MICRON SOLUTIONS INC /DE/
Form 10-K
March 19, 2019
Table of Contents

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

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

001-9731

(Commission file number)

MICRON SOLUTIONS, INC.

(Name of registrant as specified in its charter)

Delaware	72-0925679
(State or other jurisdiction of incorporation of organization)	(IRS Employer Identification Number)
25 Sawyer Passway, Fitchburg, MA	01420
(Address of principal executive offices)	(Zip Code)

(978) 345-5000

(Registrant's telephone number)

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

Common Stock, $.01 par value	NYSE AMERICAN
(Title of Each Class)	(Name of each exchange on which registered)

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 if the Securities Act. Yes No

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

Indicate by check mark whether the registrant (1) 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 in response 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 emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer”, “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act:

Large Accelerated filer Accelerated filer Non Accelerated filer Smaller reporting company

Emerging growth company

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant’s most recently completed second fiscal quarter was $9,260,225.

On March 18, 2019, there were 2,872,208 shares of the registrant's common stock, par value $.01, outstanding, which is the only class of common or voting stock of the issuer.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days following the fiscal year ended December 31, 2018. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-K.

Table of Contents

Micron Solutions, Inc.

TABLE OF CONTENTS

Part I	Item 1	Business	1
	Item 1A	Risk Factors	4
	Item 1B	Unresolved Staff Comments	4
	Item 2	Properties	4
	Item 3	Legal Proceedings	4
	Item 4	Mine Safety Disclosures	4
Part II	Item 5	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	5
	Item 6	Selected Financial Data	5
	Item 7	Management's Discussion and Analysis of Financial Condition and Results of Operations	6
	Item 7A	Quantitative and Qualitative Disclosures about Market Risk	10
	Item 8	Financial Statements and Supplementary Data	10
	Item 9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosures	10
	Item 9A	Controls and Procedures	10
	Item 9B	Other Information	11
Part III	Item 10	Directors, Executive Officers and Corporate Governance	12
	Item 11	Executive Compensation	12
	Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	12
	Item 13	Certain Relationships and Related Transactions and Director Independence	12
	Item 14	Principal Accounting Fees and Services	12
Part IV	Item 15	Exhibits, Financial Statement Schedules	12
	Item 16	Form 10-K Summary	12
		Signatures	12
Exhibit Index			14

Micron Solutions, Micron Products and our other registered or common law trademarks, service marks or trade names appearing in this annual report on Form 10-K are the property of Micron Solutions and/or Micron Products. Other trademarks and trade names referred to in this annual report on Form 10-K are the property of their respective owners.

Table of Contents

PART I

Item 1. BUSINESS

Overview

Micron Solutions®, Inc., a Delaware corporation ("Micron Solutions”), through its wholly-owned Massachusetts operating subsidiary, Micron Products®, Inc. (“Micron” and together with Micron Solutions, the "Company"), is a diversified contract manufacturing organization (“CMO”) that produces highly-engineered, innovative medical device components requiring precision machining and injection molding. The Company also manufactures components, devices and equipment for military, law enforcement, automotive and consumer product applications. The Company is engaged in the production and sale of silver/silver chloride coated and conductive resin sensors used as consumable component parts in the manufacture of integrated disposable electrophysiological sensors. These disposable medical devices are used worldwide in the monitoring of electrical signals in various medical applications. The Company's machining operations produce quick-turn, high volume finished orthopedic implant components. The Company has custom thermoplastic injection molding capabilities as well, and provides a full array of design, engineering, production services and management. The Company competes globally, with approximately 45% of its revenue derived from exports.

Micron provides design, engineering, quality and regulatory expertise across the Company’s three product lines, machining, thermoplastic injection molding and sensors, with lean and fast fulfillment systems using proprietary manufacturing processes to enable the Company’s customers to be competitive throughout the product life cycle.

Contract Manufacturing

Machining

The Company is a contract manufacturer of machined components, primarily for original equipment manufacturers (OEMs) in the medical device industry as well as the defense industry. The Company machines components for implants and instruments for medical devices including, but not limited to large joint replacements, wrist plates, rib fixation plates, and screws. Specialized components used in Total Knee Arthroscopy including femoral surface replacements, tibia trays, ultra-high-molecular-weight polyethylene (“UHMWPE”) inserts, trials and instrumentation as well as hip stems and fixation plates used in rib and wrist fractures are fabricated, machined and polished, heat treated

and passivated at Micron. These parts are primarily made from investment castings (F-75, stainless steel), machining wrought bar (F-75, stainless steel, F-136 Ti 6A-4V ELI), UHMWPE, polyether ether ketone (“PEEK”), Raydel® and other materials. The Company also employs validated processes and controls suitable for medical device components including heat treating, finishing, polishing, ultrasonic cleaning and passivation. The manufacturing process includes computer aided design ("CAD"), computer-aided manufacturing (“CAM”), and computer numerical controlled ("CNC") machining. The Company deploys the latest technologies in computer aided design, computer aided manufacturing (CAD/CAM) methodology, and up to 11-axis CNC vertical milling, mill-turning and wire electrical discharge machining (“EDM”). These products involve complex programming and machining of wrought, cast and forged cobalt-chromium-molybdenum, titanium, and stainless steel alloys, as well as ultra-high molecular weight and other polymers to customer specifications. The Company brings articular surfaces of implant components to a highly polished state as part of the manufacturing process, ready for sterilization and packaging. The Company produces superior contoured machined surfaces on metal and high molecular weight polymers to complete the implant kit. Additional capabilities include laser marking, automated polishing, passivation, and coatings. The Company also offers contract inspection and packaging in its own clean room facilities.

Thermoplastic Injection Molding

The Company's custom thermoplastic injection molding services are especially suited to meet the needs of customers who require very high quality parts, clean room molding, in-cycle vision inspection, assembly and packaging to tight tolerances using engineered materials. The Company also offers over-molding, insert molding, high volume/low change, and low volume/high change injection molding. The Company adds value with highly repeatable and reliable manufacturing with ongoing innovations for cost improvements. Other value added services include pad printing, ultrasonic welding, stamping, laser marking, clean room molding, clean room assembly, specialty coatings, and plastic machining. Micron’s International Traffic in Arms Regulation ("ITAR") registration, Federal Firearms class-10 and Federal Explosive licenses assure military and defense customers that their stringent regulatory requirements are in compliance.

Other Products and Services

The Company provides its customers with key value added services, including the design, manufacture, and rehabilitation of injection molding tools. These capabilities leverage significant cost savings and speed by vertically integrating mold making and repair into the Company’s sensor and thermoplastic injection molding businesses. The Company’s engineers and mold designers work with customers’ product development engineers to design and produce unique tooling for their products. The Company creates a sustainable partnership with the customers from prototyping to full scale production.

Table of Contents

The Company's product life cycle management program is focused on the integration of plastic and metal components into sub-assemblies. The value added service of in-house production capabilities combined with a network of subcontracted specialty coatings, metallurgical treatments, and unique production capabilities has enabled the Company to diversify its capabilities to include defense industry consumables and equipment sub-assemblies.

Sensors

Micron is a leading manufacturer and distributor of silver-plated and non-silver plated conductive resin sensors for use in the manufacture of disposable electrodes for electrocardiogram ("ECG") diagnostic, monitoring and related instrumentation. Micron's sensors consist of a molded plastic substrate plated with a silver/silver chloride surface, which is a highly sensitive conductor of electrical signals. Silver/silver chloride-plated disposable electrodes are utilized in coronary care units, telemetry units, and for other monitoring purposes. In addition to the traditional ECG tests, disposable electrodes incorporating Micron’s sensors are used in connection with cardiac stress tests, Holter monitoring, and event recorders.

Micron also manufactures sensors and conductive plastic studs used in the manufacture of radio translucent electrodes. The radio translucent conductive plastic studs are manufactured with uniquely engineered resin to enable electrical conductivity between the sensor and the recording instrument without the use of a metal snap. The radio translucent electrodes are virtually invisible to X-rays and are preferred in some medical environments such as nuclear medicine, cardiac catheterization laboratories, and certain stress procedures. Micron also manufactures the mating conductive resin snaps, which replace traditional metal snap fasteners in the radio translucent applications. These sensors and snaps have undergone testing and received a MR-Conditional designation in accordance with the American Society for Testing and Materials (ASTM) specifications F2052-06e1, F2182-09 and F2119-07 from a licensed, accredited, independent testing laboratory. Other custom designed sensors are manufactured for specific unique applications in the electroencephalogram (EEG), electro-muscular stimulation (EMG) or thermo-electrical neural stimulation (TENS) markets.

Customers and Net Sales

The Company offers its products and services to customers of all sizes, including large OEM’s and other contract manufacturing organizations. The Company manufactures products upon receipt of purchase orders. The Company generally does not receive purchase volume commitments extending beyond several months; however, the Company has a track record of establishing long term relationships with customers which results in repeat business year over year.

During the year ended December 31, 2018, the Company had net sales to three customers constituting 18%, 12% and 10% of total net sales. During the year ended December 31, 2017, the Company had net sales to two customers constituting 17% and 10%, respectively, of total net sales.

During the years ended December 31, 2018 and 2017 approximately 75% of the Company's net sales were to customers in the medical industry. The Company also had net sales to customers in the automotive, industrial, consumer products, and military and law enforcement industries.

The Company competes globally, with approximately 45% of its revenue derived from exports. While some risks exist in foreign markets, the Company's customers have historically been based in stable regions. To reduce the risks associated with foreign shipments and currency exchange fluctuations, the title to most of the products are transferred to the customers when shipped and payment is required in U.S. Dollars. The Company also has agreements with certain foreign customers to hold inventory at customer locations where title transfers and revenue is recognized when the product is consumed by the customer. To further reduce risk, the Company sells to certain markets only with cash-in-advance or letter-of-credit terms. In addition, accounts receivable insurance is used where available and appropriate to further reduce risk in these markets.

