IKONICS CORP
Form 10-K
March 01, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the Fiscal Year Ended December 31, 2018

or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the Transition Period From to .

Commission file number 000-25727

IKONICS CORPORATION

(Exact name of registrant as specified in its charter)

Minnesota (State or other jurisdiction of incorporation or organization)	**41-0730027** (I.R.S. employer identification no.)
4832 Grand Avenue **Duluth, Minnesota** (Address of principal executive offices)	**55807** (Zip code)

Registrant’s telephone number, including area code: **(218) 628-2217**

Securities registered under Section 12(b) of the Act:

Name of Each Exchange

Title of Each Class	**On Which Registered**
Common Stock, par value $.10 per share	Nasdaq Capital Market

Securities registered under Section 12(g) of the Act: **None**

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K

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

Large accelerated filer	Smaller reporting company
Accelerated filer	Emerging Growth Company
Non-accelerated filer	

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 stock held by non-affiliates of the registrant as of June 30, 2018 was $10,904,445 based on the most recent closing price for the issuer’s Common Stock on such date as reported on the

Nasdaq Capital Market. For purposes of determining this number, all officers and directors of the issuer are considered to be affiliates of the issuer, as well as individual stockholders holding more than 10% of the issuer's outstanding Common Stock. This number is provided only for the purpose of this report on Form 10-K and does not represent an admission by either the issuer or any such person as to the status of such person.

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practical date: Common Stock, $.10 par value — 1,983,553 issued and outstanding as of February 22, 2019.

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended, relating to future events or the future financial performance of the Company. In some cases, you can identify forward-looking statements by the following words: “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “ongoing,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would,” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. Forward-looking statements are only predictions or statements of intention subject to risks and uncertainties and actual events or results could differ materially from those projected. Forward-looking statements are based on information available at the time the statements are made and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievements to be materially different from the information expressed or implied by the forward-looking statements in this Annual Report on Form 10-K. Factors that could cause actual results to differ include the risks, uncertainties and other matters set forth below under the caption “Risk Factors” and the matters set forth under the captions “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as those discussed elsewhere in this Annual Report on Form 10-K.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company’s definitive proxy statement for its 2019 Annual Meeting of Shareholders are incorporated by reference in Part III.

PART I

Item 1. Business

General

IKONICS Corporation ("IKONICS" or the "Company") was incorporated in Minnesota as Chroma-Glo, Inc. in 1952 and changed its name to The Chromaline Corporation in 1982. In December 2002, the Company changed its name to IKONICS Corporation. The Company's three traditional businesses, Domestic, IKONICS Imaging and Export, have been the development, manufacture and selling of photosensitive liquids ("emulsions") and films for the screen printing, awards and recognition industries and dye sublimation markets. These sales have been augmented with inkjet receptive films, ancillary chemicals and related equipment to provide a full line of products and services to its customers. These products are sold worldwide primarily through distributors. The Company further diversified itself by expanding its business to industrial markets. These efforts now include the Company's Advanced Material Solutions ("AMS") business unit which uses the Company's proprietary processes and photoresist film for the abrasive etching of composite materials, industrial ceramics, silicon wafers, and glass wafers. The customer base for AMS is primarily the aerospace and electronics industries. Based on its expertise in ultraviolet curable fluids and inkjet receptive substrates, the Company has also developed a patented digital texturing technology ("DTX") for putting patterns and textures into steel molds for the plastic injection molding industry. The original equipment manufacturer ("OEM") for the Company's DTX technology is primarily the automotive industry. The Company offers a suite of products to the mold making industry. Industrial inkjet printers, which are integral to the DTX system, are manufactured by a third party and sold by IKONICS. The Company's business plan is to sell consumable fluids and transfer films. For most markets, these sales are direct to the mold maker. The DTX technology is also utilized in prototyping where the Company's technology offers a unique combination of high definition, large format prints, and abrasion resistance.

Products

The Company has four primary technology platforms: ultraviolet (UV) chemistry, film coating and construction, technical abrasive etching, and industrial inkjet printing. The Company's traditional products and new initiatives are based on these platforms and their combinations. The Company's Chromaline branded products for the screen printing industry and IKONICS Imaging products for the awards and recognition market are based on UV chemistry and film coating and construction capabilities; the AMS offering is a combination of UV chemistry, film coating and construction and technical abrasive etching capabilities; DTX is a combination of UV chemistry, film coating and construction, and industrial inkjet printing. There is overlap and synergy in the market between the Domestic, Ikonics Imaging, AMS and DTX product offerings, and the Company offers ancillary products, including equipment to provide customers with a total solution. The Company considers this combination of core technologies and product offerings to be unique.

Distribution and Customers

The Company currently has approximately 200 domestic and international distributors for its Chromaline and ImageMate screen printing emulsions and films. The Company's abrasive etching products are mainly sold directly to end users in the awards and recognition market under the Ikonics Imaging brand. AMS products are sold either directly to users or the Company offers AMS as a service. DTX includes the sales of consumable inks and films to customers that have purchased specialized industrial inkjet printers from the Company's strategic partner. DTX sales are primarily direct to end users. The Company markets and sells its products through magazine advertising, trade shows and the internet.

The Company has a diverse customer base both domestically and abroad, with international sales accounting for 29.4% of total sales in 2018 and 30.5% of total sales in 2017, and does not depend on one or a few customers for a material portion of its revenues. In 2018 and 2017, no one customer accounted for more than 10% of net sales.

Quality Control in Manufacturing

In March 1994, IKONICS became the first company in northern Minnesota to receive ISO 9001 certification. ISO 9000 is a worldwide standard issued by the International Organization for Standardization that provides a framework for quality assurance. The Company has been recertified every three years beginning in 1997. IKONICS' quality function goal is to train all employees properly in both their work and in the importance of their work. Internal records of quality, including related graphs and tables, are reviewed regularly and discussions are held among management and employees regarding how improvements might be realized. The Company has rigorous materials selection procedures and also uses testing procedures to assure its products meet quality standards.

Research and Development and Intellectual Property

The Company incurred costs totaling 3.7% of sales, or $677,000, on research and development in 2018, and 4.0% of sales, or $689,000, in 2017. In its research program, IKONICS has developed ultraviolet light-sensitive chemistries used in the manufacturing of screen print stencils, photoresists for abrasive etching and acid resist and prototyping ink jet fluids and ink jet receptive films. The Company has a number of patents and patent applications on these chemistries and applications. There can be no assurance that any patent granted to the Company will provide adequate protection to the Company's intellectual property. Within the Company, steps are taken to protect the Company's trade secrets, including physical security, confidentiality and non-competition agreements with employees, non-disclosure agreements where applicable, and confidentiality agreements with vendors. Over the past few years, the Company has directed a larger portion of it research and development resources towards industrial inkjettable fluids and ink jet receptive substrates along with dye sublimation films. The Company has also invested significant resources for personnel and equipment to develop proprietary products and techniques for the etching of composite materials, industrial ceramics and electronic wafers.

In addition to its patents, the Company has various trademarks including the “IKONICS,” “Chromaline,” “IKONICS Imaging,” “Precision Abrasive Machining,” “SmartFlex,” “PhotoBrasive,” “AccuArt,” “Nichols,” “image mate,” “Alpha Flex” “Alpha MicroCap,”, “DTX”, “SubTHAT!” and "IKONART" trademarks.

Raw Materials

The primary raw materials used by IKONICS in its production are photopolymers, polyester films, polyvinylacetates, polyvinylalcohols and water. The Company's purchasing staff leads in the identification of both domestic and foreign sources for raw materials and negotiates price and terms for all domestic and foreign markets. IKONICS' involvement in foreign markets has given it the opportunity to become a global buyer of raw materials at lower overall cost. The Company has a number of suppliers for its operations. Some suppliers provide a significant amount of key raw materials to the Company, but the Company believes alternative sources are available for most materials. For those raw materials where an alternative source is not readily available, the Company has contingency raw material replacement plans. To date, there have been no significant shortages of raw materials. The Company believes it has good supplier relations.

Competition

The Company competes in its markets based on product development capability, quality, reliability, availability, technical support and price. Though the screen printing market is much larger than the awards and recognition market, IKONICS commands significantly more market share in the latter. IKONICS has two primary domestic competitors in its screen printing film business. They are larger than IKONICS and possess greater resources than the Company in many areas. The Company has numerous competitors in the market for screen print emulsions, many of whom are larger than IKONICS and possess greater resources. The market for the Company's abrasive etching products in the awards and recognition market has one significant competitor. IKONICS considers itself to be the leader in this market. There are significant competitors, using different technologies in the new markets being entered by the Company. The primary competition for AMS is from other machining methods, most of which are well established. The primary competition for DTX comes from old, well-established technologies based on wax and screen printing and new competition from laser technologies.

