusted the fair value of the customer list intangible asset. Because this adjustment was determined within the measurement period, the customer list intangible was decreased by \$251,000 and goodwill was increased by \$251,000. Goodwill arising from the MUSA-Galvanized transaction increased from \$3,545,467 to \$3,796,467 and the fair value of the customer list intangible asset was decreased from \$1,424,000 to \$1,173,000. All other changes in fair value have been included as earn-out adjustments in the Company's consolidated statements of operations.

The total purchase price was allocated to the acquired net tangible and identifiable intangible assets based on their estimated fair values as of July 1, 2018. The fair value assigned to the customer list intangible is being amortized on an accelerated basis over 15 years. The excess of the consideration transferred over the fair value of the net tangible and identifiable intangible assets is reflected as goodwill. Goodwill consists of manufacturing cost synergies expected from combining Munhall-Galvanized's production capabilities with BRISMET's current operations. All of the goodwill recognized was assigned to the Company's Metals Segment and is expected to be deductible for income tax purposes. During the fourth quarter of 2018, the Company finalized the purchase price allocation for the MUSA-Galvanized acquisition.

The following table shows the initial estimate of value and revisions made during 2018:

	Initial estimate	Revisions	Final
Inventories	\$ 2,746,000	\$ —	2,746,000
Accounts Receivable	2,187,141	—	2,187,141
Other current assets - production and maintenance supplies	746,729	—	746,729
Property, plant and equipment	4,883,847	—	4,883,847
Customer list intangible	1,424,000	(251,000)	1,173,000
Goodwill	3,545,467	251,000	3,796,467
Earn-out Liability	(3,800,298)	—	(3,800,298)
Accounts payable	(1,051,239)	—	(1,051,239)
Other liabilities	(303,366)	—	(303,366)
	<u>\$ 10,378,281</u>	<u>\$ —</u>	<u>\$ 10,378,281</u>

MUSA-Galvanized's results of operations since acquisition are reflected in the Company's consolidated statements of operations as follows:

	2018
Net sales	\$ 11,876,733
Income before income taxes	64,971

The following unaudited pro-forma information is provided to present a summary of the combined results of the Company's operations with Munhall-Galvanized as if the acquisition had occurred on January 1, 2017. The unaudited pro-forma financial information is for information purposes only and is not necessarily indicative of what the results would have been had the acquisition been completed on the date indicated above.

Pro-Forma (Unaudited)

	2018	2017
Pro-forma net sales	\$ 292,793,331	\$ 225,375,581
Pro-forma net income (loss)	\$ 11,920,277	\$ 20,960
Earnings (loss) per share:		
Basic	\$ 1.35	n/a
Diluted	\$ 1.34	n/a

The 2018 pro-forma calculation excludes non-recurring acquisition costs of \$666,357 that were incurred by the Company during 2018. Munhall-Galvanized's historical financial results were adjusted for both years to eliminate interest expense charged by the prior owner. Pro-forma net income was reduced for both years for the amount of amortization on Munhall-Galvanized's customer list intangible and an estimated amount of interest expense associated with the additional line of credit borrowings.

Acquisition of the Stainless Steel Pipe and Tube Assets of Marcegaglia USA, Inc.

On December 9, 2016, BRISMET entered into a definitive agreement to acquire the stainless steel pipe and tube assets of MUSA located in Munhall, PA ("MUSA-Stainless") to enhance its on-going business with additional capacity and technological advantages. The transaction closed on February 28, 2017 and was funded through an increase to the Company's credit facility (See Note 5). The purchase price for the transaction, which excluded real estate and certain other assets, totaled \$14,953,513. The assets purchased from MUSA included inventory, production and maintenance supplies and equipment less specific identified liabilities assumed. In accordance with the agreement, on December 9, 2016, BRISMET entered into an escrow agreement and deposited \$3,000,000 into the escrow fund. The deposit was remitted to MUSA at the close of the transaction and was reflected as a credit against the purchase price.

The transaction was accounted for using the acquisition method of accounting for business combinations. During the fourth quarter of 2017, the Company finalized the purchase price allocation for the MUSA-Stainless acquisition.