Marketing and Competition

The Company markets its capabilities and services to current and potential customers to provide full product life-cycle support to their product manufacturing needs. The Company's sales force leverages its long standing relationships and targets new and potential customers through direct marketing via Micron's website (www.micronproducts.com) and regularly attending industry trade shows. As part of a total marketing and sales strategy the Company continues to invest in website enhancements and a variety of internet marketing and lead generation programs. The Company provides value added U.S. based manufacturing capabilities with plating/coating, injection molding, machining, mold making, maintenance and repair. Customers seek the Company's ability to produce complex products on short time lines and to their specifications. Micron's ISO 13485:2003 registration, the international quality standards for medical devices and manufacturing, qualifies Micron to supply products requiring tight process controls and high standards. The Company's ITAR registration with the U.S. Department of State ("State Department") allows the Company to compete in military and law enforcement applications restricted by export controls and the U.S. Department of Defense ("DOD"). Micron also holds a class-10 federal firearms license and a federal explosives license for manufacture of products for the military and law enforcement.

Table of Contents

The Company's U.S. based manufacturing capabilities are offered in a global and highly competitive market. Free trade agreements increase global competition, making every company in the same manufacturing arena around the world a potential customer or competitor. To meet this challenge, the Company focuses its development efforts on complex engineered products. Some of these products require specialty material, such as engineered resins, exotic metals, and alloys. Micron has over forty-five years of experience in some product areas with long customer relationships and has developed competitive advantages through decades of process improvement and utilization of Lean/Six Sigma principles. The Company competes on the basis of quality and speed to market. The Company also believes its expertise in manufacturing and processes to comply with governmental regulations governing medical devices, military and law enforcement provide competitive advantages in the marketplace. To remain competitive and to expand market share, the Company invests in training and educating its workforce, expanding manufacturing capacity and automating processes to increase productivity.

Manufacturing and Suppliers

The Company has registered its facilities with the U.S. Food and Drug Administration ("FDA") as well as under the U.S. State Department's ITAR registration. Micron is ISO 13485:2003 registered. Micron's injection molding machine capacity ranges from 15 to 220 tons and includes an ISO class 7 clean room. Machining, mold making and tooling capabilities include up to 11 axis CNC machining and mill-turn centers, wire electrical discharge machining ("EDM"), milling, turning, grinding, polishing, cleaning, passivation, assembly and packaging. Surface coating capabilities include electroless and electrolytic silver plating. A skilled employee base provides expertise in engineering, complex manufacturing, materials, process control, quality and automation.

While some customers may require engineered raw materials, the Company also uses commodity raw materials as the basis for its value-added manufacturing operations. Many of these commodities are widely available from multiple sources. Some specialty plastics are single sourced and, in a few cases, proprietary to the products the Company manufactures. The Company monitors the supply chain for commodity materials to manage availability in case of breaks in the global supply chain. For many products, the Company is one step in a complex supply chain for OEM customers. This requires coordination with upstream and downstream vendors in the supply chain. Coordination of production scheduling is imperative to meeting customer expectations.

Inventory Requirements

The Company stocks inventory of raw materials, work in process, and finished goods. The Company manages inventory levels to balance customer delivery requirements, manufacturing production scheduling efficiencies and supply chain coordination from suppliers and to customers. In many cases, the Company produces to a purchase order in a single production run to optimize production efficiency and holds inventory for customers to support multiple delivery dates. The Company also has supply agreements with certain foreign customers to hold inventory at their

warehouses. Customers benefit from Micron's ability to hold inventory on their behalf for just-in-time deliveries while the Company benefits from being able to optimize efficiencies of production scheduling and raw material volume purchasing.

Patents and Proprietary Technology

The Company develops and utilizes proprietary manufacturing processes to establish and maintain a competitive advantage. By having internal engineering, mold making, automation and manufacturing expertise, the Company is able to develop specialized processes throughout the product development and product manufacturing cycle. In July 2018, the Company was awarded a U.S. Patent for an invention which improves the high-low pressure system in 40MM M212 casing used in military, law enforcement and other markets. Under a multi-year exclusive supply agreement with a Company’s customer, the patent rights and obligations are shared equally.

Government Regulation

The Company's operations are subject to government regulations which establish compliance standards. As a result, there may be additional costs incurred to comply with such regulations in order to participate in certain markets. The medical device industry in particular requires strict compliance with governmental standards. The Company believes its expertise in manufacturing and processes to comply with these regulations provides a competitive advantage in the marketplace. The FDA and the European Union equivalent ("CE Mark") promulgate quality systems requirements under which a medical device is to be developed, validated and manufactured. The DOD, Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE) and the State Department also impose regulations on the production and transfer of certain goods and technical data. Because customers own the product designs, they may be directly subject to such regulations. The development or manufacture of such products must be managed in accordance with applicable regulatory requirements and any special controls required by customers. The Company's manufacturing facilities are subject to periodic inspections by the FDA and other agencies to determine compliance with regulations and other requirements.

Table of Contents

Environmental Regulation

The Company's operations involve use of hazardous and toxic materials and generate hazardous, toxic and other regulated wastes. Its operations are subject to federal, state and local laws, regulations and directives governing the use, storage, handling and disposal of such materials and certain waste products. Micron has developed an internal system of compliance as well as retained independent environmental consulting firms to regularly review, monitor and upgrade its air and waste water treatment facilities. The Company has introduced several new initiatives including the use of solar energy and energy efficient machinery and lighting to benefit from renewable energy generation and reduce overall costs associated with production. The Company employs best practices to reduce waste from its manufacturing operations and reclaims, recovers, and reuses materials to reduce pollutants and to minimize the impact on the environment. The Company also works closely with state and local officials to ensure compliance with current and proposed regulations while supporting a regulatory environment that allows complex manufacturing to be competitive globally. The Company does not expect future costs in connection with environmental matters to have a material adverse effect on its financial condition, results of operations or liquidity aside from the cost of regulatory compliance and maintaining certifications and processes related to compliance with environmental regulations.

Employees

As of December 31, 2018, the Company had a total of 88 employees, of which 83 were full time employees.

Periodic Reporting and Financial Information

The Company registered its common stock under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and has reporting obligations, including the requirement that it file annual and quarterly reports with the SEC. You may obtain information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov. The Company also makes available through its website the annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports as soon as reasonably practical after filing with the SEC. Its website address is http://www.micronsolutionsinc.com. Information on the Company's website is not part of this Annual Report on Form 10-K.

Item 1A. RISK FACTORS

Smaller reporting companies are not required to provide the information required by this item.

Item 1B. UNRESOLVED STAFF COMMENTS

Smaller reporting companies are not required to provide the information required by this item.

Item 2. PROPERTIES

The manufacturing facilities and offices of the Company are located in two buildings in an industrial area in Fitchburg, Massachusetts. The first building consists of an approximately 22,000 square foot, six story building. The second building is over 94,000 square feet. The property on which the two buildings are situated is subject of a mortgage in favor of the Company's asset based lender entered into in December 2017. See Note 7 to the consolidated financial statements. The Company believes its current facilities are sufficient to meet current and future production needs. Additionally, the Company owns two unoccupied buildings in the complex with a total of approximately 52,000 square feet.

In January 2016, the Company entered into a Purchase and Sale Agreement with a Buyer for the sale of the two unoccupied buildings and land. The closing under the Purchase and Sale Agreement is subject to permitting and approvals from the City of Fitchburg and the Commonwealth of Massachusetts and is expected to take place by the end of June 2019. See Note 6 to the consolidated financial statements.

Item 3. LEGAL PROCEEDINGS

None.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Table of Contents

PART II

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

Market Information

The Company's common stock has been listed on the NYSE American since 1992 and currently trades under the ticker symbol MICR.

Holders

As of March 19, 2019 the number of holders of the Company's common stock is estimated to be in excess of 1,500, including beneficial and record holders of our common stock.

Item 6. SELECTED FINANCIAL DATA

Smaller reporting companies are not required to provide the information required by this item.

Table of Contents

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

The following discussion of the Company's results of operations and financial condition should be read in conjunction with the consolidated financial statements and notes pertaining to them that appear elsewhere in this Form 10-K. Any forward-looking statements made herein are based on current expectations of the Company that involve a number of risks and uncertainties and should not be considered as guarantees of future performance. These statements are made under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as "expect," "anticipate," "believe," "intend," "plans," "predict," or "wil Although the Company believes that expectations are based on reasonable assumptions, management can give no assurance that the expectations will materialize. Many factors could cause actual results to differ materially from the Company's forward-looking statements. These factors include the following, among other matters: the Company's ability to obtain and retain order volumes from customers who represent high proportions of revenue; the Company's ability to maintain the pricing model, offset higher costs with price increases and/or decrease the cost of sales; the variability of customer delivery requirements and the ability of the Company to anticipate and respond thereto; the level of sales of higher margin products and services and the Company's ability to increase such sales; volatility in commodity and energy prices; the Company's level of debt and provisions in the debt agreements which could limit the Company's ability to react to changes in the economy or its industry; the Company's ability to comply with the financial and other covenants contained in its credit agreement, including as a result of events beyond its control, which could result in an event of default; the Company's reliance on revenue from exports and the impact on the Company's financial results due to economic uncertainty, changes in trade policy and tariffs, tax laws and regulations, or downturns in foreign markets; and continued availability of supplies or materials used in manufacturing at competitive prices. The Company is under no obligation and does not intend to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events.

Results of Operations

The following table sets forth, for the periods indicated, the percentages of the net sales represented by certain items reflected in the Company's consolidated statements of operations.