Government Regulation

The Company is subject to a variety of federal, state and local industrial laws and regulations, including those relating to the discharge of material into the environment and protection of the environment. The governmental authorities primarily responsible for regulating the Company's environmental compliance are the Environmental Protection Agency, the Minnesota Pollution Control Agency and the Western Lake Superior Sanitary District. Failure to comply with the laws promulgated by these authorities may result in monetary sanctions, liability for environmental clean-up and other equitable remedies. To maintain compliance, the Company may make occasional changes in its waste generation and disposal procedures.

These laws and regulations have not had a material effect upon the capital expenditures or competitive position of the Company. The Company believes that it complies in all material respects with the various federal, state and local regulations that apply to its current operations. Failure to comply with these regulations could have a negative impact on the Company's operations and capital expenditures and such negative impact could be significant.

The Company also is subject to regulations from foreign governments covering the importation of certain chemicals. The Company believes that it complies in all material respects with these regulations that apply to its current products. Failure to comply with these regulations could have a negative impact on the Company's operations and capital expenditures and such negative impact could be significant.

Employees

As of February 23, 2019, the Company had 82 full-time employees, 77 of whom are located at the Company's two facilities in Duluth, Minnesota and five of whom are outside technical sales representatives in various locations in the United States. None of the Company's employees are subject to a collective bargaining agreement and the Company believes that its employee relations are good.

<u>Item 1A. Risk Factors</u>

The Company's DTX and AMS initiatives involve new technologies that might not be executed successfully and might not achieve market acceptance.

The Company's DTX and AMS initiatives involve new technologies that might never achieve market acceptance. During 2018 and 2017, the Company generated operating losses in its AMS segment while the DTX segment has realized operating income since 2015. The Company's ability for generating profits from these initiatives will depend on its products gaining market acceptance among customers, which cannot be guaranteed. The degree of market acceptance of any new products the Company develops will depend on a number of factors, including:

- the Company's ability to successfully develop its technologies and products to include the capabilities the Company intends;
- the Company's ability to accurately assess the functions and features customers desire;
- the perceived effectiveness and price of the Company's products compared to alternative products and technologies;

- the development of new products and technologies by current competitors or new competitors that might enter the Company’s markets; and

- the strength of the Company’s marketing and distribution functions.

If new products that the Company develops do not have the capabilities the Company expects or fail to achieve an adequate level of acceptance by customers for any reason, then the Company’s AMS and DTX business units could fail to generate the revenues the Company expects and may not become profitable or sustain profitability.

If the Company's new products and technologies do not achieve market acceptance, the Company will not realize a return on its investments in its new business initiatives.

The Company has invested, and plans to continue to invest, significant resources in its research and development efforts to develop technology for its business units. The Company spent 3.7% of sales, or $677,000, on research and development in 2018 and 4.0% of sales, or $689,000, in 2017. A substantial portion of these investments was for new products and initiatives. The Company plans to continue to invest significant resources in research and development of new products and initiatives for the foreseeable future. The Company believes successful execution of these initiatives and new products is important for its ability to grow its revenues and profits. However, if the Company fails to generate its projected revenues from these products and initiatives, the Company's investments in these areas would not generate the profits the Company expects and its results of operations, financial condition and prospects would be materially and adversely affected.

Adverse changes to global economic conditions generally, and to the aerospace and automotive industries in particular, may harm the Company's business.

The prospects for economic growth in the United States and other countries remain uncertain and major economies where the Company conducts business could continue or return to recessionary conditions. Economic concerns and issues such as reduced access to capital for businesses or tariffs may cause the Company's customers to delay or reduce purchases of the Company's products. Given the continued uncertainty concerning the global economy, the Company also faces risks that may arise from financial difficulties experienced by suppliers and customers, such as an inability to collect receivables or the continued operation of suppliers.

The Company's AMS segment focuses primarily on customers in the aerospace industry, and its DTX segment focuses primarily on customers in the automotive industry. The aerospace and automotive industries have experienced volatility in prior years in a manner similar to or greater than the global economy generally. If either or both these industries experiences difficulties that reduce demand for their products generally, the Company's results of operations, financial condition and prospects would suffer.

The Company faces significant competition and expects to face increasing competition in many aspects of its businesses, which could cause operating results to suffer.

The Company operates in highly competitive industries that experience rapid technological and market developments, changes in customer needs, and frequent product introductions and improvements, particularly with respect to the AMS and DTX businesses. If the Company is unable to anticipate and respond to these developments, its products or technologies could become uncompetitive or obsolete. Most of the Company's competitors in the AMS and DTX fields are larger and better capitalized than the Company with longer operating histories. These advantages could allow the Company's competitors to invest more resources in research and development and sales and marketing than the Company, which could make the competitive products more attractive or better known to consumers than the Company's products. In addition, because there is potential for rapid technological change in fields in which the Company operates, the Company could face competition from new sources in the future that customers find more attractive.

The Company also could face increased competition in its traditional Domestic and IKONICS Imaging units. Capital costs for machinery necessary to operate in these industries have decreased in recent years, increasing the possibility that the Company will face new competitors. An increase in the amount of competition the Company faces, or a loss of competitiveness in any of the Company's business units for any reason, could adversely affect its revenues and gross margins.

The Company's failure to comply with environmental laws and regulations could harm its business and results of operations.

The manufacturing of the Company's products requires the use of hazardous materials that are subject to a broad array of environmental laws and regulations. The Company's failure to comply with these laws or regulations could result in:

- regulatory penalties, fines and legal liabilities;
- suspension of production;
- alteration of manufacturing processes; and
- restrictions on the Company's operations or sales.

The Company's failure to manage the use, transportation, emissions, discharge, storage, recycling or disposal of hazardous materials could lead to increased costs or future liabilities. Environmental laws and regulations also could require the Company to acquire pollution abatement or remediation equipment, modify product designs or incur other expenses.

Third parties may claim the Company infringes their intellectual property rights, which could harm the Company's business.

The Company may face claims that it infringes other parties' intellectual rights. Regardless of a claim's merit, claims that the Company's products or processes infringe the intellectual property rights of others could cause the Company to incur large costs to respond to, defend, and resolve the claims, and they may divert the efforts and attention of management and technical personnel. As a result of any intellectual property rights infringement claims, the Company could be required to:

- pay infringement claims;
- stop manufacturing, using, or selling products or technology subject to infringement claims;
- develop other products or technology not subject to infringement claims, which could be time-consuming, costly or impossible; or
- license technology from the party claiming infringement, which license may not be available on commercially reasonable terms, if at all.

These actions could harm the Company's competitive position, result in additional expenses, or require the Company to impair its assets. If the Company alters or stops production of affected items, its ability to generate revenue could be harmed.

The Company may be unable to enforce or protect its intellectual property rights, which may harm its ability to compete and may harm its business.

The Company’s ability to enforce its patents, trademarks and other intellectual property rights is subject to general litigation risks, as well as uncertainty as to the enforceability of the Company’s intellectual property rights in various countries. If the Company seeks to enforce its rights, it could become subject to claims that its intellectual property rights are invalid, not enforceable, or licensed to the opposing party. The Company’s assertion of intellectual property rights also could result in the other party seeking to assert claims against the Company, which could harm the Company’s business. The Company’s inability to enforce its intellectual property rights for any reason could harm its competitive position and business.

If the Company is unable to protect the confidentiality of its proprietary information and know-how, the value of its technology could be adversely affected.

In addition to patented technology, the Company relies on unpatented proprietary technology, trade secrets, processes and know-how. The Company generally seeks to protect this information by confidentiality agreements with employees, consultants, advisors and third parties. These agreements may be breached, and the Company may not have adequate remedies for any such breach. In addition, the Company’s trade secrets may otherwise become known or be independently developed by competitors. To the extent that the Company’s employees, consultants or contractors use intellectual property owned by others in their work for the Company, disputes may arise as to the rights in related or resulting know-how and inventions.

The Company operates a global business that exposes it to additional risks.

The Company operates throughout the world, including in the United States, Europe, India and China. These international operations create a variety of risks and uncertainties, including:

- rapid changes in government, economic and political policies and conditions, political or civil unrest or instability, terrorism or epidemics;
- fluctuations in foreign currency exchange rates;
- compliance with and changes in foreign laws and regulations, as well as U.S. laws affecting the activities of U.S. companies abroad, including the Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”);

- different, complex and changing laws governing intellectual property rights, sometimes affording companies lesser protection in certain areas;
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- protectionist laws, tariffs and business practices that favor local producers; and
- potentially adverse tax consequences, including the complexities of foreign value added tax systems and restrictions on the repatriation of earnings.

The occurrence of any one of these risks could negatively affect the Company's international business and, consequently, its results of operations generally.

The Company faces risks related to sales through distributors and other third parties.