MUSA will receive quarterly earn-out payments for a period of four years following closing. Aggregate earn-out payments will be at least \$3,000,000, with no maximum. Actual payouts will equate to three percent of BRISMET's incremental revenue, if any, from the amount of small diameter stainless steel pipe and tube (outside diameter of ten inches or less) sold. At February 28, 2017, the acquisition date, the Company forecasted earn-out payments to be \$4,063,204, which was discounted to a present value of \$3,604,330 using a discount rate applicable to future revenue of five percent. In determining the appropriate discount rate to apply to the contingent payments, the risk associated with the functional form of the earn-out, the credit risk associated with the payment of the earn-out and the methodology to quantify the earn-out were all considered. The fair value of the contingent consideration was estimated by applying the Monte Carlo simulation approach using management's estimates of pounds shipped.

In the second quarter of 2017, management adjusted the selling price used in the earn-out calculation associated with the MUSA-Stainless acquisition. Since this adjustment was determined within the measurement period, the beginning earn-out liability and goodwill were increased by \$1,059,453. Goodwill related to the MUSA-Stainless acquisition increased from \$3,589,342 to \$4,648,795 and the fair value of contingent consideration was increased from \$3,604,330 to \$4,663,783. All other changes in fair value have been included as earn-out adjustments in the Company's consolidated statements of operations.

The total purchase price was allocated to Munhall-Stainless' net tangible and identifiable intangible assets based on their estimated fair values as of February 28, 2017. The fair value assigned to the customer list intangible is being amortized on an accelerated basis over 15 years. The excess of the consideration transferred over the fair value of the net tangible and identifiable intangible assets and liabilities is reflected as goodwill. Goodwill consists of manufacturing cost synergies expected from combining laser mill capabilities acquired as part of Munhall-Stainless with BRISMET's current operations. All of the goodwill recognized was assigned to the Company's Metals Segment and is expected to be deductible for income tax purposes.

The following table shows the initial estimate of value and revisions made during 2017:

	Initial estimate	Revisions	Final
Inventories	\$ 5,434,000	\$ —	\$ 5,434,000
Other current assets - production and maintenance supplies	1,548,701	—	1,548,701
Equipment	7,576,733	—	7,576,733
Customer list intangible	992,000	—	992,000
Goodwill	3,589,342	1,059,453	4,648,795
Earn-out liability	(3,604,330)	(1,059,453)	(4,663,783)
Other liabilities assumed	(582,933)	—	(582,933)
	<u>\$ 14,953,513</u>	<u>\$ —</u>	<u>\$ 14,953,513</u>

Munhall-Stainless' results of operations since acquisition are reflected in the Company's consolidated statements of operations. The amount of Munhall-Stainless' revenues and operating loss included in the consolidated statements of operations for the year ended December 31, 2017 was \$25,766,689 and \$245,408, respectively.

On March 1, 2017, pursuant to the terms and conditions of the MUSA asset purchase agreement, the Company entered into a lease agreement to lease manufacturing and warehouse space at MUSA's Munhall, PA facility for \$33,333 per month for the initial lease term of 15 months. In February 2018, the lease was amended to extend the term of the lease for the period beginning June 1, 2018 and ending May 31, 2023 and includes escalating rent payments. The lease met the operating lease requirements and was accounted for as such in 2017.

As part of the MUSA-Galvanized acquisition that occurred on July 1, 2018, the Company amended and restated the Master Lease, effective June 29, 2018, pursuant to which the Company leased the Munhall, PA facility, purchased by Store Funding from MUSA for the remainder of the initial term of 20 years set forth in the Master Lease (see Note 12).

Note 19 Dispositions and Closures

Associated with the closure of Bristol Fab in 2014, Bristol Fab's collective bargaining agreement with the Union expired and the Company was legally obligated to pay a withdrawal liability to the Union's pension fund of approximately \$1,904,628. This obligation was payable over 26 months ending October 1, 2016 with an interest rate of 4.51 percent.

During 2016, the Company successfully completed the items and processes identified when the one-time closing charges were developed. A charge of \$99,334 and \$1,251,058, net of tax respectively, was recorded as discontinued operations during 2016 and 2015 for a legal claim filed against Synalloy Fabrication. The matter was settled during 2016 and the settlement was paid in full by September 2016. As such, the facility closing reserve was zero as of December 31, 2016. Bristol Fab was reported as a part of the Metals Segment.

The Company's results from discontinued operations are summarized below:

	2016
Net sales	\$ —
Loss before income taxes	\$ (150,334)
Benefit from income taxes	(51,000)
Net loss from discontinued operations	\$ (99,334)

Note 20 Payment of Dividends

At the end of each fiscal year the Board reviews the financial performance and capital needed to support future growth to determine the amount of cash dividend, if any, which is appropriate. In 2018, the Company paid a \$0.25 cash dividend on December 12, 2018 for a total of \$2,250,537. In 2017, the Company paid a \$0.13 cash dividend totaling \$1,148,513. In 2016, no dividends were declared or paid by the Company.