	Year Ended December 31,	
	2018	2017
Net sales	100.0 %	100.0 %
Cost of sales	88.1	88.6
Gross profit	11.9	11.4

Selling and marketing	3.7	4.2
General and administrative	11.5	11.7
Research and development	0.5	0.6
Other expense	1.7	1.7
Loss before income tax provision (benefit)	(5.5)	(6.8)
Income tax provision (benefit)	—	—
Net loss	(5.5) %	(6.8) %

Net Sales

Net sales	2018	2017	$ Change	% Change
Year ended December 31,	$ 19,564,981	$ 20,102,662	$ (537,681)	(2.7)%

The decrease in consolidated net sales for 2018 versus 2017 was due primarily to decreased net sales of machined components, thermoplastic injection molding and tooling partly offset by an increase in net sales of sensors.

The decrease in net sales was due in part to a 15.8% decrease in sales of machined components for the year ended December 31, 2018 when compared to the same period in the prior year. The decrease in machined components was due primarily to decreased demand in the fourth quarter from the Company's largest machining customer. In 2019, the Company expects the demand from this customer to return to levels more consistent with volumes in the first half of 2018. Additionally, a second customer's demand decreased in the latter half of 2018 due to delays at the customer in obtaining its FDA 510(k) approval.

The decrease in net sales was also due in part to a 6.8% decrease in sales of thermoplastic injection molding. The decrease in net sales of thermoplastic injection molding was due largely to decreases in the military and law enforcement, consumer and medical device industries. Additionally, net sales of tooling decreased 28.5% due to fewer tooling projects in 2018 than in 2017.

Table of Contents

The decreases above were partly offset by an 8.2% increase in net sales from sensors for the year ended December 31, 2018 when compared to the same period in the prior year. The increase was due largely to an increase in production volume, to the highest level in the Company's history. Silver surcharge billed increased 2.0% based largely upon an increase in volume over the same period last year. The increase in volume was partly offset by declining silver prices compared to the same period last year and in part due to the timing of shipments versus the changes in the daily spot rate of the price of silver. Approximately 90% of net sales from sensors are in foreign markets. All net sales of sensors are in U.S. Dollars to protect the Company from foreign currency fluctuations.

Gross Profit

Gross profit	2018	2017	$ Change	% Change
Year ended December 31,	$ 2,323,692	$ 2,292,378	$ 31,314	1.4%
As a percentage of sales	11.9%	11.4%		

The increase in consolidated gross profit for the year ended December 31, 2018 versus 2017 was due to higher gross profit from sensors. The increase was partly offset by lower gross profit from machined components, thermoplastic injection molding and tooling. The gross profit fluctuation is primarily driven by sales volume, customer and product mix.

Selling and Marketing

The Company's consolidated selling and marketing expenses decreased to $730,863, or 3.7% of net sales, in 2018 from $841,845, or 4.2% of net sales, in 2017, a decrease of $110,982 or 13.2%. For the year ended December 31, 2018, the decrease was primarily due to decreased compensation in part as a result of the departure of a sales person in the third quarter of 2017. Additionally, marketing, advertising and professional fees decreased due in part to lower costs related to online lead generation programs. Depreciation expense, office and computer supplies, and travel expense also all decreased compared to the prior year. The decreases were partly offset by an increase in commissions due in part to the mix of commissionable parts.

General and Administrative Expenses

The Company's consolidated general and administrative expenses decreased to $2,243,595, or 11.5% of net sales, in 2018 compared to $2,357,909, or 11.7% of net sales, in 2017; a decrease of $114,314 or 4.8%. The decrease in general and administrative expense is due in part to lower compensation expense due in part to outsourcing the IT function and non-recurring charges related to outside consulting services in 2017. Partially offsetting the decreases was an increase in accounting and professional fees, largely related to the implementation of new revenue recognition guidance in the first quarter of 2018 as well as increased environmental health and safety expenses.

Research and Development

The Company's consolidated research and development expenses decreased to $106,814, or 0.5% of net sales in 2018 from $111,014, or 0.6% of net sales in 2017, a decrease of $4,200, or 3.8% due to lower compensation expense.

Other Income (Expense)

Other expense, net, was $338,559 in 2018 compared to $337,666 in 2017, an increase of $893. Interest expense was $391,437 in 2018 compared to $395,085 in 2017, a decrease of $3,648. Interest expense decreased in part due to the discharge of the higher interest rate subordinated promissory notes, partly offset by higher deferred financing costs related to entering into the new credit agreement in December 2017.

Income Tax Provision

The tax provisions for the years ended December 31, 2018 and 2017 are attributable to the U.S. federal and state income taxes. The Company’s combined federal and state effective income tax rate was 0% in 2018 and 2017 due to the impact of deferred tax assets reserved for with a valuation allowance.

Earnings Per Share

Consolidated basic and diluted loss per share for the year ended December 31, 2018 was $0.39 per share compared with a loss per share of $0.48 per share for the year ended December 31, 2017, a decrease in loss per share of $0.09 per share. The decreased loss per share for the year ended December 31, 2018, is due largely to a decrease of $229,496 in operating expenses, as well as an increase in gross profit of $31,314 despite lower net sales of $537,681 compared to the prior year period.

7

Table of Contents

Off-Balance Sheet Arrangements

Lease expense under all operating leases was approximately $24,033 and $24,954 for the years ended December 31, 2018 and 2017, respectively. Future minimum lease payments for the years ending December 31 are as follows:

2019	$ 20,222
2020	$ 18,222
2021	$ 10,630

Liquidity and Capital Resources

Working capital was $2,455,498 at December 31, 2018 compared to $2,548,692 at December 31, 2017 a decrease of $93,194. The decrease is primarily due to decreases in cash and cash equivalents, restricted cash, accounts receivable as well as prepaid expenses and other current assets. The decrease in working capital is also due in part to increases in the revolver, accrued expenses and other current liabilities, contract liabilities and current portion of term notes payable. The decrease in working capital was partially offset by the reclassification of assets held for sale from long-term to short-term, an increase in inventory, a decrease in accounts payable and due to the discharge of the subordinated promissory notes. See Note 7 to the consolidated financial statements.

Cash on hand was $1,715 and $956,988 at December 31, 2018 and 2017, respectively. Cash on hand at December 31, 2018 was lower due to the Company's credit agreement providing for deposits being swept daily against the revolver. Cash on hand at December 31, 2017 consisted of cash and cash equivalents of $606,988 and restricted cash of $350,000. The decrease in cash and cash equivalents is due in part to $250,000 in proceeds from the credit agreement for the purpose of providing adequate float for the transitioning of operating accounts from the previous lender. The $350,000 decrease in restricted cash is due to the discharge of the subordinated promissory notes using the proceeds from the credit agreement designated for that purpose.

Trade accounts receivable, net of allowance for doubtful accounts were $2,325,804 and $2,595,248 at December 31, 2018 and December 31, 2017, respectively, a decrease of $269,444. The decrease is primarily due to lower sales in the fourth quarter of 2018 when compared to the fourth quarter of 2017.

Inventories were $3,685,059 at December 31, 2018 as compared to $3,413,199 at December 31, 2017, an increase of $271,860 due largely to an increase in work-in-process inventory related to machining and tooling.

Accounts payable decreased $343,038 due to the timing of disbursements for the year ended December 31, 2018 as compared to December 31, 2017. Accrued expenses and other current liabilities increased $157,376 due partly to increased accrued interest, as well as benefits and repair and maintenance accruals. Additionally, contract liabilities increased $134,345 due in part to a tooling project with a military and law enforcement customer.

Capital equipment expenditures were $801,884 in 2018 as compared to $924,621 in 2017. Capital expenditures were primarily for replacement equipment as well as upgrades to robotics and new machining equipment.

On December 29, 2017, the Company entered into a three-year $9,500,000 credit agreement (the “Credit Agreement”) with a Massachusetts trust company, replacing the credit facility and forbearance agreement with the Company’s previous lender. The Credit Agreement includes a revolving line of credit of up to $5.0 million (“Revolver”), a machinery and equipment term loan of $2.5 million (“Equipment Loan”) and a real estate term loan of $2.0 million (“Real Estate Loan” and together with the “Equipment Loan” the “Term Loans”).

At December 31, 2018, the Company’s total debt, net of debt issuance costs, was $5,972,470 as compared to $6,575,241 at December 31, 2017, a decrease of $602,771 or 9.2%. The total outstanding debt at December 31, 2018 and 2017 was comprised of outstanding principal amounts of $3,946,878 and $4,346,194 of Term Loans, net of debt issuances costs, respectively, and $2,025,592 and $1,879,047 on the Revolver, respectively and $350,000 of subordinated promissory notes at December 31, 2017. The decrease is due to $419,047 of payments on the Term Loans as well as the discharge of the $350,000 of subordinated promissory notes in 2018, partly offset by a net increase in the revolver of $146,545. See Note 7 to the consolidated financial statements. The Credit Agreement was amended subsequent to year end to revise certain financial covenants.

No dividends were declared or paid in 2018 or 2017.

The Company believes that cash flows from its operations, together with its existing working capital, booked orders, the sale of the vacant buildings, expense management, and its Revolver, will be sufficient to fund operations at current levels and repay debt obligations over the next twelve months; however, there can be no assurance that the Company will be able to do so.

Table of Contents

Summary of Changes in Cash Position

At December 31, 2018, the Company had cash on hand of $1,715, a decrease of $955,273 from December 31, 2017. The Company's credit agreement provides for daily sweeps of cash on hand against the revolver. Net cash provided by operating activities in 2018 totaled $505,803. Net cash used in investing activities in 2018 was $796,185. Net cash used in financing activities in 2018 totaled $664,891. The net cash flows for the year ended December 31, 2018 are discussed in further detail below.

Operating Cash Flows

Net cash provided by operating activities in 2018 was $505,803 as a result of the net loss, changes in working capital components and non-cash add-backs, primarily depreciation and amortization.