During 2018, a significant portion of the Company's sales, including nearly all sales of its Domestic products and a significant amount of its International sales, were conducted through third parties. Using third parties for distribution exposes the Company to many risks, including competitive pressure, concentration, credit risk and compliance risks. Distributors may sell products that compete with the Company's products, and the loss of a distributor could reduce the Company's revenue. Distributors may face financial difficulties, including bankruptcy, which could harm the Company's collection of accounts receivable and financial results. Violations of the FCPA or similar laws by distributors or other third-party intermediaries could have a material impact on the Company's business. Failing to manage risks related to the Company's use of distributors may reduce sales, increase expenses, and weaken its competitive position.

Increases in prices and declines in the availability of raw materials could negatively impact the Company's financial results.

Certain raw materials needed to manufacture products are obtained from a limited number of suppliers and many of the raw materials are petroleum-based. Under normal market conditions, these raw materials are generally available on the open market from a variety of producers. While alternate supplies of most key raw materials are available, supplier production outages may lead to strained supply-demand situations for certain raw materials. The substitution of key raw materials could require the Company to identify new supply sources, or reformulate and retest products or processes. From time to time, the prices and availability of these raw materials may fluctuate, which could impair the Company's ability to procure necessary materials, or increase the cost of manufacturing products. If the prices of raw materials increase in a short period of time, the Company may be unable to pass these increases on to its customers in a timely manner or at all, which could reduce its gross margins. Like most companies in the Company's industries, the

Company does not have long-term supply contracts for most of its key raw materials, which exacerbates the foregoing risks to the Company.

If any of the Company's current single or limited source suppliers become unavailable or inadequate, its customer relationships, results of operations and financial condition may be adversely affected.

The Company acquires certain of its materials that are critical to its operations from a limited number of third parties. Should any of the Company's current single or limited source suppliers become unavailable or inadequate, or impose terms unacceptable to the Company such as increased pricing terms, the Company could be required to spend a significant amount of time and expense to develop alternate sources of supply, and may not be successful in doing so on acceptable terms or at all. If the Company is unable to find a suitable supplier for a particular material, it could be required to modify its existing business processes or offerings to accommodate the situation. As a result, the loss of a single or limited source supplier could adversely affect the Company's relationship with its customers and its results of operations and financial condition.

The Company depends on one manufacturer to make and sell DTX printers. If the manufacturer ceased to make or sell DTX printers, or failed to meet quality standards, the Company's financial results and prospects would be adversely affected.

The Company relies on one company to manufacture and sell DTX printers. If the manufacturer ceased to produce or devote resources to selling DTX printers, due to a change in company strategy, to focus on alternative initiatives, or for any other reason, the Company would need to find an alternative manufacturer and seller of DTX printers. Finding an alternative manufacturer and seller of DTX printers could result in additional costs and delays in growing the Company's DTX business unit, which would adversely affect the Company's financial results and prospects.

In addition, if these manufacturers failed to produce DTX printers that satisfy the Company's quality standards, the Company's reputation with end users could be harmed and the Company could be forced to find a new manufacturer. Either of these results also would harm the Company's business and prospects.

The inability to attract and retain qualified personnel could adversely impact the Company's business.

Sustaining and growing the Company's business depends on the recruitment, development and retention of qualified employees, including management and research and development personnel. The inability to recruit and retain key personnel or the unexpected loss of key personnel may adversely affect the Company's operations.

An active trading market for the Company's shares of common stock may not develop.

The Company's common stock has been listed for trading on the Nasdaq Capital Market since 1999 and persistently has experienced limited trading volume. There can be no assurance that an active public market for the Company's shares will develop or be sustained. The lack of an active trading market could adversely affect the price and liquidity of the Company's common stock.

The Company's directors and officers own a large percentage of the Company's common stock, which may allow them to collectively exert significant influence over substantially all matters requiring shareholder approval.

As of December 31, 2018, the Company's directors and officers collectively beneficially owned approximately 14.0% of its common stock outstanding as of that date. As a result, the Company's directors and officers could exert significant influence over all matters requiring a shareholder vote, including the election of directors, amendments to the Company's articles of incorporation, and extraordinary transactions such as mergers or going private transactions. These ownership positions may have the effect of delaying, deterring or preventing a change in control or a change in the composition of the Company's board of directors. In addition, substantial sales of shares beneficially owned by our directors or officers could be viewed negatively by third parties and have a negative impact on the Company's stock price.

The price of the Company's common stock may fluctuate significantly.

The price of the Company's common stock has, and could continue to, fluctuate substantially in a short period of time. The price of the Company's common stock could vary for many reasons, including the following:

- future announcements concerning the Company or its competitors;
- introduction of new products by the Company or its competitors, or the failure of the Company's new products to meet expectations;
- the commencement of, or developments to, litigation involving the Company;
- quarterly variations in operating results, which the Company has experienced in the past and expects to experience in the future;
- business acquisitions or divestitures; or
- changes to the global economy in general, and the aerospace and automotive markets in particular.

In addition, stock markets in general have experienced price and volume fluctuations in recent years, fluctuations that sometimes have been unrelated to the operating performance of the affected companies. These broad market fluctuations may adversely affect the market price of the Company's common stock. The market price of the Company's common stock could decline below its current price and the market price of the Company's shares may fluctuate significantly in the future. These fluctuations may be unrelated to the Company's performance.

The terms of our financing agreement contain certain financial ratio covenants that may impair our ability to conduct our business.

On April 1, 2016, the Company entered into a financing agreement with the Duluth Economic Development Authority and Wells Fargo Bank, N.A. to borrow $3.4 million. The proceeds from the loan were used to finance the construction of a 27,300-square foot building, as well as related equipment for use in the manufacturing of sound deadening technology used in the aerospace industry and products consisting of etched composites, ceramics, glass and silicon wafers, to be located in Duluth, Minnesota. The Company is subject to certain customary covenants set forth in the associated covenant agreement, including a requirement to maintain a debt service coverage ratio as of the end of each calendar quarter of not less than 1.25 to 1.00 on a rolling four-quarter basis. In the event of a breach of a covenant, the Company would need to obtain a waiver from the lender or the lender may cancel the financing agreement and accelerate the full amount of outstanding indebtedness. The Company is in compliance with the covenants, including the debt service ratio covenant, as of December 31, 2018, but its ability to comply with these covenants in the future will depend on future operating performance and the Company may not meet them. In the event that the Company falls out of compliance with these covenants and is unable to obtain a waiver and the indebtedness is accelerated, it would have an adverse effect on the Company's financial condition and future operating performance and could limit its ability to invest in other business activities.

We heavily rely on our information technology systems and are vulnerable to damage and interruption.

The Company relies on our information technology systems and infrastructure to process transactions and manage its business, including maintaining employee, client and supplier information. The Company has also engaged third parties, including cloud providers, to store, transfer and process data. The information technology systems, as well as the systems of our customers, suppliers and other partners, are vulnerable to outages and an increasing risk of deliberate intrusions to gain access to and exploit company sensitive information. Similarly, data security breaches by employees and others with or without permitted access to the Company's systems pose a risk that sensitive data may be exposed to unauthorized persons or to the public. The Company may be unable to prevent outages or security breaches in its systems that could adversely affect results of operations and cause reputational harm.

The Company's operating results and financial condition may fluctuate on a quarterly and annual basis.

The Company's operating results and financial condition may fluctuate from quarter to quarter and year to year, and could vary due to a number of factors, some of which are outside of the Company's control. In addition, the Company's actual or projected operating results may fail to match its past performance. The Company's operating results and financial condition may fluctuate due to a number of factors, including those listed below and those identified throughout this "Risk Factors" section:

- the failure of the Company's new products to meet expectations;
- changes to the costs of raw materials, especially petroleum-based materials;
- the entry of new competitors into the Company's markets whether by established companies or by new companies;
- the geographic distribution of the Company's sales;
- changes in customer preferences or needs;
- changes in the amount that the Company invests to develop or acquire new technologies;
- delays between the Company's expenditures to develop new technologies and products and the generation of sales related thereto;

- protectionist laws and tariffs implemented by foreign governments to favor local producers
- a prolonged United States Federal or State government shutdown
- changes in the Company's pricing policies or those of its competitors;
- changes in accounting rules and tax and other laws; and
- general economic and industry conditions that affect customer demand and product development trends.

Due to all of the foregoing factors and the other risks discussed in this "Risk Factors" section, you should not rely on quarter-to-quarter or year-to-year comparisons of the Company's operating results as an indicator of future performance.