Note 21 At the Market Offering

On August 9, 2018, the Company entered into an Equity Distribution Agreement pursuant to which the Company had the ability to issue and sell, from time to time, shares of the Company's common stock (the "Shares"), par value \$1.00 per share, with aggregate gross sales proceeds of up to \$10 million, through an "at-the-market" equity offering program under which BB&T Capital Markets, a division of BB&T Securities, LLC and Ladenburg Thalmann & Co. Inc. (the "Agents") were sales agents (the "ATM Program").

In 2018, the Company issued and sold 44,378 shares in connection with the ATM Program, with total net proceeds of \$982,519. The Agents received \$20,470 in commission on the sales.

On November 16, 2018, the Company terminated the ATM Program. The Company has not sold any shares under the ATM Offering since September 30, 2018, and will no longer offer any shares under this program.

Note 22 Revenues

Adoption of ASC Topic 606, "Revenue from Contracts with Customers"

On January 1, 2018, the Company adopted Topic 606 using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Topic 605. The Company operates as a manufacturer of various products, and revenue is comprised of short-term contracts with point-in-time performance obligations. As a result, the Company did not identify any differences in its recognition of revenue between Topic 606 and Topic 605. Accordingly, there was no adjustment required to opening retained earnings for the cumulative impact of adopting Topic 606 and no impact to revenues for the year-ended December 31, 2018 as a result of applying Topic 606.

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers upon shipment, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

The following table presents the Company's revenues, disaggregated by product group. Substantially all of the Company's revenues are derived from contracts with customers where performance obligations are satisfied at a point-in-time.

	Twelve Months Ended	
	Dec 31, 2018	Dec 31, 2017
Storage tank and vessel	\$ 31,653,832	\$ 27,599,731
Seamless carbon steel pipe and tube	32,473,950	25,103,641
Stainless steel pipe	146,237,630	100,253,823
Galvanized pipe	11,876,733	—
Specialty chemicals	58,599,274	48,190,487
Total revenues	<u>\$ 280,841,419</u>	<u>\$ 201,147,682</u>

Arrangements with Multiple Performance Obligations

Our contracts with customers may include multiple performance obligations. For such arrangements, revenue for each performance obligation is based on its stand-alone selling price and revenue is recognized as each performance obligation is satisfied. The Company generally determines stand-alone selling prices based on the prices charged to customers using the adjusted market assessment approach or expected cost plus margin.

Deferred Revenues

Deferred revenues are recorded when cash payments are received in advance of satisfying the performance obligation, including amounts which are refundable. The deferred revenue balance decreased \$7,356 during 2018 to \$177,518 as of December 31, 2018 due to receiving \$2,597,792 in advance of satisfying our performance obligations during the period, offset by \$2,605,148 of revenue that was recognized during the period after satisfying the performance obligations that were included in the beginning deferred revenue balance or received during the current period. Deferred revenues are included in "Accrued expenses" on the accompanying Consolidated Balance Sheets.

Our payment terms vary by the financial strength or location of our customer and the products offered. The length of time between invoicing and when payment is due is not significant. For certain customers, payment is required before the products or services are delivered to the customer.

Practical Expedients and Election

When shipping and handling activities are performed after a customer obtains control of goods, the Company reflects shipping and handling activities as part of satisfying the obligation of providing goods to the customer.

In some instances, the Company withholds various states' sales taxes upon shipments into those states. Accordingly, management makes an accounting policy election to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are imposed on and concurrent with a specific revenue-producing transaction and collected from a customer.

The Company expenses sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within selling, general, and administrative expenses.

The Company does not disclose the value of unsatisfied performance obligations since contracts are expected to be completed within one year.

Note 23 Subsequent Events

On January 1, 2019, Synalloy Corporation's wholly-owned subsidiary, ASTI, completed its purchase of substantially all of American Stainless' assets and operations in Statesville and Troutman, North Carolina. The purchase price for the all-cash acquisition was approximately \$22,736,854, subject to a post-closing working capital adjustment. American Stainless will also receive quarterly earn-out payments for a period of three years following closing. Pursuant to the asset purchase agreement between ASTI and American Stainless, earn-out payments will equate to six and one-half percent (6.5 percent) of ASTI's revenue over the three-year earn-out period. Synalloy funded the acquisition with a new five-year \$20,000,000 term note and a draw against its recently increased \$100,000,000 asset based line of credit, both with Synalloy's current lender. Proforma information related to

this acquisition is not included in the notes to the consolidated financial statements because the initial accounting for the business combination was not complete at the time the financial statements were issued.