Investing Cash Flows

Net cash used in investing activities in 2018 was $796,185, primarily for capital expenditures, largely for machinery and equipment for the contract manufacturing of machined components as well as the molding of sensors.

Financing Cash Flows

Net cash used in financing activities in 2018 was $664,891. Cash used in financing activities was largely due to payments on term notes and the discharge of subordinated debt, partly offset by net proceeds from the revolver.

Inflation

The Company believes that inflation in the United States or international markets has not had a significant effect on its results of operations. However, there has been considerable volatility in both energy and commodity prices, particularly the cost of silver.

Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 2 to the consolidated financial statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Some of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of the Company's financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on the Company's financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) the Company is required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates the Company could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on the Company's financial condition or results of operations. Estimates and assumptions about future events and their effects cannot be determined with certainty. The Company bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as the Company's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that the Company's consolidated financial statements are fairly stated in accordance with generally accepted accounting principles, and present a meaningful presentation of the Company's financial condition and results of operations.

Management believes that the following are critical accounting policies. See Note 2 to the consolidated financial statements for application and impact of these accounting policies to the Company.

- The initial adoption of Accounting Standards Codification (ASC) 606, Revenue from Contracts with Customers (ASC 606). Based on the Company's assessment, the implementation of Topic 606 affects the timing of certain revenue related transactions primarily resulting from the earlier recognition of the Company's tooling revenue and costs.
- Inventory valuation; and
- Deferred tax assets.

Table of Contents

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Smaller reporting companies are not required to provide the information required by this item.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item may be found on pages F-1 through F-24 of this Annual Report on Form 10-K.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this annual report the Company's management, with the participation of the Company's principal executive officer and principal financial officer (“the Certifying Officers”), conducted evaluations of the Company's disclosure controls and procedures as defined under Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Based upon the evaluations, the Certifying Officers have concluded that as of December 31, 2018, the Company's disclosure controls and procedures were effective.

Management’s Report on Internal Control Over Financial Reporting

The Company's Certifying Officers are 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) of the Exchange Act.

Internal control over financial reporting is a process designed by, or under the supervision of, the Certifying Officers and effected by the Company's Board of Directors, management and other personnel, 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 and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Company's assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition or disposition of the Company's assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. It is a process that involves human diligence and compliance and is subject to lapses in judgment or breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. While process safeguards can reduce risks, because of inherent limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis. 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.

The Company, under the supervision and with the participation of the Certifying Officers, has evaluated the effectiveness of the Company's internal control over financial reporting as of December 31, 2018 based upon the framework in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on such evaluations, the Certifying Officers have concluded that the Company's internal control over financial reporting was effective as of December 31, 2018.

Changes in Internal Control Over Financial Reporting

During the three months ended December 31, 2018, there have been no changes in the Company’s internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

Table of Contents

Item 9B. OTHER INFORMATION

None.

Table of Contents

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required under this item is incorporated by reference to the applicable information set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders.

Item 11. EXECUTIVE COMPENSATION

The information required under this item is incorporated by reference to the applicable information set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders.

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

The information required under this item is incorporated by reference to the applicable information set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required under this item is incorporated by reference to the applicable information set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required under this item is incorporated by reference to the applicable information set forth in the Proxy Statement for the 2018 Annual Meeting of Stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

We have filed the following documents as part of this report:

1. Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm
Consolidated Financial Statements:
Balance sheets
Statements of operations
Statements of changes in shareholders' equity
Statements of cash flows
Notes to consolidated financial statements

2. Financial Statement Schedules

Schedules have been omitted because they are not required, not applicable, or the required information is otherwise included.

3. Exhibits

The Company hereby furnishes the exhibits listed on the attached exhibit index. Exhibits, which are incorporated herein by reference that are filed electronically with the SEC and are available at http://www.sec.gov. The Company maintains a web site that contains reports, proxy and information statements and other information electronically at the address http://www.micronsolutionsinc.com. Information on our website is not a part of this Annual Report on Form 10-K.

Item 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Table of Contents

MICRON SOLUTIONS, INC.

By: /s/ William J. Laursen
William J. Laursen
President and Chief Executive Officer
March 19, 2019

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William J. Laursen and Derek T. Welch, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K for the year ended December 31, 2018, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Capacity	Date
/s/ William J. Laursen William J. Laursen	President and Chief Executive Officer and Director (principal executive officer)	March 19, 2019
/s/ Derek T. Welch Derek T. Welch	Chief Financial Officer (principal financial and accounting officer)	March 19, 2019
/s/ Jason R. Chambers Jason R. Chambers	Chairman of the Board	March 19, 2019
/s/ Marco F. Benedetti Marco F. Benedetti	Director	March 19, 2019

/s/ Rodd E. Friedman Rodd E. Friedman	Director	March 19, 2019
/s/ Robert A. Mello Robert A. Mello	Director	March 19, 2019
/s/ Andrei Soran Andrei Soran	Director	March 19, 2019

Table of Contents

EXHIBIT INDEX

Exhibit Number	Description of Exhibit	Page
3.0	Certificate of Incorporation (incorporated by reference to the Company's Registration Statement on Form S-18 as filed with the Commission in April 1988, Registration Statement No. 33-20945-FW).	
3.1	Amended and Restated By-laws (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K as filed with the Commission on July 1, 2011).	
3.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on August 13, 2015).	
3.3	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on March 14, 2017).	
4.0	Form of Certificate evidencing shares of the Company's Common Stock (incorporated by reference to the Company's Registration Statement on Form S-18 as filed with the Commission in April 1988, Registration Statement No. 33-20945-FW).	
4.10*	2010 Equity Incentive Plan (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 as filed with the Commission on May 6, 2010, Registration Statement No. 333-166600).	
4.11	Form of Subordinated Note (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013).	
4.12	Form of Subordination Agreement (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013)	
4.13	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K as filed with the Commission on December 23, 2013).	
4.14	Form of Amended and Restated Subordinated Promissory Note (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the Commission on October 17, 2016).	
4.15	Form of Amendment No. 1 to Warrant to Purchase Shares of Common Stock (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K as filed with the Commission on October 17, 2016).	
10.51	Loan and Security Agreement between UniBank for Savings and Micron Solutions, Inc. and Micron Products, Inc. dated March 29, 2013 (incorporated by reference to Exhibit 10.51 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on July 1, 2013).	
10.61	Fourth Amendment to Loan and Security Agreement and Commercial Equipment Line of Credit Promissory Note dated June 19, 2015 (incorporated by reference to Exhibit 10.61 to the Company's Quarterly Report on Form 10-Q as filed with the Commission on August 13, 2015).	
10.62	Fifth Amendment to Loan and Security Agreement dated as of November 15, 2016 (incorporated by reference to Exhibit 10.62 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).	
10.63		

	Commercial Term Promissory Note dated November 15, 2016 (incorporated by reference to Exhibit 10.63 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).
10.64	Commercial Equipment Line of Credit Promissory Note dated November 15, 2016 (incorporated by reference to Exhibit 10.64 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).
10.65*	Executive Incentive Plan (incorporated by reference to Exhibit 10.65 to the Company's Current Report on Form 8-K as filed with the Commission on December 6, 2016).

Table of Contents

10.66*	Employment Agreement between the Company and Salvatore Emma, Jr. dated as of January 1, 2017 (incorporated by reference to Exhibit 10.66 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).
10.67*	Employment Agreement between the Company and Derek T. Welch dated as of January 1, 2017 (incorporated by reference to Exhibit 10.67 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2016 as filed with the Commission on March 22, 2017).
10.68	Sixth Amendment to Loan and Security Agreement dated June 16, 2017 (incorporated by reference to Exhibit 10.68 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 as filed with the Commission on August 11, 2017).
10.69	Forbearance Agreement between UniBank for Savings, Micron Solutions, Inc. and Micron Products, Inc. dated September 29, 2017 (incorporated by reference to Exhibit 10.69 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 as filed with the Commission on November13, 2017).
10.70	Credit and Security Agreement between Micron Products, Inc. and Rockland Trust Company dated December 29, 2017 (incorporated by reference to Exhibit 10.70 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.71	General Security Agreement between the Company and Rockland Trust Company dated December 29, 2017 (incorporated by reference to Exhibit 10.71 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.72	Mortgage, Security Agreement and Financing Statement entered into by Micron Products, Inc. dated December 29, 2017 (incorporated by reference to Exhibit 10.72 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.73	M&E Term Loan Note entered into by Micron Products, Inc. dated December 29, 2017 (incorporated by reference to Exhibit 10.73 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.74	Real Estate Term Loan Note entered into by Micron Products, Inc. dated December 29, 2017 (incorporated by reference to Exhibit 10.74 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.75	Revolver Note entered into by Micron Products, Inc. dated December 29, 2017 (incorporated by reference to Exhibit 10.75 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.76	General Continuing Guarantee entered into by the Company dated as of December 29, 2017 (incorporated by reference to Exhibit 10.76 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Commission on March 26, 2018).
10.77*	Employment Agreement between the Company and Salvatore Emma, Jr. dated as of October 29, 2018 (incorporated by reference to Exhibit 10.77 to the Current Report on Form 8-K filed with the Commission on November 2, 2018).
10.78*	Employment Agreement between the Company and William J. Laursen dated as of October 29, 2018 (incorporated by reference to Exhibit 10.78 to the Current Report on Form 8-K filed with the Commission on November 2, 2018).
10.79	First Amendment to the Credit and Security Agreement between Micron Products, Inc. and Rockland Trust Company dated March 7, 2019 (incorporated by reference to Exhibit 10.79 to the Company's Current Report on Form 8-K filed with the Commission on March 12, 2019).