Item 1B. Unresolved Staff Comments

None

Item 2. Property

The Company primarily conducts its operations in Duluth, Minnesota. The administrative, sales, research and development, quality and most of the manufacturing activities are housed in a 60,000 square-foot, four-story building, including a basement level. The building is approximately seventy years old and the Company believes it has been maintained in good condition. The Company also utilizes a 5,625 square-foot warehouse adjacent to the existing plant building that was constructed in 1997. These facilities are owned by the Company with no existing liens or leases. The Company also owns an approximately 11-acre property with a 62,300 square-foot manufacturing and warehouse facility. The 62,300 square-foot facility is comprised of a 35,000 square-foot warehousing and manufacturing facility constructed in 2008 and a 27,300 square-foot expansion completed in 2016 to accommodate the Company's AMS business. The entire facility on the 11-acre property is collateral on the Company's $3.4 million loan.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The Company's Common Stock is traded on the Nasdaq Capital Market under the symbol "IKNX."

As of February 22, 2019, the Company had 468 shareholders. The Company has not declared cash dividends in the past two years and does not currently have plans to pay any cash dividends in the future. Any future declaration and payment of dividends is within the sole discretion of the Company's board of directors.

Recent Sales of Unregistered Equity Securities

None.

Purchases of Equity Securities by the Company

None.

Item 6. Selected Financial Data

Not applicable

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

The following management discussion and analysis focuses on those factors that had a material effect on the Company's financial results of operations and financial condition during 2018 and 2017 and should be read in conjunction with the Company's audited financial statements and notes thereto for the years ended December 31, 2018 and 2017, included herein.

Critical Accounting Policies and Estimates

The Company prepares its financial statements in conformity with generally accepted accounting principles in the United States of America. Therefore, the Company is required to make certain estimates, judgments and assumptions that the Company believes are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. The accounting policies and estimates which IKONICS believes are the most critical to aid in fully understanding and evaluating its reported financial results include the following:

Revenue Recognition. In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, *Topic 606. Revenue from Contracts with Customers* (Topic 606), and in August 2015, FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of Effective Date*, which deferred the effective date of ASU 2014-09 by one year. Topic 606 supersedes the revenue recognition requirements previously set forth in the Accounting Standards Codification (ASC) Topic 605, *Revenue Recognition*, and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services.

On January 1, 2018, the Company adopted Topic 606 for all customer contracts using the modified retrospective method. The adoption of Topic 606 did not result in a change to revenue previously recognized under prior revenue recognition rules. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The Company does not expect the adoption of the new revenue standard to have a material impact to its operating results on an ongoing basis. A majority of the Company's sales revenue continues to be recognized when products are shipped from its manufacturing facility. However, depending on the individual terms of the agreement with the customer, some sales revenue may be recognized when the goods arrive at the customer's location, the point at which control transfers.

Changes to the Company's significant accounting policies as a result of adopting Topic 606 are discussed below:

Revenue recognition. Revenue is measured based on consideration specified in the contract with a customer, adjusted for any applicable estimates of variable consideration and other factors affecting the transaction price, including noncash consideration, consideration paid or payable to customers and significant financing components. While most of the Company's revenue is contracted with customers through one-time purchase orders and short-term contracts, the Company does have long-term arrangements with certain customers. Revenue from all customers is recognized when a performance obligation is satisfied by transferring control of a distinct good or service to a customer.

Individually promised goods and services in a contract are considered a distinct performance obligation and accounted for separately if the customer can benefit from the individual good or service on its own or with other resources that are readily available to the customer and the good or service is separately identifiable from other promises in the arrangement. When an arrangement includes multiple performance obligations, the consideration is allocated between the performance obligations in proportion to their estimated standalone selling price. Costs related to products delivered are recognized in the period incurred, unless criteria for capitalization of costs are met. Costs of revenues consist primarily of direct labor, manufacturing overhead, materials and components. The Company does not incur significant upfront costs to obtain a contract. If costs to obtain a contract were to become material, the costs would be recorded as an asset and amortized to expense in a manner consistent with the related recognition of revenue.

The Company excludes governmental assessed and imposed taxes on revenue transactions that are invoiced to customers from revenue. The Company includes freight billed to customers in revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of goods sold.

The timing of revenue recognition, billings and cash collections results in accounts receivable on the balance sheet.

Performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract's transaction price is allocated to each distinct performance obligation in proportion to its standalone selling price and recognized as revenue when, or as, the performance obligation is satisfied. The Company's various performance obligations and the timing or method of revenue recognition are discussed below:

The Company sells its products to both distributors and end-users. Each unit of product delivered under a customer order represents a distinct and separate performance obligation as the customer can benefit from each unit on its own or with other resources that are readily available to the customer and each unit of product is separately identifiable from other products in the arrangement.

The transaction price for the Company's products is the invoiced amount. The Company does not have variable consideration in the form of refunds, credits, rebates, price concessions, pricing incentives or other items impacting transaction price. The purchase order pricing in arrangements with customers is deemed to approximate standalone selling price; therefore, the Company does not need to allocate proceeds on a relative standalone selling price allocation between performance obligations. The Company applies the practical expedient in paragraph 606-10-50-14 and does not disclose information about remaining performance obligations that have original expected durations of one year or less. There are no material obligations that extend beyond one year.

Revenue is recognized when transfer of control occurs as defined by the terms in the customer agreement. The Company immediately recognizes incidental items that are immaterial in the context of the contract. The Company has also applied the practical expedient in paragraph 606-10-32-18 regarding the adjustment of the promised amount of consideration for the effects of a significant financing component when the customer pays for that good or service within one year or less, as the Company does not have any significant financing components in its customer arrangements as payment is received at or shortly after the point of sale, generally thirty to ninety days.

The Company estimates returns based on an analysis of historical experience if the right to return products is granted to its customers. The Company does not record a return asset as non-conforming products are generally not returned. The Company's return policy does not vary by geography. The customer has no rotation or price protection rights.

Trade receivables. Trade receivables include amounts invoiced and currently due from customers. The amounts due are stated at their net estimated realizable value. The Company records an allowance for doubtful accounts to provide for the estimated amount of receivables that will not be collected. The allowance is based on a review of all outstanding amounts on an on-going basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivables and considers a customer's financial condition, credit history, and current economic conditions. Trade receivables are written off when deemed uncollectible. Recoveries of trade receivables previously written off are recorded when received. Accounts are considered past due if payment is not received according to agreed-upon terms.

Sales commissions. Sales commissions paid to sales representatives are eligible for capitalization as they are incremental costs that would not have been incurred without entering into a specific sales arrangement and are recoverable through the expected margin on the transaction. The Company has elected to apply the practical expedient provided by ASC 340-40-25-4 and recognize the incremental costs of obtaining contracts as an expense when incurred, as the amortization period of the assets that would have otherwise been recognized is one year or less. The Company records these costs in selling, general, and administrative expense.

Product warranties. The Company offers warranties on various products and services. These warranties are assurance type warranties that are not sold on a standalone basis; therefore, they are not considered distinct performance obligations. The Company estimates the costs that may be incurred under its warranties and records a liability in the amount of such costs at the time the revenue is recognized for the product sale.

International revenue. The Company markets its products to numerous countries in North America, Europe, Latin America, Asia and other parts of the world. Foreign sales were approximately 29.4% of total sales in 2018 compared to 30.5% of sales in 2017.

Trade Receivables. The Company performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and the customer’s current credit worthiness, as determined by review of the current credit information. The Company continuously monitors collections and payments from its customers and maintains a provision for estimated credit losses based upon historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been within expectations and the provisions established, the Company cannot guarantee that it will continue to experience the same collection history that has occurred in the past. The general payment terms are net 30-45 days for domestic customers and net 30-90 days for foreign customers. A small percentage of the trade receivables balance is denominated in a foreign currency with no concentration in any given country. At the end of each reporting period, the Company analyzes the receivable balance for customers paying in a foreign currency. These balances are adjusted to each quarter or year-end spot rate. The Company also maintains a provision based upon historical experience and any specifically identified issues for any customer related returns, refunds or credits.

Inventories. Inventories are valued at the lower of cost or net realizable value using the last in, first out (LIFO) method. The Company monitors its inventory for obsolescence and records reductions from cost when required.

Income Taxes. Deferred taxes are provided on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

The Tax Cut and Jobs Act of 2017 (the “Tax Reform Act”) was enacted December 22, 2017. This legislation makes significant changes in U.S. tax law including a reduction in the corporate tax rates, changes to net operating loss carryforwards and carrybacks and a repeal of the corporate alternative minimum tax. The legislation reduced the U.S. corporate tax rate from the current rate of 34% and 35% to 21%. As a result of the enacted law, the Company was required to revalue deferred tax assets and liabilities at the newly enacted rate. This revaluation resulted in a benefit in 2017 of $115,000 to income tax expense in continuing operations and a corresponding reduction in the deferred tax liability. The other provisions of the Tax Reform Act did not have a material impact on the 2017 consolidated financial statements.