On January 1, 2019, Synalloy Store Funding amended and restated the Master Lease, pursuant to which Synalloy will lease the properties purchased by Store from American Stainless on January 1, 2019, for the remainder of the initial term of 20 years set forth in the Master Lease, with two renewal options of 10 years each. First year rent expense will be \$430,000. The lease includes a rent escalator equal to the lesser of 1.25 times the percentage increase in the Consumer Price Index since the previous increase or two percent. Synalloy will sublease both properties to ASTI.

On February 21, 2019, the Board of Directors authorized a stock repurchase program for up to 850,000 shares of its outstanding common stock over the next twenty-four months. The shares will be purchased from time to time at prevailing market prices, through open market or privately negotiated transactions, depending on market conditions. Under the program, the purchases will be funded from available working capital, and the repurchased shares will be returned to the status of authorized, but unissued shares of common stock or held in treasury. There is no guarantee as to the exact number of shares that will be repurchased by the Company, and the Company may discontinue purchases at any time that management determines additional purchases are not warranted.

Management's Annual Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities and Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies may deteriorate.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 using the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission in the *Internal Control-Integrated Framework (COSO 2013)*. Based on that evaluation, management believes the Company's internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2018, has been audited by KPMG LLP, an independent registered public accounting firm, which also audited the Company's Consolidated Financial Statements for the year ended December 31, 2018. KPMG LLP's report on the Company's internal control over financial reporting is set forth below.

Changes in Internal Control Over Financial Reporting

There was no change in the Company's internal control over financial reporting that occurred during the Company's fourth quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company believes that its disclosure controls and procedures were operating effectively as of December 31, 2018.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Synalloy Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Synalloy Corporation and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 18, 2019, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2015.

Richmond Virginia
March 18, 2019

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Synalloy Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited Synalloy Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule (collectively, the consolidated financial statements), and our report dated March 18, 2019 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Richmond, Virginia
March 18, 2019

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

None.

Item 9A Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of the Company's management, including the Chief Executive Officer and the Chief Financial Officer, the Company conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934 (the "Exchange Act"), as amended. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of the end of December 31, 2018. There have been no significant changes in the Company's internal controls or in other factors that could significantly affect the internal controls subsequent to the date the Company completed the evaluation.

Item 9B Other Information

Not applicable.

PART III

Item 10 Directors, Executive Officers and Corporate Governance

In accordance with General Instruction G(3), information called for by Part III, Item 10, is incorporated herein by reference from the information appearing under the caption "Proposal 1 - Election of Directors," "Executive Officers," and "Section 16(a) Beneficial Ownership Reporting Compliance" in the definitive Proxy Statement for the 2017 Annual Meeting of Shareholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Code of Conduct. The Company's Board of Directors has adopted a Code of Conduct that applies to the Company's Chief Executive Officer, Chief Financial Officer and corporate and divisional controllers. The Code of Conduct is available on the Company's website at www.synalloy.com. Any amendment to, or waiver from, this Code of Conduct will be posted on the Company's website.

Audit Committee. The Company has a separately designated standing Audit Committee of the Board of Directors established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934. The members of the Audit Committee are Anthony A. Callander, Henry L. Guy and James W. Terry.

Audit Committee Financial Expert. The Company's Board of Directors has determined that the Company has at least one "audit committee financial expert," as that term is defined by Item 407(d)(5) of Regulation S-K promulgated by the Securities and Exchange Commission, serving on its Audit Committee. Mr. Anthony A. Callander meets the terms of the definition and is independent, as independence is defined for audit committee members in the rules of the NASDAQ Global Market. Pursuant to the terms of Item 407(d) of Regulation S-K, a person who is determined to be an "audit committee financial expert" will not be deemed an expert for any purpose as a result of being designated or identified as an "audit committee financial expert" pursuant to Item 407(d), and such designation or identification does not impose on such person any duties, obligations or liability that are greater than the duties, obligations or liability imposed on such person as a member of the Audit Committee and Board of Directors in the absence of such designation or identification. Further, the designation or identification of a person as an "audit committee financial expert" pursuant to Item 407(d) does not affect the duties, obligations or liability of any other member of the Audit Committee or Board of Directors.