21	Subsidiaries (incorporated by reference to Exhibit 21.0 to the Company's Annual Report on Form 10-K for fiscal year ended December 31, 2010 as filed with the Commission on March 23, 2011).	
23.1**	Consent of Wolf & Company, P.C.	X-1
31.1**	Certification of the CEO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-2
31.2**	Certification of the CFO pursuant to Rule 13a-14(a) or Rule 15(d)-14(a)	X-3
32.1**	Certification of the CEO pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-4
32.2**	Certification of the CFO pursuant to 18 U.S.C. §1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X-5
101.INS†	XBRL Instance Document	
101.SCH†	XBRL Taxonomy Extension Schema Document	
101.CAL†	XBRL Taxonomy Extension Calculation Linkbase Document	
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document	
101.DEF†	XBRL Taxonomy Extension Definition Linkbase Document	

* Indicates a management contract or compensatory plan required to be filed as an exhibit.

Table of Contents

**Filed herewith

† XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

Table of Contents

Micron Solutions, Inc.

and Subsidiary

Contents

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Financial Statements:	
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations	F-4
Consolidated Statements of Changes in Shareholders' Equity	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-8

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Micron Solutions, Inc. and Subsidiary

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Micron Solutions, Inc. and Subsidiary (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, changes in shareholders' equity, and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also

included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ WOLF & COMPANY, P.C.

We have served as the Company's auditor since 2013.

Boston, Massachusetts

March 19, 2019

Table of Contents

Micron Solutions, Inc. and Subsidiary

Consolidated Balance Sheets

	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 1,715	$ 606,988
Restricted cash	—	350,000
Trade accounts receivable, net of allowance for doubtful accounts of $40,000 at December 31, 2018 and 2017	2,325,804	2,595,248
Inventories	3,685,059	3,413,199
Assets held for sale, net	688,750	—
Prepaid expenses and other current assets	389,390	460,954
Total current assets	7,090,718	7,426,389
Property, plant and equipment, net	5,131,773	5,744,039
Assets held for sale, net	—	688,750
Intangible assets, net	53,155	55,133
Other assets	5,140	10,289
Total assets	$ 12,280,786	$ 13,924,600
Liabilities and Shareholders' Equity		
Current liabilities:		
Revolving line of credit	$ 2,025,592	$ 1,879,047
Term notes payable, current portion	389,420	367,779
Subordinated promissory notes, current portion	—	350,000
Accounts payable	1,200,298	1,534,349
Accrued expenses and other current liabilities	459,108	320,065
Contract liabilities, current portion	560,802	426,457
Total current liabilities	4,635,220	4,877,697
Long-term liabilities:		
Term notes payable, non-current portion	3,557,458	3,978,415
Total long-term liabilities	3,557,458	3,978,415
Total liabilities	8,192,678	8,856,112
Commitments and Contingencies		
Shareholders' equity:		
Preferred stock, $0.001 par value; 2,000,000 shares authorized, none issued	—	—
Common stock, $0.01 par value; 10,000,000 shares authorized; 3,926,491 issued, 2,861,008 outstanding at December 31, 2018 and 3,926,491 issued, 2,839,274 outstanding at December 31, 2017	39,265	39,265
Additional paid-in-capital	11,604,817	11,532,207

Treasury stock at cost, 1,065,483 shares at December 31, 2018 and 1,087,217 shares at December 31, 2017	(2,907,490)	(2,966,798)
Accumulated deficit	(4,648,484)	(3,536,186)
Total shareholders' equity	4,088,108	5,068,488
Total liabilities and shareholders' equity	$ 12,280,786	$ 13,924,600

See accompanying notes to consolidated financial statements.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Consolidated Statements of Operations

	Year Ended December 31, 2018	2017
Net sales	$ 19,564,981	$ 20,102,662
Cost of sales	17,241,289	17,810,284
Gross profit	2,323,692	2,292,378
Selling and marketing	730,863	841,845
General and administrative	2,243,595	2,357,909
Research and development	106,814	111,014
Total operating expenses	3,081,272	3,310,768
Net loss from operations	(757,580)	(1,018,390)
Other income (expense):		
Interest expense	(391,437)	(395,085)
Other income, net	52,878	57,419
Total other expense, net	(338,559)	(337,666)
Net loss before income tax provision (benefit)	(1,096,139)	(1,356,056)
Income tax provision (benefit)	2,168	(960)
Net loss	$ (1,098,307)	$ (1,355,096)
Earnings (loss) per share - basic and diluted	$ (0.39)	$ (0.48)
Weighted average common shares outstanding - basic and diluted	2,850,397	2,824,061

See accompanying notes to consolidated financial statements.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Consolidated Statements of Changes in Shareholders' Equity

	Common stock		Additional paid-in	Treasury stock		Accumulated	
	Shares	Amount	capital	Shares	Amount	deficit	Total
December 31, 2016	3,926,491	$ 39,265	$ 11,457,320	1,109,852	$ (3,028,564)	$ (2,181,090)	$ 6,286,931
Share-based compensation - options			48,129				48,129
Issuance of common stock from treasury			26,758	(22,635)	61,766		88,524
Net loss						(1,355,096)	(1,355,096)
December 31, 2017	3,926,491	$ 39,265	$ 11,532,207	1,087,217	$ (2,966,798)	$ (3,536,186)	$ 5,068,488
Change in accounting principle (see Note 3)						(13,991)	(13,991)
Share-based compensation - options			56,168				56,168
Issuance of common stock from treasury			16,442	(21,734)	59,308		75,750
Net loss						(1,098,307)	(1,098,307)
December 31, 2018	3,926,491	$ 39,265	$ 11,604,817	1,065,483	$ (2,907,490)	$ (4,648,484)	$ 4,088,108

See accompanying notes to consolidated financial statements.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Consolidated Statements of Cash Flows

	Year Ended December 31, 2018	2017
Cash flows from operating activities:		
Net loss	$ (1,098,307)	$ (1,355,096)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Gain on sale of property, plant and equipment	(8,360)	(21,750)
Depreciation and amortization	1,504,037	1,611,139
Impairment of intangibles	—	1,771
Non-cash interest expense	62,120	63,846
Change in allowance for doubtful accounts	—	10,000
Share-based compensation expense	131,918	136,653
Changes in operating assets and liabilities:		
Accounts receivable	269,444	(328,640)
Inventories	(348,121)	(353,114)
Prepaid expenses and other current assets	43,394	153,408
Other non-current assets	995	145,942
Accounts payable	(343,038)	(209,912)
Accrued expenses and other current liabilities	157,376	(13,296)
Contract liabilities	134,345	79,179
Other non-current liabilities	—	(156,953)
Net cash provided by (used in) operating activities	505,803	(236,823)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(801,884)	(924,621)
Proceeds from sale of property, plant and equipment	8,360	34,600
Cash paid for patents and trademarks	(2,661)	(29,307)
Net cash provided by (used in) investing activities	(796,185)	(919,328)
Cash flows from financing activities:		
Proceeds from (payments on) revolving line of credit, net	146,545	93,252
Proceeds from term notes	—	4,500,000
Payments on term notes payable	(419,047)	(2,606,688)
Payments of debt issuance costs	(42,389)	(153,806)
Payments on subordinated debt	(350,000)	(100,000)
Net cash provided by (used in) financing activities	(664,891)	1,732,758
Net change in cash and cash equivalents and restricted cash	(955,273)	576,607
Cash and cash equivalents and restricted cash, beginning of period	956,988	380,381

Cash and cash equivalents and restricted cash, end of period	$ 1,715	$ 956,988

See accompanying notes to consolidated financial statements.

Table of Contents

Micron Solutions, Inc. and Subsidiaries

Consolidated Statements of Cash Flows Supplemental Information

	Year Ended December 31,	
Supplemental Cash Flow Information	2018	2017
Cash paid for interest	$ 313,425	$ 324,641
Non-cash activities:		
Issuance of treasury stock for directors fees	$ 75,750	$ 88,524
Adjustment to accumulated deficit for change in accounting principle (Note 3)	$ (13,991)	$ —

See accompanying notes to consolidated financial statements.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

1. Description of Business

Micron Solutions®, Inc., a Delaware corporation ("Micron Solutions"), through its wholly-owned Massachusetts operating subsidiary, Micron Products®, Inc. (“Micron” and together with Micron Solutions, the "Company"), is a diversified contract manufacturing organization (“CMO”) that produces highly-engineered, innovative components requiring precision machining and thermoplastic injection molding. The Company also manufactures components, devices and equipment for military, law enforcement, automotive and consumer products applications. The Company's capabilities include the production and sale of silver/silver chloride coated and conductive resin sensors used as consumable component parts in the manufacture of integrated disposable electrophysiological sensors. The Company’s machining operations produce quick-turn, high volume and patient-specific orthopedic implant components and instruments. The Company also has custom thermoplastic injection molding capabilities as well as a full array of design, engineering, production services and management. The Company competes globally, with approximately 45% of its revenue derived from exports.

Today, the Company has diversified manufacturing capabilities with the capacity to participate in full product life-cycle activities from early stage development and engineering and prototyping to full scale manufacturing as well as packaging and product fulfillment services.

Liquidity and Management’s Plan

At December 31, 2018, the Company identified certain conditions and events which in the aggregate required management to perform an assessment of the Company’s ability to continue as a going concern. These conditions included the Company’s negative financial history and the Company’s ability to generate sufficient cash to support the Company’s operations and to meet debt service requirements under the Company’s credit agreement. As of December 31, 2018, the Company has $1,715 of cash and approximately $285,000 of borrowing capacity on its revolving line of credit. As a result of the above factors, management has performed an analysis to evaluate the entity’s ability to continue as a going concern for one year after the financial statements issuance date.