Results of Operations

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Sales. Sales increased 5.6% in 2018 to $18.2 million, compared to $17.2 million in 2017. AMS sales in 2018 increased by $1.0 million, or 139.2%, compared to 2017 as the Company realized increased sales from its largest customer as the customer maintained its expected activity level for all of 2018 while AMS sales in 2017 were unfavorably affected by a temporary decrease in orders from its largest customer. Domestic sales also increased from $6.9 million in 2017 to $7.3 million in 2018, a $354,000, or 5.1%, sales increase due to improved emulsion and film sales while 2018 Export sales increased by $155,000, or 3.3%, due to higher sales to both the Middle East and Latin America. Sales in 2018 were unfavorably impacted by a $397,000, or 48.5% DTX sales decrease as 2017 DTX sales benefited from $320,000 in sales of two DTX printers. There were no printer sales in 2018. Additionally, DTX consumable sales were lower in 2018 versus 2017. IKONICS Imaging sales in 2018 decreased from $4.0 million in 2017 to $3.8 million, a $180,000, or 4.5%, decrease. IKONICS Imaging 2017 sales were positively impacted by $258,000 in sales for its newly introduced SubTHAT!™ film while SubTHAT!™ film sales in 2018 were minimal.

Gross Profit. Gross profit was $6.3 million, or 34.3% of sales, in 2018 compared to $5.7 million, or 33.2% of sales, in 2017. AMS increased sales volumes benefitted the 2018 gross margin as the AMS gross margin improved from a negative 72.5% in 2017 to a positive 13.2% in 2018. A large portion of the AMS cost structure is fixed, causing sales volumes to have a significant impact on its gross margin. The 2018 DTX gross margin improved to 67.4% from 40.4% in 2017 as the 2017 gross margin was negatively affected by the sale of two low margin printers. The IKONICS Imaging gross margin decreased from 52.4% in 2017 to 47.1% in 2018 as the 2017 gross margin benefitted from high margin SubTHAT!™ film sales. The 2018 Domestic and Export gross margin percentages were similar to their 2017 gross margin percentages.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $5.4 million, or 29.4% of sales, in 2018 compared to $5.5 million, or 31.9% of sales, in 2017. The 2018 decrease in selling, general and administrative expense is related to the Company’s cost reduction initiative. The Company realized lower travel, promotional, consulting and salary expense partially offset by higher health insurance expenses.

Research and Development Expenses. Research and development expenses in 2018 were $677,000, or 3.7% of sales, versus $689,000, or 4.0% of sales in 2017. The expense decrease in 2018 was due to lower production trial and patent-related legal expenses. The Company incurred additional production trial expenses in 2017 related to the development of its new SubTHAT!™ film product.

Income Taxes. During 2018, the Company realized an income tax expense of $46,000, or an effective rate of 24.8%, compared to an income tax benefit of $298,000, or an effective rate of 56.9%, for the same period in 2017. The increase to income tax expense in 2018 from 2017 is primarily due to a benefit of $115,000 related to the favorable impact of a revaluation of the Company's deferred tax liability as a result of the Tax Reform Act in 2017 as well as pre-tax book income generated in 2018 compared to the pre-tax book loss generated in 2017. Additionally, differences between effective tax rate and the statutory tax rate are related to credits for research and development and other non-deductible items.

Liquidity and Capital Resources

Outside of the 2016 building expansion, for which $3.4 million in financing was obtained, the Company has financed its operations principally with funds generated from operations. These funds have been sufficient to cover the Company's normal operating expenditures, annual capital requirements, and research and development expenditures.

Cash and cash equivalents were $1.6 million and $930,000 at December 31, 2018 and 2017, respectively. In addition to its cash, the Company held $2.7 million and $2.9 million of short-term investments as of December 31, 2018 and 2017, respectively. The Company generated $1.2 million in cash from operating activities during 2018, compared to generating $205,000 of cash from operating activities in 2017. Cash provided by operating activities is primarily the result of the net income (loss) adjusted for non-cash depreciation and amortization, deferred taxes, and certain changes in working capital components discussed in the following paragraph.

During 2018, an increase in sales resulted in a $25,000 trade receivables increase. Inventories decreased by $39,000 related to a decrease in finished goods inventories compared to 2017. Accounts payable increased from 2017 to 2018 by $326,000 due to the timing of payments to and purchases from vendors, mainly related to raw materials. Prepaid expenses and other assets increased $207,000 from 2017 to 2018. The increase is mainly due to a receivable related to the reimbursement of 2018 medical insurance costs that the Company will receive from its stop-loss insurance carrier. Compared to 2017, accrued expenses increased $104,000 reflecting the timing of compensation payments and an increase in accrued medical insurance costs. Income taxes receivables increased $1,000 due to the timing of estimated 2018 tax payments compared to the calculated 2018 tax liability.

During 2017, improved collections resulted in a $146,000 trade receivables decrease. Inventories increased by $100,000 related to an increase in finished goods inventories compared to 2016. Accounts payable decreased from 2016 to 2017 by $409,000 due to the timing of payments to and purchases from vendors, mainly related to raw materials. Prepaid expenses and other assets decreased $194,000 from 2016 to 2017. The decrease is mainly related to 2016 prepayments on equipment being manufactured that was sold in 2017. Compared to 2016, accrued expenses decreased $33,000 reflecting the timing of compensation payments. Income taxes receivables decreased $64,000 due to the timing of estimated 2017 tax payments compared to the calculated 2017 tax liability.

During 2018, cash used in investing activities was $393,000. The Company purchased 23 certificates of deposits totaling $5.6 million. Twenty four certificates of deposits totaling $5.8 million matured during 2018. The Company's purchases of property and equipment of $543,000 in 2018 were mainly for building upgrades and improvements to production and process capabilities. Also, during 2018, the Company incurred $50,000 in patent application costs that the Company has recorded as an asset and will amortize upon successful completion of the application process.

During 2017, cash provided by investing activities was $115,000. The Company purchased 16 certificates of deposits totaling $3.9 million. Eighteen certificates of deposits totaling $4.2 million matured during 2017. The Company's purchases of property and equipment of $230,000 in 2017 were mainly for improvements to production and process capabilities and two vehicles. Also, during 2017, the Company incurred $39,000 in patent application costs that the Company has recorded as an asset and will amortize upon successful completion of the application process. In addition, the Company sold three vehicles for $33,000.

Related to the Company's loan, the Company made principal payments of $138,000 in 2018 and $140,000 in 2017. During 2017, the Company received $2,000 from financing activities from the issuance of 250 shares of common stock due to the exercise of stock options, while the Company repurchased 35,450 shares of its own stock for $300,000.

On April 1, 2016, the Company entered into a financing agreement to borrow $3.4 million. The proceeds from the loan were used to finance the construction of a 27,300-square foot building, as well as related equipment for use in the Company's manufacture of sound deadening technology used in the aerospace industry and products consisting of etched composites, ceramics, glass and silicon wafers, to be located in Duluth, Minnesota. The Loan requires monthly payments of approximately $18,000, including interest. The Loan bears interest at a rate of 2.60% per year, subject to change based upon changes to the maximum federal corporate tax rate, payable monthly, and matures on April 1, 2041. The Loan is subject to mandatory purchase provisions, under which any owners of the Bonds (the "Owners") may tender the Bonds to the Issuer on April 1, 2021, which would result in the Company repaying the outstanding loan principal and any outstanding accrued and unpaid interest to the Issuer at that time. If in the event the Bonds are not repurchased on April 1, 2021, the Bonds shall be subject to the interest rate and redemption provisions set forth in the associated covenant agreement. Including debt costs of approximately $139,000, the Loan's effective annual interest rate was 3.23% at December 31, 2018. The Company is subject to certain customary covenants set forth in the associated covenant agreement, including a requirement that the Company maintain a debt service coverage ratio as of the end of each calendar quarter of not less than 1.25 to 1.00 on a rolling four-quarter basis. The Company was in compliance with the required debt service coverage ratio as of December 31, 2018 and 2017.

A bank line of credit exists providing for borrowings of up to $2,050,000 and expires on June 30, 2019. The line of credit is collateralized by the Company's assets and bears interest at 1.8 percentage points over the 30-day LIBOR rate. The Company did not utilize this line of credit during 2018 or 2017, and there were no borrowings outstanding as of December 31, 2018 and 2017. There are no financial covenants related to the line of credit.

The Company believes that current financial resources, its line of credit, cash generated from operations and secured through debt financing, and short-term investments, along with the Company's capacity for additional debt and/or equity financing will be sufficient to fund current and anticipated business operations. The Company also believes that it is unlikely that a decrease in demand for the Company's products would impair the Company's ability to fund operations given its excess cash and available line of credit.