Item 11 Executive Compensation

In accordance with General Instruction G(3), information called for by Part III, Item 11, is incorporated herein by reference from the information appearing under the caption "Board of Directors and Committees - Compensation Committee Interlocks and Insider Participation," "Director Compensation," "Discussion of Executive Compensation" and "Compensation Committee Report" in the definitive Proxy Statement for the 2019 Annual Meeting of Stockholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

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

In accordance with General Instruction G(3), information called for by Part III, Item 12, is incorporated by reference from the information appearing under the caption "Beneficial Owners of More Than Five Percent of the Company's Common Stock" and "Security Ownership of Certain Beneficial Owners and Management" in the definitive Proxy Statement for the 2019 Annual Meeting of Shareholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Equity Compensation Plan Information. The following table sets forth aggregated information as of December 31, 2018 about all of the Company's equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))⁽¹⁾ (c)
Equity compensation plans approved by security holders	59,096	\$ 14.16	300,776
Equity compensation plans not approved by security holders	—	—	—
Total	59,096	\$ 14.16	300,776

⁽¹⁾ Represents shares remaining available for issuance under the 2015 Stock Awards Plan and the 2011 Plan.

Non-employee directors are paid an annual retainer of \$102,000, and each director has the opportunity to elect to receive 100 percent of the retainer in restricted stock. For 2018, non-employee directors received an aggregate of \$276,000 of the annual retainer in restricted stock. The number of restricted shares is determined by the average of the high and low sale price of the Company's stock on the day prior to the Annual Meeting of Shareholders. For 2018, six non-employee directors each received an aggregate of 14,857 shares. Issuance of the shares granted to the directors is not registered under the Securities Act of 1933 and the shares are subject to forfeiture in whole or in part upon the occurrence of certain events. The above table does not reflect these shares issued to non-employee directors.

Item 13 Certain Relationships and Related Transactions, and Director Independence

In accordance with General Instruction G(3), information called for by Part III, Item 13, is incorporated by reference from the information appearing under the caption "Board of Directors and Committees – Related Party Transactions" and "– Director Independence" in the definitive Proxy Statement for the 2019 Annual Meeting of Shareholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

Item 14 Principal Accounting Fees and Services

In accordance with General Instruction G(3), information called for by Part III, Item 14, is incorporated by reference from the information appearing under the caption "Independent Registered Public Accounting Firm - Fees Paid to Independent Registered Public Accounting Firm" and "– Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm" in the definitive Proxy Statement for the 2019 Annual Meeting of Shareholders, which definitive Proxy Statement will be filed electronically with the SEC pursuant to Regulation 14A.

PART IV

Item 15 Exhibits, Financial Statement Schedules

(a) The following documents are filed as a part of this report:

1. Financial Statements: The following consolidated financial statements of Synalloy Corporation are included in Part II, Item 8:

Consolidated Balance Sheets as of December 31, 2018 and December 31, 2017

Consolidated Statements of Operations and Comprehensive Income for the years ended December 31, 2018, December 31, 2017 and December 31, 2016

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2018, December 31, 2017 and December 31, 2016

Consolidated Statements of Cash Flows for the years ended December 31, 2018, December 31, 2017 and December 31, 2016

Notes to Consolidated Financial Statements

2. Financial Statements Schedules: The following consolidated financial statements schedule of Synalloy Corporation is included in Item 15:

Schedule II - Valuation and Qualifying Accounts for the years ended December 31, 2018, December 31, 2017 and December 31, 2016

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

3. Listing of Exhibits:

See "Exhibit Index"

Item 16 Form 10-K Summary

None.

Schedule II Valuation and Qualifying Accounts

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Charged to (Reduction of) Cost and Expenses	Deductions	Balance at End of Period
Year ended December 31, 2018				
Deducted from asset account:				
Allowance for doubtful accounts	\$ 35,000	\$ 240,000	\$ (106,000)	\$ 169,000
Inventory reserves	\$ 697,000	\$ 1,828,000	\$ (1,849,000)	\$ 676,000
Year ended December 31, 2017				
Deducted from asset account:				
Allowance for doubtful accounts	\$ 82,000	\$ 202,000	\$ (249,000)	\$ 35,000
Inventory reserves	\$ 966,000	\$ 1,237,000	\$ (1,506,000)	\$ 697,000
Year ended December 31, 2016				
Deducted from asset account:				
Allowance for doubtful accounts	\$ 247,000	\$ (45,000)	\$ (120,000)	\$ 82,000
Inventory reserves	\$ 682,000	\$ 984,000	\$ (700,000)	\$ 966,000