Management’s analysis includes forecasting future revenues, expenditures and cash flows, taking into consideration past performance and the requirements under the credit agreement. Revenue and cash flow forecasts are dependent on the Company’s ability to fill booked orders from existing customers, its ability close new and expanded business and to

improve overall financial performance.

Management also believes that it is probable that the Company will close on the sale of the vacant buildings, shown as assets held for sale on the consolidated balance sheets, on or about June 30, 2019 and the proceeds of approximately $700,000 will be applied against the Company's revolver. Additionally, subsequent to year end, on March 7, 2019, the Company entered into the First Amendment to the Credit and Security Agreement in which the quarterly debt service coverage ratio measurement requirements for 2019 were amended to lessen the burden of compliance. See Note 7.

Based on management's analysis, the Company believes that cash flows from its operations, together with its existing working capital, booked orders, the sale of the vacant buildings, expense management, and its Revolver, will be sufficient to fund operations at current levels and repay debt obligations over the next twelve months from the financial statements issuance date; however, there can be no assurance that the Company will be able to do so.

2. Accounting Policies

Principles of consolidation

The consolidated financial statements (the "financial statements") include the accounts of Micron Solutions, Inc. and its operating subsidiary, Micron Products, Inc. All intercompany balances and transactions have been eliminated in consolidation.

Use of estimates

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

Revenue recognition

The Company adopted Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers, Topic 606" ("Topic 606") effective January 1, 2018 using the modified retrospective

F-8

Table of Contents

approach. Under the modified retrospective method, a cumulative effect of initially applying the new standard is recorded as an adjustment to the opening balance of retained earnings at the date of initial application. By electing to use this method, there is no restatement of the comparative periods presented. As permitted by Topic 606 transition guidance, the Company applied the new standard only to contracts that were not completed contracts at the date of initial application, and therefore, the Company only evaluated those contracts that were in-process and not completed before January 1, 2018.

Beginning January 1, 2018, the Company applied Topic 606 using the five step approach outlined in the guidance: (1) Identify contracts with the customer, (2) Identify the performance obligations in the contract, (3) Determine the transaction price, (4) Allocate the transaction price to the performance obligations in the contract, and (5) Recognize revenue when (or as) the entity satisfies the performance obligations.

The Company determined that customer purchase orders represent contracts with a customer. For each contract, the Company considers the promise to transfer products, each of which are distinct, to be the identified performance obligations. Shipping and handling activities for which the Company is responsible are not a separate promised service but instead are activities to fulfill the entity's promise to transfer goods and are recognized at the same time as the related performance obligation is satisfied.

The Company determines the transaction price as the amount of consideration it expects to receive in exchange for transferring promised goods or services to the customer. If a contract includes a variable amount, such as a rebate, then the Company estimates the transaction price using either the expected value or the most likely amount of consideration to be received, depending upon the specific facts and circumstances. The Company includes estimated variable consideration in the transaction price only to the extent it is probable that a significant reversal of revenue will not occur when the uncertainty is resolved. The Company updates its estimate of variable consideration at the end of each reporting period to reflect changes in facts and circumstances.

The Company recognizes revenue at the point in time when it transfers control of the promised goods or services to the customer, which typically occurs once the product has shipped or has been delivered to the customer. For certain customer warehousing agreements, delivery is deemed to have occurred when the customer pulls inventory out of the warehouse for use in their production. Additionally, for certain customers, delivery is deemed to have occurred when items are delivered to bill and hold locations at the Company's facility.

The Company evaluated the nature of any guarantees or warranties related to its contracts with customers. The Company determined that any such warranty is an assurance-type warranty that only covers the products' compliance with agreed-upon specifications and does not provide the customer with a service in addition to the assurance that the product complies with agreed-upon specifications.

Certain contracts contain prepayment terms that result in liabilities for customer deposits. Additionally, certain contracts provide for invoicing before all performance obligations have been fulfilled which results in deferred revenue. Customer deposits and advance invoicing are recorded as contract liabilities on the consolidated balance sheet.

The Company generally expenses sales commission when incurred because the amortization period would have been one year or less. These costs are recorded within selling and marketing expenses.

The Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.

Fair value of financial instruments

The carrying amount reported in the balance sheets for cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair value due to the immediate or short-term nature of such instruments. The carrying value of debt approximates fair value since it provides for market terms and interest rates.

Concentration of credit risk

Financial instruments which potentially expose the Company to concentrations of credit risk consist primarily of accounts receivable and cash and cash equivalents. It is the Company's policy to place its cash in high quality financial institutions. The Company does not believe significant credit risk exists above federally insured limits with respect to these institutions.

Accounts receivable are customer obligations due under normal trade terms. A large portion of the Company's products are sold to large diversified medical, military and law enforcement product manufacturers. The Company does not generally require collateral for its sales; however, the Company believes that its terms of sale provide adequate protection against credit risk.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

During the year ended December 31, 2018, the Company had net sales to three customers constituting 18%, 12% and 10% of total net sales. Accounts receivable from these three customers at December 31, 2018 was 19%, 7% and 7%, respectively, of the total accounts receivable balance at year end. During the year ended December 31, 2017, the Company had net sales to two customers constituting 17% and 10%, respectively, of total net sales. Accounts receivable from these two customers at December 31, 2017 was 13% and 3%, respectively, of the total accounts receivable balance at year end.

During the years ended December 31, 2018 and 2017 approximately 75% of the Company's net sales were to customers in the medical industry. The Company also had net sales to customers in the automotive, industrial, consumer products, and military and law enforcement industries.

The Company competes globally, with approximately 45% of its revenue derived from exports. While some risks exist in foreign markets, the Company's customers have historically been based in stable regions. To reduce the risks associated with foreign shipments and currency exchange fluctuations, the title to most of the products are transferred to the customers when shipped and payment is required in U.S. Dollars. The Company also has agreements with certain foreign customers to hold inventory at customer locations where title transfers and revenue is recognized when the product is consumed by the customer. To further reduce risk, the Company sells to certain markets only with cash-in-advance or letter-of-credit terms. In addition, accounts receivable insurance is used where available and appropriate to further reduce risk in these markets.

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and on deposit in high quality financial institutions with maturities of three months or less at the time of purchase. The Company's credit agreement provides for a daily sweep of cash balances against the balance of the Revolver (see Note 7).

Restricted cash

Restricted cash represents cash obtained pursuant to the Company's credit agreement for the designated purpose of discharging the subordinated promissory notes, which occurred on January 2, 2018 (see Note 7).

Accounts receivable and allowance for doubtful accounts

Accounts receivable represent amounts invoiced by the Company. Management maintains an allowance for doubtful accounts based on information obtained regarding individual accounts and historical experience. Amounts deemed uncollectible are written off against the allowance for doubtful accounts.

The Company insures receivables for certain customers based upon several factors. Such factors include the customer’s payment terms, ordering patterns and volume requirements, the customer’s payment history, or general economic conditions of the region in which a customer is located.

Inventories

The Company values its inventory at the lower of average cost, or net realizable value, and cost is determined using first in first out (FIFO) or average cost. The Company reviews its inventory for quantities in excess of production requirements, obsolescence and for compliance with internal quality specifications. A review of inventory on hand is made at least annually and obsolete inventory may be disposed of and/or recycled. Any adjustments to inventory would be equal to the difference between the cost of inventory and the estimated net market value based upon assumptions about future demand, market conditions and expected cost to distribute those products to market. The Company also has supply agreements with certain foreign customers to hold inventory at the customer’s warehouses.

Property, plant and equipment

Property, plant and equipment are recorded at cost and include expenditures which substantially extend their useful lives. Depreciation on property, plant and equipment is calculated using the straight-line method over the estimated useful lives of the assets. Expenditures for maintenance and repairs are charged to earnings as incurred. When equipment is retired or sold, the resulting gain or loss is reflected in earnings.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

Assets held for sale

Property classified as held for sale is measured at the lower of its carrying value or fair value less cost to sell. Gains or losses are recognized for any subsequent changes to fair value less cost to sell; however, gains that may be recognized are limited by cumulative losses previously recognized. Property held for sale is not depreciated.

Fair value hierarchy

The Company groups its assets and liabilities measured at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value.

Level 1 – Valuation is based on quoted prices in active markets for identical assets or liabilities. Valuations are obtained from readily available pricing sources.

Level 2 – Valuation is based on observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Valuation is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using unobservable inputs to pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Company’s assessment of the significance of a particular input to the fair value measurement in its

entirety requires judgment and considers factors specific to the investment.

At December 31, 2018 and 2017, assets held for sale is the only item in the financial statements reflected at fair value. Assets held for sale are considered level 3. The fair value of assets held for sale was determined using the sales price per the amended purchase and sale agreement, less the estimated cost to sell (see Note 6).

Long-lived and intangible assets

The Company assesses the impairment of long-lived assets and intangible assets with finite lives annually or whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. Based upon the annual review, the Company did not record any impairment charges in 2018. The Company recorded impairment charges of $1,771 in 2017.

Intangible assets consist of the following:

	Estimated Useful Life (in years)	December 31, 2018			December 31, 2017		
		Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Patents and trademarks	10	$ 36,880	$ 12,134	$ 24,746	$ 22,911	$ 9,888	$ 13,023
Patents and trademarks pending	—	2,143	—	2,143	13,786	—	13,786
Trade names	15	29,398	3,132	26,266	29,062	738	28,324
Total intangible assets		$ 68,421	$ 15,266	$ 53,155	$ 65,759	$ 10,626	$ 55,133

Amortization expense related to intangible assets, excluding the 2017 impairment charge noted above, was $4,639 and $2,496 in 2018 and 2017, respectively. Estimated future annual amortization expense for currently amortizing intangible assets is expected to approximate $4,000 through 2031.

Income taxes

The Company recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax liabilities and assets are

determined based on the

F-11

Table of Contents

difference between the financial statement and tax bases of assets and liabilities using tax rates in effect for the year in which the differences are expected to reverse.