Capital Expenditures

In 2018, the Company incurred $543,000 of capital expenditures which were mainly for building upgrades and improvements to production and process capabilities. In 2017, the Company incurred $230,000 of capital expenditures mainly for improvements to production and process capabilities and two vehicles.

The Company expects capital expenditures in 2019 of approximately $577,000. The planned expenditures primarily will be to upgrade the Company's costing capabilities, AMS related equipment, replacement of computer hardware and two vehicles. These commitments are expected to be funded with cash generated from operating activities.

International Activity

The Company markets its products in numerous countries in various regions of the world, including North America, Europe, Latin America, and Asia. The Company's 2018 foreign sales of $5.3 million were approximately 29.4% of total sales, compared to the 2017 foreign sales of $5.4 million, which were 30.5% of total sales. The Company realized a decrease in foreign sales due to the 2017 sale of two DTX printers into Europe. There were no printer sales in 2018.

The Company's foreign transactions are primarily negotiated, invoiced and paid in U.S. dollars, though a portion is transacted in Euros. IKONICS has not implemented an economic hedging strategy to reduce the risk of foreign currency translation exposures, which management does not believe to be significant based on the scope and geographic diversity of the Company's foreign operations. Furthermore, the impact of foreign exchange on the Company's balance sheet and operating results was not material in either 2018 or 2017.

Future Outlook

IKONICS has spent an average of approximately 4.0% of annual sales in research and development and has made capital expenditures related to new products and programs. The Company plans to maintain its efforts in these areas to expedite internal product development as well as to form technological alliances with outside entities to commercialize new product opportunities.

The Company continues to make progress on its AMS business initiative as demonstrated by its 2018 sales. The Company has three long-term sales agreements in place for its technology with major aerospace companies. In anticipation of this growing business, the Company increased its AMS capacity with a 27,300 square foot expansion at its Morgan Park site in 2016.

The Company is also continuing to pursue DTX-related business initiatives. Despite lower sales in 2018, the Company expects increasing consumable sales as a result of the sale of two DTX printers in 2017 and additional DTX printer sales are expected later in 2019. In addition to making efforts towards growing the inkjet technology business, the Company offers a range of products for creating texture surfaces and has introduced a fluid for use in prototyping. The Company is currently working on production improvements to enhance its customer offerings. The Company has been awarded European, Japanese, and United States patents on its DTX technologies. The Company has also modified its DTX technology to facilitate entry into the market for prototyping.

Both the Domestic and IKONICS Imaging units remain profitable in mature markets. Although these business units require aggressive strategies to grow market share, both are developing new products and business relationships that we believe will contribute to growth. In October 2017, the Company introduced SubTHAT!™, a patent-pending product for the dye-sublimation market. The Company fulfilled a $258,000 SubTHAT!™ initial stocking order in 2017 but did not receive an order of that magnitude in 2018. Early in 2019 the Company introduced its new IKONART™ product to positive reviews. IKONART™ provides a new way to make custom reusable stencils for the creative arts markets. In addition to its traditional emphasis on domestic markets, the Company will continue efforts to grow its business internationally by attempting to develop new markets and expanding market share where it has already established a presence. However, the strong U.S. dollar has made this challenging.

Other future activities undertaken to expand the Company's business may include acquisitions, building improvements, equipment additions, new product development and marketing opportunities.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements.

Recent Accounting Pronouncements

During February 2016, the FASB issued ASU No. 2016-02, Leases. ASU No. 2016-02 was issued to increase transparency and comparability among organizations by recognizing all lease transactions (with terms in excess of 12 months) on the balance sheet as a lease liability and a right-of-use asset (as defined). ASU No. 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with earlier application permitted. Upon adoption, the lessee will apply the new standard retrospectively to all periods presented or retrospectively using a cumulative effect adjustment in the year of adoption. The Company will adopt 2016-02 on January 1, 2019 by applying a cumulative effect adjustment of the impact; however the adoption will not have a material impact on the Company's financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable

Item 8. Financial Statements

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of IKONICS Corporation

Opinion on the Financial Statements

We have audited the accompanying balance sheets of IKONICS Corporation (the Company) as of December 31, 2018 and 2017, the related statements of operations, stockholders' equity and cash flows for the years then ended, and the related notes to the financial statements (collectively, 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 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/ RSM US LLP

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

Duluth, Minnesota
March 1, 2019

IKONICS CORPORATION

BALANCE SHEETS

DECEMBER 31, 2018 AND 2017

	December 31, 2018	**December 31, 2017**
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 1,623,137	$ 929,700
Short-term investments	2,695,000	2,895,000
Trade receivables, less allowance of $53,000 in 2018 and 2017	2,215,215	2,190,260
Inventories	2,046,588	2,086,065
Prepaid expenses and other assets	375,362	168,242
Income taxes receivable	2,768	2,116
Total current assets	8,958,070	8,271,383
PROPERTY, PLANT, AND EQUIPMENT, at cost:		
Land and building	9,500,429	9,207,790
Machinery and equipment	4,964,816	4,968,595
Office equipment	1,559,728	1,573,191
Vehicles	245,679	245,679
	16,270,652	15,995,255
Less accumulated depreciation	(8,185,910)	(7,693,594)
Total property, plant and equipment at cost	8,084,742	8,301,661
INTANGIBLE ASSETS, less accumulated amortization of $149,740 in 2018 and $174,991 in 2017	376,406	351,186
Total assets	$ 17,419,218	$ 16,924,230
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Current portion of long-term debt	$ 129,282	$ 130,899
Accounts payable	647,528	321,860
Accrued compensation	366,900	360,554
Other accrued liabilities	159,821	62,468
Total current liabilities	1,303,531	875,781
LONG-TERM LIABILTIES		
Long-term debt, less current portion	2,821,657	2,946,518
Deferred income taxes	183,000	144,000
Total long-term liabilities	3,004,657	3,090,518

Total liabilities	4,308,188	3,966,299
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Preferred stock, par value $.10 per share; authorized 250,000 shares; issued none	—	—
Common stock, par value $.10 per share; authorized 4,750,000 shares; issued and outstanding 1,983,553 shares in 2018 and 2017.	198,355	198,355
Additional paid-in-capital	2,723,024	2,709,390
Retained earnings	10,189,651	10,050,186
Total stockholders' equity	13,111,030	12,957,931
Total liabilities and stockholders' equity	$17,419,218	$16,924,230

See notes to financial statements.

IKONICS CORPORATION

STATEMENTS OF OPERATIONS

YEARS ENDED DECEMBER 31, 2018 AND 2017

	Year Ended December 31, 2018	2017
NET SALES	$18,213,653	$17,243,244
COST OF GOODS SOLD	11,959,626	11,512,699
GROSS PROFIT	6,254,027	5,730,545
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	5,350,966	5,506,466
RESEARCH AND DEVELOPMENT EXPENSES	677,242	688,688
INCOME (LOSS) FROM OPERATIONS	225,819	(464,609)
INTEREST EXPENSE	(90,583)	(83,080)
OTHER	50,229	23,542
INCOME (LOSS) BEFORE INCOME TAXES	185,465	(524,147)
INCOME TAX EXPENSE (BENEFIT)	46,000	(298,000)
NET INCOME (LOSS)	$139,465	$(226,147)
INCOME (LOSS) PER COMMON SHARE:		
Basic	$0.07	$(0.11)
Diluted	$0.07	$(0.11)
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING		
Basic	1,983,553	2,007,613
Diluted	1,983,553	2,007,613

See notes to financial statements.

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IKONICS CORPORATION

STATEMENTS OF STOCKHOLDERS' EQUITY

YEARS ENDED DECEMBER 31, 2018 AND 2017

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Total Stock-holders' Equity
BALANCE AT DECEMBER 31, 2016	2,018,753	$201,875	$2,732,006	$10,525,279	$13,459,160
Net loss	—	—	—	(226,147)	(226,147)
Exercise of stock options and related tax benefit	250	25	1,798	—	1,823
Common stock repurchased	(35,450)	(3,545)	(47,975)	(248,946)	(300,466)
Stock based compensation	—	—	23,561	—	23,561
BALANCE AT DECEMBER 31, 2017	1,983,553	198,355	2,709,390	10,050,186	12,957,931
Net income	—	—	—	139,465	139,465
Stock based compensation	—	—	13,634	—	13,634
BALANCE AT DECEMBER 31, 2018	1,983,553	$198,355	$2,723,024	$10,189,651	$13,111,030

See notes to financial statements.