Index to Exhibits

Exhibit No. from Item 601 of Regulation S-K	Description
1.1	Underwriting Agreement dated September 24, 2013, incorporated by reference to Registrant's Form 8-K filed September 24, 2013
1.2	Equity Distribution Agreement, dated August 9, 2018, between Synalloy Corporation and BB&T Capital Markets, a division of BB&T Securities, LLC, and Ladenburg Thalmann & Co. Inc., incorporated by reference to Registrant's Form 8-K filed August 10, 2018
3.1	Restated Certificate of Incorporation of Registrant, as amended, incorporated by reference to Registrant's Form 10-Q for the period ended April 2, 2005
3.2	Restated Certificate of Incorporation of Registrant, as amended, incorporated by reference to Registrant's Form 8-K filed May 18, 2015
3.3	Bylaws of Registrant, incorporated by reference to Registrant's Form 10-Q for the period ended March 31, 2001, as amended, which amendments are incorporated by reference to Registrant's Form 8-K filed August 13, 2007
4.1	Form of Common Stock Certificate, incorporated by reference to Registrant's Form 10-Q for the period ended March 31, 2001
10.1	Synalloy Corporation 2005 Stock Awards Plan, incorporated by reference to the Proxy Statement for the 2005 Annual Meeting of Shareholders
10.2	Amendment 1 to the Synalloy Corporation 2005 Stock Awards Plan, incorporated by reference to Registrant's Form 10-K for the year ended December 29, 2007
10.3	Amendment 2 to the Synalloy Corporation 2005 Stock Awards Plan, incorporated by reference to Registrant's Form 10-K for the year ended January 3, 2015
10.4	Synalloy Corporation 2015 Stock Awards Plan, incorporated by reference to the Proxy Statement for the 2015 Annual Meeting of Shareholders
10.5	Amended and Restated Synalloy Corporation 2015 Stock Awards Plan, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018
10.6	2011 Long-Term Incentive Stock Option Plan, incorporated by reference to Registrant's Proxy Statement for the 2011 Annual Meeting of Shareholders
10.7	Agreement between Registrant's Bristol Metals, LLC subsidiary and the United Steelworkers of America Local 4586, dated February 1, 2015, incorporated by reference to Registrant's Form 10-K for the year ended December 31, 2015
10.8	Agreement between Registrant's Specialty Pipe & Tube, Inc. subsidiary and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union Local 4564-07, dated July 1, 2014, incorporated by reference to Registrant's Form 10-K for the year ended January 3, 2015
10.9	Agreement between Registrant's Bristol Metals, LLC subsidiary and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union Local 5852-22, dated March 12, 2018, but effective January 6, 2018, incorporated by reference to Registrant's Form 10-K for the year ended December 31, 2017
10.10	Second Amended and Restated Loan Agreement, dated as of August 31, 2016, between Registrant and Branch Banking and Trust ("BB&T"), incorporated by reference to Registrant's Form 10-Q for the period ended September 30, 2016
10.11	Third Amended and Restated Loan Agreement, dated as of October 30, 2017, between Registrant and BB&T, incorporated by reference to Registrant's Form 10-Q for the period ended September 30, 2017
10.12	First Amendment to Third Amended and Restated Loan Agreement, dated as of June 29, 2018, between Registrant and BB&T, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018
10.13	Second Amendment to Third Amended and Restated Loan Agreement, dated as of December 20, 2018, between Registrant and BB&T.
10.14	Employment Agreement, dated as of March 1, 2019, between Registrant and Craig C. Bram.
10.15	Employment Agreement, dated as of March 1, 2019, between Registrant and Dennis M. Loughran.
10.16	Employment Agreement, dated as of March 1, 2019, between Registrant and J. Kyle Pennington.
10.17	Employment Agreement, dated as of March 1, 2019, between Registrant and James G. Gibson.
10.18	Stock Purchase Agreement, dated as of August 10, 2012, among Jimmie Dean Lee, James Varner, Steven C. O'Brate and Registrant, incorporated by reference to Registrant's Form 8-K filed on August 24, 2012