The Company follows the provisions of FASB ASC 740, “Accounting for Income Taxes”, which provides detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in the financial statements. Tax positions must meet a “more-likely-than-not” recognition threshold at the effective date to be recognized. No interest and penalties related to uncertain tax positions were incurred during 2018 and 2017. The Company’s primary operations are located in the United States. Tax years ended December 31, 2015 or later remain subject to examination by the IRS and state taxing authorities.

Share-based compensation

Share-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee’s requisite service period (generally the vesting period of the share-based grant).

Earnings per share data

Basic earnings (loss) per share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding. The computation of diluted earnings (loss) per share is similar to the computation of basic earnings (loss) per share except that the denominator is increased to include the average number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. In addition, the numerator is adjusted for any changes in net income (loss) that would result from the assumed conversions of those potential shares.

Research and development

Research and development expenses include costs directly attributable to conducting research and development programs primarily related to the development of a unique process to improve silver coating during the manufacturing processes, including the design and testing of specific process improvements for certain medical device components. Such costs include salaries, payroll taxes, employee benefit costs, materials, supplies, depreciation on research equipment, and services provided by outside contractors. All costs associated with research and development programs are expensed as incurred.

Recently issued accounting pronouncements

In the normal course of business, management evaluates all new accounting pronouncements issued by the FASB to determine the potential impact they may have on the Company's Consolidated Financial Statements. Based upon this review, management does not expect any of the recently issued accounting pronouncements, which have not already been adopted, to have a material impact on the Company's consolidated financial statements.

In February 2016 the FASB issued ASU No. 2016-02, Leases, which requires a lessee to recognize lease liabilities for the lessee's obligation to make lease payments arising from a lease, measured on a discounted basis, and right-of-use assets, representing the lessee's right to use, or control the use of, specified assets for the lease term. The ASU became effective on January 1, 2019. As of the date of this report, the Company is the lessee of office equipment in a single operating lease and is the lessee of a parking lot. The Company is not a lessor in any arrangements. The Company does not expect any material impact on reporting or on the results of operations.

Reclassification of prior period balances

Amounts in prior year financial statements are reclassified when necessary to conform to the current year presentation.

3. Change in Accounting Principle

Revenue Recognition

Based on the Company's assessment, the implementation of Topic 606 affects the timing of certain revenue related transactions primarily resulting from the earlier recognition of the Company's tooling revenue and costs. Under legacy GAAP, the Company accounted for tooling as multiple element arrangements whereby revenue and cost were recognized over a period of time after the tool was completed. Upon adoption of ASU 2014-09, tooling sales and costs are now recognized at the point in time upon which the tool is complete and the Company has satisfied all its performance obligations under the contract.

F-12

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

As a result of the initial application of Topic 606, the Company made an adjustment to its beginning accumulated deficit of ($13,991) to recognize the remaining deferred revenue ($18,333) and deferred costs ($32,324) recorded as of December 31, 2017 relative to certain completed tooling sales.

The table below compares the affected lines on the consolidated statements of operations as presented to legacy GAAP treatment.

	Year Ended December 31, 2018	
	2018 As presented	2018 Legacy GAAP
Net sales	$ 19,564,981	$ 19,208,155
Cost of sales	17,241,289	16,979,892
Gross profit	2,323,692	2,228,263
Net loss from operations	(757,580)	(853,009)
Net loss before income tax provision (benefit)	(1,096,139)	(1,191,568)
Net loss	$ (1,098,307)	$ (1,193,736)
Earnings (loss) per share - basic and diluted	$ (0.39)	$ (0.42)
Weighted average common shares outstanding - basic and diluted	2,850,397	2,850,397

The table below compares the affected lines on the consolidated balance sheets as presented to legacy GAAP treatment.

	December 31, 2018 As presented	December 31, 2018 Legacy GAAP
Assets		
Current assets:		
Prepaid expenses and other current assets	$ 389,390	$ 488,817
Total current assets	7,090,718	7,190,145
Other assets	5,140	167,110
Total assets	$ 12,280,786	$ 12,542,183
Liabilities and Shareholders' Equity		
Current liabilities:		
Contract liabilities, current portion	$ 560,802	$ 697,733
Total current liabilities	4,635,220	4,772,151
Long-term liabilities:		
Contract liabilities, non-current portion	—	219,895
Total long-term liabilities	3,557,458	3,777,353
Total liabilities	8,192,678	8,549,504
Shareholders' equity:		
Accumulated deficit	(4,648,484)	(4,743,913)
Total shareholders' equity	4,088,108	3,992,679
Total liabilities and shareholders' equity	$ 12,280,786	$ 12,542,183

Contract liabilities would be presented as customer deposits and deferred revenue under legacy GAAP.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

4. Inventories

Inventories consist of the following:

	December 31, 2018	December 31, 2017
Raw materials	$ 1,079,887	$ 1,100,187
Work-in-process	1,105,272	822,244
Finished goods	1,499,900	1,490,768
Total	$ 3,685,059	$ 3,413,199

The total cost of silver in our inventory as raw materials, as work-in-process or as a plated surface on finished goods had an estimated cost of $461,272 and $536,963 at December 31, 2018 and 2017, respectively.

5. Property, Plant and Equipment, Net

Property, plant and equipment, net consist of the following:

	Asset Lives	December 31,	December 31,

	(in years)	2018	2017
Machinery and equipment	3 to 15	$ 17,978,781	$ 17,498,586
Building and improvements	5 to 25	3,991,951	3,986,715
Vehicles	3 to 5	98,119	90,713
Furniture, fixtures, computers and software	3 to 5	1,440,071	1,542,027
Construction in progress		168,094	17,412
Total property, plant and equipment		23,677,016	23,135,453
Less: accumulated depreciation		(18,545,243)	(17,391,414)
Property, plant and equipment, net		$ 5,131,773	$ 5,744,039

For the year ended December 31, 2018, the Company recorded $1,499,398 of depreciation expense compared to $1,608,643 for the year ended December 31, 2017. There are no commitments related to the completion of construction in process as of December 31, 2018.

6. Assets Held for Sale

In January 2016, the Company entered into a Purchase and Sale Agreement with a Buyer (collectively the “Parties”) to sell two unoccupied buildings, with a total of approximately 52,000 square feet, and land, at its Fitchburg, Massachusetts campus. As a result, the Company has since classified the property as Assets Held for Sale. The carrying value of $665,000 approximates the fair value less the expected cost to sell.

The Parties have since entered into multiple amendments which provided for, among other things, an extension of the expiration date of the agreement to June 2019 in exchange for monthly extension fees. The closing is expected to take place by the end of June 2019.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

7. Debt

The following table sets forth the items which comprise debt for the Company:

	December 31, 2018	December 31, 2017
Revolving line of credit	$ 2,025,592	$ 1,879,047
Subordinated promissory notes	$ —	$ 350,000
Total term notes payable, net of issuance costs	$ 3,946,878	$ 4,346,194
Less current portion, net	389,420	367,779
Term notes payable, non-current, net	3,557,458	3,978,415
Total short and long term debt, net	$ 5,972,470	$ 6,575,241

Bank Debt

On December 29, 2017, the Company entered into a three-year $9,500,000 Credit and Security Agreement (the “credit agreement”) with a Massachusetts trust company, replacing the credit facility and forbearance agreement with the Company’s previous lender. The credit agreement also provided funds with which to discharge the subordinated promissory notes.

The credit agreement includes a revolving line of credit of up to $5.0 million (“Revolver”), a machinery and equipment term loan of $2.5 million (“Equipment Loan”) and a real estate term loan of $2.0 million (“Real Estate Loan” and together with the “Equipment Loan” the “Term Loans”).

Revolver

The Revolver allows for interest only payments during the term of the facility with the full principal outstanding balance to be paid upon maturity on December 29, 2020. Interest on all borrowings from the Revolver shall be equal to the Wall Street Journal prime rate ("Prime Rate") plus 0.5%. In lieu of having interest charged at the Prime Rate, the Company shall have the option, on the last day of each month, (the "LIBOR Option") to have interest charged at a rate of interest equal to the daily one-month LIBOR plus 3.25% for the following month. The interest rate will automatically convert back to the Prime Rate at the beginning of the next month unless the Company elects the LIBOR Option for the next month. The interest rate at December 31, 2018 was 5.59%.

This Revolver carries a provision for a quarterly unused facility fee equal to 0.25% per annum of the average daily undisbursed face amount of the Revolver during the three months immediately preceding the applicable due date and has no prepayment penalty. The credit agreement provides for a daily sweep of cash balances against the balance of the Revolver. Availability to borrow under the Revolver is based on conditions defined in the credit agreement and amounts to $284,968 at December 31, 2018.

Term Loans

The Equipment Loan requires monthly principal payments of approximately $29,762, payable on the first day of each month commencing February 1, 2018. The Equipment Loan is based upon an 84 month amortization with a balloon payment of approximately $1,458,333 due and payable in full upon maturity on December 29, 2020.

The Real Estate Loan requires monthly principal payments of approximately $8,333, payable on the first day of each month commencing February 1, 2018. The Real Estate Loan is based upon a 240 month amortization with a balloon payment of approximately $1,708,333 due and payable in full upon maturity on December 29, 2020.

Interest on the Term Loans shall be at such Wall Street Journal prime rate plus 0.75%. In lieu of having interest charged at the Prime Rate, the Company shall have a LIBOR Option, as described above, to have interest charged at a rate of interest equal to the daily one-month LIBOR plus 3.5% for the following month. The interest rate at December 31, 2018 was 5.84%.