IKONICS CORPORATION

STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2018 AND 2017

	Year Ended	
	2018	**2017**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	$139,465	$(226,147)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation	758,834	836,877
Amortization	36,485	38,265
Stock based compensation	13,634	23,561
Net loss (gain) on sale and disposal of plant and equipment	1,230	(28,689)
Deferred income taxes	39,000	(302,000)
Changes in working capital components:		
Trade receivables	(24,955)	146,241
Inventories	39,477	(99,893)
Prepaid expenses and other assets	(207,120)	193,663
Income tax receivable	(652)	64,003
Accounts payable	325,668	(408,526)
Accrued expenses	103,699	(32,666)
Net cash provided by operating activities	1,224,765	204,689
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of plant and equipment	(543,145)	(230,089)
Proceeds from sales of equipment	—	32,635
Purchases of intangibles assets	(49,970)	(38,977)
Purchases of short-term investments	(5,615,000)	(3,875,000)
Proceeds on sale of short-term investments	5,815,000	4,226,000
Net cash (used in) provided by investing activities	(393,115)	114,569
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payment on long-term debt	(138,213)	(139,690)
Repurchase of common stock	—	(300,466)
Proceeds from exercise of stock options	—	1,885
Net cash used in financing activities	(138,213)	(438,271)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	693,437	(119,013)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	929,700	1,048,713

CASH AND CASH EQUIVALENTS AT END OF PERIOD	$1,623,137	$929,700
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for interest	$78,112	$70,990
Cash paid for income taxes, net	$7,652	$60,003

See notes to financial statements.

IKONICS CORPORATION

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2018 AND 2017

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business and Foreign Export Sales - IKONICS Corporation's (the Company or IKONICS) traditional business has been the development and manufacturing of high-quality photochemical imaging systems for sale primarily to a wide range of printers and decorators of surfaces. Customers' applications are primarily screen printing and abrasive etching. These sales have been augmented with inkjet receptive films, ancillary chemicals and related equipment to provide a full line of products and services to its customers. Leveraging these technologies the Company is also diversifying and expanding its business to industrial markets. These efforts also include the Company's Advanced Material Solutions (AMS) business unit which uses the Company's proprietary process and photoresist film for the abrasive etching of composite materials, industrial ceramics, silicon wafers, and glass wafers. The customer base for AMS is primarily the aerospace and electronics industries. Based on its expertise in ultraviolet curable fluids and inkjet receptive substrates, the Company has also developed a patented digital texturing technology (DTX) for putting patterns and textures into steel molds for the plastic injection molding industry. The original equipment manufacturer ("OEM") for the Company's DTX technology is primarily the automotive industry. Industrial inkjet printers, which are integral to the DTX system, are manufactured and sold by a strategic partner. The Company's business plan is to sell a suite of products including consumable fluids and transfer films. For most markets these sales are direct to the mold maker. The DTX technology is being expanded to prototyping where the Company's technology offers a unique combination of high definition and large format prints. The Company's principal markets are throughout the United States. In addition, the Company sells to Europe, Latin America, Asia, and other parts of the world. The Company extends credit to its customers, all on an unsecured basis, on terms that it establishes for individual customers.

Foreign sales approximated 29.4% and 30.5% of net sales in 2018 and 2017, respectively. The Company's trade receivables at December 31, 2018 and 2017 due from foreign customers were 27.6% and 25.5% of total trade receivables, respectively. The foreign export receivables are comprised primarily of open credit arrangements with terms ranging from 30 to 90 days. No single customer or foreign country represented greater than 10% of net sales in 2018 or in 2017.

The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure.

A summary of the Company's significant accounting policies follows:

Cash Equivalents — The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. Cash equivalents consist of money market funds in which the carrying value approximates fair value because of the short maturity of these instruments. The money market fund invests in United States dollar denominated securities that present minimal credit risk and consist of investments in debt securities issued or guaranteed by the United States government or by United States government agencies or instrumentalities, repurchase agreements fully collateralized by the United States Treasury, and United States government securities.

Short-Term Investments — Short-term investments consist of fully insured certificates of deposit with original maturities ranging from one to twelve months as of both December 31, 2018 and 2017.

A small percentage of the trade receivables balance is denominated in a foreign currency with no concentration in any given country. At the end of each reporting period, the Company analyzes the receivable balance for customers paying in a foreign currency. These balances are adjusted to each quarter or year-end spot rate. Foreign currency transactions and translation adjustments did not have a significant effect on the Balance Sheets or the Statements of Operations, Stockholders' Equity and Cash Flows for 2018 and 2017.

Inventories — Inventories are stated at the lower of cost or net realizable value using the last-in, first-out (LIFO) method. If the first-in, first-out (FIFO) cost method had been used, inventories would have been approximately $1,287,000 and $1,183,000 higher than reported at December 31, 2018 and 2017, respectively. The inventory reserve for obsolescence was $9,000 and $7,000 at December 31, 2018 and 2017, respectively. The major components of inventories are as follows:

	Dec 31, 2018	**Dec 31, 2017**
Raw materials	$1,767,458	$1,428,924
Work-in-progress	370,075	423,186
Finished goods	1,196,516	1,416,547
Reduction to LIFO cost	(1,287,461)	(1,182,592)
Total Inventories	$2,046,588	$2,086,065

Property, Plant and Equipment — Major expenditures extending the life of the property, plant and equipment are capitalized. Repair and maintenance costs are expensed in the period in which they are incurred. Depreciation of property, plant and equipment is computed using the straight-line method over the following estimated useful lives:

	Years
Buildings	15-40
Machinery and equipment	5-10
Office equipment	3-10
Vehicles	3

Intangible Assets — Intangible assets consist of patents. Intangible assets are amortized on a straight-line basis over their estimated useful lives or agreement terms.

As of December 31, 2018, the Company's sole intangible assets consisted of patents which had a remaining estimated weighted average useful life of 10.1 years.

Impairment of Long-lived Assets — The Company reviews its long-lived assets, including property, plant and equipment and intangible assets, for impairment when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. Any impairment loss recorded is measured as the amount by which the carrying value of the assets exceeds the fair value of the assets. To date, the Company has determined that no loss on impairment of long-lived assets exists.

Fair Value of Financial Instruments — The carrying amounts of financial instruments, including cash and cash equivalents, short-term investments, trade receivables, accounts payable, and accrued liabilities approximate fair value due to the short maturities of these instruments. The fair value of long-term debt approximates its carrying value and has been estimated based on interest rates being offered for similar debt having the same or similar remaining maturities and collateral requirements.

Revenue Recognition – In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, *Topic 606. Revenue from Contracts with Customers* (Topic 606), and in August 2015, FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of Effective Date*, which deferred the effective date of ASU 2014-09 by one year. Topic 606 supersedes the revenue recognition requirements previously set forth in the Accounting Standards Codification (ASC) Topic 605, *Revenue Recognition*, and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services.

On January 1, 2018, the Company adopted Topic 606 for all customer contracts using the modified retrospective method. The adoption of Topic 606 did not result in a change to revenue previously recognized under prior revenue recognition rules. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The Company does not expect the adoption of the new revenue standard to have a material impact to its operating results on an ongoing basis. A majority of the Company's sales revenue continues to be recognized when products are shipped from its manufacturing facility. However, depending on the individual terms of the agreement with the customer, some sales revenue may be recognized when the goods arrive at the customer's location, the point at which control transfers.

Changes to the Company's significant accounting policies as a result of adopting Topic 606 are discussed below:

Revenue recognition. Revenue is measured based on consideration specified in the contract with a customer, adjusted for any applicable estimates of variable consideration and other factors affecting the transaction price, including noncash consideration, consideration paid or payable to customers and significant financing components. While most of the Company's revenue is contracted with customers through one-time purchase orders and short-term contracts, the Company does have long-term arrangements with certain customers. Revenue from all customers is recognized when a performance obligation is satisfied by transferring control of a distinct good or service to a customer.

Individually promised goods and services in a contract are considered a distinct performance obligation and accounted for separately if the customer can benefit from the individual good or service on its own or with other resources that are readily available to the customer and the good or service is separately identifiable from other promises in the arrangement. When an arrangement includes multiple performance obligations, the consideration is allocated between the performance obligations in proportion to their estimated standalone selling price. Costs related to products delivered are recognized in the period incurred, unless criteria for capitalization of costs are met. Costs of revenues consist primarily of direct labor, manufacturing overhead, materials and components. The Company does not incur significant upfront costs to obtain a contract. If costs to obtain a contract were to become material, the costs would be recorded as an asset and amortized to expense in a manner consistent with the related recognition of revenue.

The Company excludes from revenue governmental assessed and imposed taxes on revenue transactions that are invoiced to customers. The Company includes freight billed to customers in revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of goods sold.

The timing of revenue recognition, billings and cash collections results in accounts receivable on the balance sheet.

Performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. A contract's transaction price is allocated to each distinct performance obligation in proportion to its standalone selling price and recognized as revenue when, or as, the performance obligation is satisfied. The Company's various performance obligations and the timing or method of revenue recognition are discussed below:

The Company sells its products to both distributors and end-users. Each unit of product delivered under a customer order represents a distinct and separate performance obligation as the customer can benefit from each unit on its own or with other resources that are readily available to the customer and each unit of product is separately identifiable from other products in the arrangement.