- [10.19](#) [Stock Purchase Agreement, dated as of November 21, 2014, between The Davidson Corporation and Registrant, incorporated by reference to Registrant's Form 8-K filed on November 25, 2014](#)
- [10.20](#) [Asset Purchase Agreement, dated as of December 9, 2016, between Marcegaglia USA, Inc. and Registrant's Bristol Metals, LLC subsidiary, incorporated by reference to Registrant's Form 10-K for the year ended December 31, 2016](#)
- [10.21](#) [Amendment No. 1 to Asset Purchase Agreement, dated as of February 28, 2017, between Marcegaglia USA, Inc. and Registrant's Bristol Metals, LLC subsidiary, amending the Asset Purchase Agreement between the parties dated December 9, 2016, incorporated by reference to Registrant's Form 10-K for the year ended December 31, 2016](#)
- [10.22](#) [Amendment No. 2 to Asset Purchase Agreement, dated as of July 1, 2018, between Marcegaglia USA, Inc. and Registrant's Bristol Metals, LLC subsidiary, further amending the Asset Purchase Agreement between the parties dated December 9, 2016, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018](#)
- [10.23](#) [Asset Purchase Agreement, dated as of June 29, 2018, but with a closing effective date of July 1, 2018, between Marcegaglia USA, Inc. and Registrant's Bristol Metals, LLC subsidiary, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018](#)
- [10.24](#) [Asset Purchase Agreement, dated as of November 30, 2018, between American Stainless Tubing, Inc. \(now HLM Legacy Group, Inc.\) and Registrant's ASTI Acquisition, LLC \(now American Stainless Tubing, LLC\) subsidiary](#)
- [10.25](#) [Purchase and Sale Agreement, dated as of September 1, 2016, between Store Capital Acquisition, LLC and Registrant's Bristol Metals, LLC, Specialty Pipe & Tube, Inc., Palmer of Texas Tanks, Inc., Manufacturers Soap & Chemical Company, Manufacturers Chemicals, LLC subsidiaries, and Registrant, incorporated by reference to Registrant's Form 10-Q for the period ended September 30, 2016](#)
- [10.26](#) [Master Lease Agreement, dated as of September 30, 2016 between Registrant and Store Master Funding XII, LLC, incorporated by reference to Registrant's Form 10-K for the year ended December 31, 2016](#)
- [10.27](#) [Purchase and Sale Agreement, dated as of May 25, 2018, between Marcegaglia USA, Inc. and Registrant's Bristol Metals, LLC subsidiary, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018](#)
- [10.28](#) [Agreement to Designate and Lease, dated as of June 29, 2018, between Registrant and Store Capital Acquisitions, LLC, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018](#)
- [10.29](#) [Amended and Restated Master Lease Agreement, dated as of June 29, 2018, between Registrant and Store Master Funding XII, LLC, incorporated by reference to Registrant's Form 10-Q for the period ended June 30, 2018](#)
- [10.30](#) [Purchase and Sale Agreement, dated as of November 30, 2018, between American Stainless Tubing, Inc. \(now HLM Legacy Group, Inc.\) and Registrant's ASTI Acquisition, LLC \(now American Stainless Tubing, LLC\) subsidiary](#)
- [10.31](#) [Amended and Restated Master Lease, dated as of January 1, 2019, between Registrant and Store Master Funding XII, LLC.](#)
- [21](#) [Subsidiaries of the Registrant](#)
- [23.1](#) [Consent of KPMG LLP, independent registered public accounting firm](#)
- [31.1](#) [Rule 13a-14\(a\)/15d-14\(a\) Certifications of Chief Executive Officer](#)
- [31.2](#) [Rule 13a-14\(a\)/15d-14\(a\) Certification of the Chief Financial Officer](#)
- [32](#) [Certifications Pursuant to 18 U.S.C. Section 1350](#)
- 101.INS* XBRL Instance Document
- 101.SCH* XBRL Taxonomy Extension Schema
- 101.CAL* XBRL Taxonomy Extension Calculation Linkbase
- 101.LAB* XBRL Taxonomy Extension Label Linkbase
- 101.PRE* XBRL Taxonomy Extension Presentation Linkbase
- 101.DEF* XBRL Taxonomy Extension Definition Linkbase
- * In accordance with Regulation S-T, the XBRL-related information in Exhibit 101 to this Annual Report on Form 10-K shall be deemed "furnished" and not "filed."

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.

SYNALLOY CORPORATION

By /s/ Craig C. Bram

Craig C. Bram
President and Chief Executive Officer
(principal executive officer)

March 18, 2019
Date

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

/s/ Murray H. Wright

Murray H. Wright
Chairman of the Board

March 18, 2019
Date

/s/ Anthony A. Callander

Anthony A. Callander
Director

March 18, 2019
Date

/s/ Amy J. Michtich

Amy J. Michtich
Director

March 18, 2019
Date

/s/ James W. Terry, Jr.