All interest will be calculated based upon a year of 360 days for actual days elapsed. All interest will accrue from the Closing Date and will be payable monthly in arrears. Upon the occurrence and during the continuation of an Event of Default, all interest will be increased by 2% above the per annum rate otherwise applicable thereto. The Term Loans carry a prepayment penalty with respect

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

to the prepayment of any portion of either Term Loan equal to 3%, 2%, and 1% of the amount prepaid in the first, second, and third years, respectively, of the credit agreement.

This credit agreement contains covenants related to various matters including certain financial covenants, prohibitions on further borrowings and security interests, merger or consolidation, acquisitions, guarantees, sales of assets other than in the normal course of business, leasing, and payment of dividends. The lender has a security interest in all assets and a mortgage encumbering certain real property.

Subsequent to year end, on March 7, 2019, the Company entered into the First Amendment to the Credit and Security Agreement in which the quarterly debt service coverage ratio measurement requirements for 2019 were amended.

Other debt

Subordinated promissory notes

In December 2013, the Company completed a private offering in which the Company sold an aggregate of $500,000 in subordinated promissory notes and issued warrants to purchase 100,000 shares of common stock. $50,000 of the notes were repaid in 2016. In 2017, the Company paid one of the subordinated notes in the principal amount of $100,000. The remaining five notes, totaling an aggregate principal amount of $350,000, including $100,000 each with the two largest beneficial shareholders of the Company, were repaid in 2018. The Company carried $350,000 as restricted cash at December 31, 2017 for this purpose. A discount on the notes related to the attached warrants was being recognized as non-cash interest expense over the term of the notes. The Company recorded $0 and $17,989 of non-cash interest expense for the years ended December 31, 2018 and 2017.

No warrants were exercised in 2018 or 2017 and unexercised warrants expired on December 31, 2018.

Future maturities of term debt

Future maturities of term debt for the years ending December 31 are as follows:

	2019	2020	2021	2022	2023	Thereafter	Total
Term notes	457,143	3,623,809	—	—	—	—	4,080,952

8. Income Taxes

The income tax provision consists of the following:

	Year Ended December 31,	
	2018	2017
Current:		
Federal	$ —	$ —
State	2,168	2,140
Total current income taxes	2,168	2,140
Deferred:		
Federal	—	(3,100)
State	—	—
Total deferred income taxes	—	(3,100)
Total income tax provision (benefit)	$ 2,168	$ (960)

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

The components of deferred income taxes are as follows:

	Year Ended December 31, 2018	2017
Deferred tax assets:		
Net operating loss carryforwards	$ 3,144,600	$ 2,936,800
Federal and state tax credit carryforwards	525,000	517,700
Accruals and reserves	104,400	81,500
Stock based compensation	68,300	64,300
Patents and intangibles	12,000	22,000
Other long-term	45,300	21,400
Total long-term deferred tax assets	3,899,600	3,643,700
Deferred tax valuation allowance	(3,374,800)	(3,172,100)
Deferred tax assets, net of allowance	524,800	471,600
Property, plant and equipment	(43,500)	(45,300)
Prepaid expenses	(478,200)	(423,200)
Total deferred tax liabilities	(521,700)	(468,500)
Net deferred tax assets	$ 3,100	$ 3,100

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax-planning strategies in making this assessment. As of December 31, 2018, the Company continues to maintain a valuation allowance against all of its domestic and foreign deferred tax assets, except for its AMT Credit carryforward, which is treated as a refundable attribute under the new tax law.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”). The Tax Act makes broad and complex changes to the U.S. tax code that affect fiscal 2017 including, but not limited to, a reduction of the U.S. federal corporate tax rate from 35% to 21% starting January 1, 2018, changes to bonus depreciation starting late September 2017, and the elimination of the Alternative Minimum Tax starting in 2018. The primary provision of the Tax Act which impacted the Company’s 2017 income tax provision relate to the revaluation of the Company's deferred tax assets and liabilities.

In December 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 income tax effects of the Tax Act. The final amounts may differ from these provisional amounts, possibly materially, due to, among other things, additional analysis, changes in interpretations and assumptions the Company has made, additional regulatory guidance that may be issued, and actions the Company may take as a result of the Tax Act. The Company has completed is assessment of the impact of the Tax Act in 2018, and no change was recorded from the originally presented balances.

For the year ended December 31, 2018, the Company has federal and state net operating loss carryforwards totaling $11,300,000 and $12,195,000, respectively, which begin to expire in 2031. The Company also had federal and state tax credit carryovers of $306,000 and $277,000, respectively. The federal and state credits begin to expire in 2027 and 2018, respectively.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

The Company files a consolidated federal income tax return. The actual income tax provision differs from applying the Federal statutory income tax rate (21% in 2018 and 34% in 2017) to the pre-income tax loss from continuing operations as follows:

	Year Ended December 31,	
	2018	2017
Tax benefit computed at statutory rate	$ (216,791)	$ (461,347)
Increases (reductions) due to:		
Change in valuation allowance	202,700	(640,800)
State income taxes, net of federal benefit	1,713	1,431
Permanent differences	9,669	13,636
Tax credits (federal and state)	(7,326)	(73,618)
Change in tax rates	—	1,002,994
Differences on prior returns (federal and state)	12,203	156,744
Income tax provision (benefit)	$ 2,168	$ (960)

9. Employee Benefit Plans

The Company sponsors an Employee Savings and Investment Plan under Section 401(k) of the Internal Revenue Code covering all eligible employees of the Company. Employees can contribute up to 90% of their eligible compensation to the maximum allowable by the IRS. The Company's matching contributions are at the discretion of the Company. The Company's matching contributions in 2018 and 2017 were $39,039 and $42,215, respectively.

10. Commitments and Contingencies

Legal matters

In the ordinary course of its business, the Company is involved in various legal proceedings involving a variety of matters. The Company does not believe there are any pending legal proceedings that will have a material impact on the Company's financial position or results of operations.

Operating lease agreements

Lease expense under all operating leases was approximately $24,033 and $24,954 for the years ended December 31, 2018 and 2017, respectively. Future minimum lease payments for the years ending December 31 are as follows:

2019	$ 20,222
2020	$ 18,222
2021	$ 10,630

11. Shareholders' equity

Common stock

In 2018 and 2017, the Company issued 21,734 and 22,635 shares of the Company's common stock from treasury, pursuant to the 2010 Equity Incentive Plan, with a fair value of $75,750 and $88,524, respectively, for directors' fees in lieu of cash payments.

No shares were issued as a result of the exercise of stock options or the exercise of warrants in 2018 or 2017.

No dividends were declared or paid in 2018 or 2017.

F-18

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

Warrants

No warrants were exercised in 2018 or 2017 and 70,000 warrants expired on December 31, 2018. There are no warrants outstanding as of December 31, 2018.

Stock options and Share-Based Incentive Plan

In March 2010, the Company's Board of Directors adopted the Micron Solutions, Inc. 2010 Equity Incentive Plan (the "Plan"). The Plan authorizes the issuance of an aggregate of 500,000 shares. The Plan provides the Company flexibility to award a mix of stock options, equity incentive grants, performance awards and other types of stock-based compensation to certain eligible employees, non-employee directors, or consultants and under which an aggregate of 500,000 shares have been reserved for such grants. The options granted have ten year contractual terms that vest annually between three to five-year terms.

At December 31, 2018, there were options to acquire an aggregate of 393,500 shares outstanding. At December 31, 2017, there were options to acquire an aggregate of 205,500 shares outstanding.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. Expected volatilities are based on historical volatility of the common stock using historical periods consistent with the expected term of the options. The expected term of options granted under the Company's equity incentive plan, all of which qualify as "plain vanilla," is based on the average of the contractual term and the vesting period as permitted under SEC Staff Accounting Bulletin Nos. 107 and 110. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option.

During 2018, there were 195,000 new option grants. No options were granted in 2017. The assumptions used to measure the fair value of option grants in 2018 and 2017 were as follows:

	Year Ended December 31, 2018	2017
Expected option term	5.5 to 6.25	-
Expected volatility factor	16.96% to 26.87%	-
Risk-free rate	2.36% to 2.94%	-
Expected annual dividend yield	-	-

The following table sets forth the stock option transactions for the year ended December 31, 2018:

	Number of options	Weighted Average Exercise Price	Weighted average remaining contractual term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2017	205,500	$ 6.04	6.07	$ 28,750
Granted	195,000	3.64		
Forfeited	(7,000)	3.81		
Outstanding at December 31, 2018	393,500	$ 4.89	7.22	$ 960
Exercisable at December 31, 2018	182,164	$ 6.09	4.81	$ 960
Exercisable at December 31, 2017	114,583	$ 6.42	5.30	$ 20,551

For the years ended December 31, 2018 and 2017, share-based compensation expense related to stock options and the non-cash issuance of common stock amounted to $56,168 and $48,129, respectively, and is included in general and administrative expenses. As of December 31, 2018, $127,944 of unrecognized compensation costs related to non-vested share-based compensation arrangements granted under the stock option plan. This cost is expected to be recognized over a weighted average period of 2.59 years. The weighted average grant date fair value of grants made in 2018 was $0.55.

At December 31, 2018 there were 31,631 shares available for future grants under the Plan, after giving effect to shares which became available for reissuance due to expired or forfeited options.

Table of Contents

Micron Solutions, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Years Ended December 31, 2018 and 2017

12. Subsequent Events

Changes to Management

Mr. Salvatore Emma, Jr.'s employment with the Company terminated effective February 8, 2019. Mr. Emma most recently served as Chief Operating Officer of the Company. On February 28, 2019, the Company and Mr. Emma entered into an Agreement and Release effective March 7, 2019. Subject to the terms of the agreement, Mr. Emma shall be entitled to, as a severance benefit, $1,187.50 per week over 24 months or an aggregate of $123,500. The agreement also included a general release of claims by Mr. Emma and certain confidentiality, non-competition and non-solicitations and innovations provisions.