James W. Terry, Jr.
Director

March 18, 2019
Date

/s/ Henry L. Guy

Henry L. Guy
Director

March 18, 2019
Date

/s/ Susan S. Gayner

Susan S. Gayner
Director

March 18, 2019
Date

/s/ Craig C. Bram

Craig C. Bram
Chief Executive Officer and Director

March 18, 2019
Date

/s/ Dennis M. Loughran

Dennis M. Loughran
Senior Vice President and Chief Financial Officer
(principal financial and accounting officer)

March 18, 2019
Date

SHAREHOLDER INFORMATION

CORPORATE OFFICERS

Telephone: (804) 822-3260
synalloy.com

Craig C. Bram
Chief Executive Officer & President

Dennis M. Loughran
Senior Vice President
& Chief Financial Officer

Sally M. Cunningham
Vice President, Corporate
Administration

METALS SEGMENT OFFICERS

J. Kyle Pennington
President, Synalloy Metals

BRISTOL METALS, LLC
Telephone: (423) 989-4700
brismet.com

John C. Tidlow
Executive Vice President

Kevin L. Van Zandt
Executive Vice President,
Munhall Operations

Carl A. Devine
Vice President, Manufacturing
& Labor Relations

Kristopher T. Epperson
Vice President, Sales

Barry D. Newberry
Vice President, Purchasing & HR

Joshua L. Ringley
Vice President, Business Operations
& Logistics

Anita R. Meade
Controller

SPECIALTY CHEMICALS SEGMENT OFFICERS

SYNALLOY CHEMICALS
TN Telephone: (423) 476-6666
SC Telephone: (864) 862-2399
synalloychemicals.com

J. Greg Gibson
President, Synalloy Chemicals

Charles A. Jones (Tony)
Vice President, Sales

Nataly E. Franks
Director of Finance

PALMER OF TEXAS TANKS, INC.
Telephone: (432) 523-5904
palmeroftexas.com

Robert W. Easter
General Manager

Stacy L. Montague
Vice President, Business Development

SPECIALTY PIPE & TUBE, INC.
OH Telephone: (330) 505-8262
TX Telephone: (713) 676-2891
specialtypipe.com

Steven J. Baroff
President & General Manager

K. Dianne Beck
Vice President

Christopher D. Sitka
Vice President

**AMERICAN STAINLESS
TUBING, LLC**
Telephone: (704) 878-8823
asti-nc.com

Maria Haughton Roberson
President

Rex Haughton
Vice President, Operations

BOARD OF DIRECTORS

Craig C. Bram
Chief Executive Officer & President
Director since 2004

Anthony A. Callander
Upstate Managing Director,
The Hobbs Group
Director since 2012
Committees: Audit & Corporate
Governance

Susan S. Gayner
Chief Executive Officer & President of
Parkland Ventures, Inc.
Director since 2016
Committees: Compensation
& Long-Term Incentive & Corporate
Governance

Henry L. Guy
President & Chief Executive Officer of
Modern Holdings, Inc.
Director since 2011
Committees: Audit & Compensation
& Long-Term Incentive

Amy J. Michtich
Global Supply Chain Executive
Director since 2014
Committees: Compensation
& Long-Term Incentive & Corporate
Governance

James W. Terry, Jr.
Director of Strategic Investments,
Hollingsworth Funds, Inc.
Director since 2011
Committees: Audit & Compensation
& Long-Term Incentive

Murray H. Wright
Chairman of the Board, Synalloy
Director since 2001

ANNUAL MEETING

The 2019 Annual Meeting of Shareholders will be held Thursday, May 16, 2019, at 10:00 a.m. EST, online at virtualshareholdermeeting.com/SYNL2019

TRANSFER AGENT & REGISTRAR

American Stock Transfer & Trust Company
Telephone: (800) 937-5449
6201 15th Avenue, Brooklyn, NY 11219
Attention: Shareholder Services

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

KPMG, LLP, Richmond, VA

GENERAL COUNSEL

Robert A. Peay, Attorney at Law, Richmond, VA

Annual Reports, incorporating the Form 10-K, will be provided free of charge and may be obtained by calling Investor Relations at (804) 822-3260, e-mail at investorrelations@synalloy.com or our website at synalloy.com. The Form 10-K is available from the Securities and Exchange Commission's website at sec.gov.



Synalloy

4510 COX ROAD, SUITE 201, RICHMOND, VA 23060 | SYNALLOY.COM