The transaction price for the Company's products is the invoiced amount. The Company does not have variable consideration in the form of refunds, credits, rebates, price concessions, pricing incentives or other items impacting transaction price. The purchase order pricing in arrangements with customers is deemed to approximate standalone selling price; therefore, the Company does not need to allocate proceeds on a relative standalone selling price allocation between performance obligations. The Company applies the practical expedient in paragraph 606-10-50-14 and does not disclose information about remaining performance obligations that have original expected durations of one year or less. There are no material obligations that extend beyond one year.

Revenue is recognized when transfer of control occurs as defined by the terms in the customer agreement. The Company immediately recognizes incidental items that are immaterial in the context of the contract. The Company has also applied the practical expedient in paragraph 606-10-32-18 regarding the adjustment of the promised amount of consideration for the effects of a significant financing component when the customer pays for that good or service within one year or less, as the Company does not have any significant financing components in its customer arrangements as payment is received at or shortly after the point of sale, generally thirty to ninety days.

The Company estimates returns based on an analysis of historical experience if the right to return products is granted to its customers. The Company does not record a return asset as non-conforming products are generally not returned. The Company’s return policy does not vary by geography. The customer has no rotation or price protection rights.

Trade receivables. Trade receivables include amounts invoiced and currently due from customers. The amounts due are stated at their net estimated realizable value. The Company records an allowance for doubtful accounts to provide for the estimated amount of receivables that will not be collected. The allowance is based on a review of all outstanding amounts on an on-going basis. Management determines the allowance for doubtful accounts by regularly evaluating individual customer receivables and considers a customer's financial condition, credit history, and current economic conditions. Trade receivables are written off when deemed uncollectible. Recoveries of trade receivables previously written off are recorded when received. Accounts are considered past due if payment is not received according to agreed-upon terms.

Sales commissions. Sales commissions paid to sales representatives are eligible for capitalization as they are incremental costs that would not have been incurred without entering into a specific sales arrangement and are recoverable through the expected margin on the transaction. The Company has elected to apply the practical expedient provided by ASC 340-40-25-4 and recognize the incremental costs of obtaining contracts as an expense when incurred, as the amortization period of the assets that would have otherwise been recognized is one year or less. The Company records these costs in selling, general, and administrative expense.

Product warranties. The Company offers warranties on various products and services. These warranties are assurance type warranties that are not sold on a standalone basis; therefore, they are not considered distinct performance obligations. The Company estimates the costs that may be incurred under its warranties and records a liability in the amount of such costs at the time the revenue is recognized for the product sale.

International revenue. The Company markets its products to numerous countries in North America, Europe, Latin America, Asia and other parts of the world. Foreign sales were approximately 29% of total sales in 2018 compared to 31% of sales in 2017.

Deferred Taxes — Deferred taxes are provided on a liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The Company classifies deferred tax assets and liabilities as noncurrent. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. The Tax Cut and Jobs Act of 2017 (the "Tax Reform Act") was enacted December 22, 2017. This legislation makes significant changes in U.S. tax law including a reduction in the corporate tax rates, changes to net operating loss carryforwards and carrybacks and a repeal of the corporate alternative minimum tax. The legislation reduced the U.S. corporate tax rate from the current rate of 34% and 35% to 21%. As a result of the enacted law, the Company was required to revalue deferred tax assets and liabilities at the newly enacted rate. This revaluation resulted in a benefit of $115,000 in 2017 to income tax expense in continuing operations and a corresponding reduction in the deferred tax liability. The other provisions of the Tax Reform Act did not have a material impact on the consolidated financial statements.

The Company follows the accounting standard on accounting for uncertainty in income taxes, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this guidance, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement. The guidance on accounting for uncertainty in income taxes also addresses derecognition, classification, interest and penalties on income taxes, and accounting in interim periods.

Earnings Per Common Share (EPS) – Basic EPS is calculated using net income (loss) divided by the weighted average of common shares outstanding. Diluted EPS is similar to Basic EPS except that the weighted average number of common shares outstanding is increased to include the number of additional common shares, when dilutive, that would have been outstanding if the potential dilutive common shares, such as those shares subject to options, had been issued.

Shares used in the calculation of diluted EPS are summarized below:

	2018	**2017**
Weighted average common shares outstanding	1,983,553	2,007,613
Dilutive effect of stock options	—	—
Weighted average common and common equivalent shares outstanding	1,983,553	2,007,613

At December 31, 2018, options to purchase 18,000 shares of common stock with a weighted average exercise price of $13.22 were outstanding, but were excluded from the computation of common share equivalents because they were anti-dilutive.

If the Company was in a net income position at December 31, 2017, 2,250 options with a weighted average exercise price of $8.91 would have been included as part of the weighted average common and common equivalent shares outstanding as the options would have been dilutive, while 15,918 options with a weighted average exercise price of $14.51 would have remained excluded as the options were anti-dilutive.

Employee Stock Plan - The Company accounts for employee stock options under the provision of ASC 718, Compensation — Stock Compensation.

Recent Accounting Pronouncements - During February 2016, the FASB issued ASU No. 2016-02, *Leases*. ASU No. 2016-02 was issued to increase transparency and comparability among organizations by recognizing all lease transactions (with terms in excess of 12 months) on the balance sheet as a lease liability and a right-of-use asset (as defined). ASU No. 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with earlier application permitted. Upon adoption, the lessee will apply the new standard retrospectively to all periods presented or retrospectively using a cumulative effect adjustment in the year of adoption. The Company will adopt 2016-02 on January 1, 2019 by applying a cumulative effect adjustment of the impact; however, the Company does not expect the effect of the adoption to have a material impact on the Company's financial statements.

Use of Estimates — The preparation of the 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 revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates include the allowance for doubtful trade receivables, the reserve for inventory obsolescence, and the valuation allowance for deferred tax assets.

2. INCOME TAXES

Income tax expense (benefit) for the years ended December 31, 2018 and 2017 consists of the following:

	2018	2017
Current:		
Federal	$—	$(5,000)
State	7,000	9,000
	7,000	4,000
Deferred - Federal	39,000	(302,000)
	$46,000	$(298,000)

The Tax Reform Act reduced the Company's U.S. corporate tax rate from 34% to 21%. The expected provision (benefit) for income taxes, computed by applying the U.S. federal income tax rate of 21% in 2018 and 34% in 2017 to income (loss) before taxes, is reconciled to income benefit as follows:

	2018	2017
Expected provision for federal income taxes	$39,000	$(178,000)
State income taxes, net of federal benefit	7,000	2,000
Non-deductible meals, entertainment, and life insurance	12,000	29,000
Research and development credit	(43,000)	(38,000)
Change in valuation allowance	18,000	16,000
Tax rate change adjustment related to Tax Reform Act	—	(115,000)
Prior year true-ups and other	13,000	(14,000)
	$46,000	$(298,000)

Net deferred tax liabilities consist of the following as of December 31, 2018 and 2017:

	2018	2017
Deferred tax liabilities:		
Accrued vacation	$18,000	$19,000
Inventories reserve	46,000	46,000
Allowance for doubtful accounts	2,000	2,000
Allowance for sales returns	9,000	9,000
Research and development credit carryforward	161,000	131,000

Accrued self-insured medical	4,000	1,000
Property and equipment	(282,000)	(242,000)
Intangible assets	(73,000)	(65,000)
Net operating loss	33,000	40,000
Other	8,000	6,000
Valuation allowance	(109,000)	(91,000)
Net deferred tax liabilities	$(183,000)	$(144,000)

The Company's federal net operating loss carryforward and research and development credit carryover as of December 31, 2018 was $141,000 and $52,000, respectively, and will begin to expire in 2037. The Company's state net operating loss carryforwards at December 31, 2018 total $54,000 and begin expiring in 2026. The Company has state research and development credit carryforwards as of December 31, 2018 of $138,000.

The valuation allowance balance of $109,000 and $91,000 at December 31, 2018 and 2017, relates entirely to Minnesota research and development credit carryforwards that the Company does not expect to utilize and begin to expire in 2028. The change in the valuation allowance was $18,000 in 2018 and $31,000 in 2017. Approximately $15,000 of the $31,000 change in 2017 is a result of recording the impact of the revaluation on these credits and corresponding increase in valuation allowance related to the Tax Reform Act discussed above.

It has been the Company's policy to recognize interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2018 and 2017, there was no liability for unrecognized tax benefits.

The Company is subject to federal and state taxation. As of December 31, 2018, with few exceptions, the Company is no longer subject to examination prior to tax year 2015.

3. INTANGIBLE ASSETS

Intangible assets consist of patents, patent applications, and licenses. Capitalized patent application costs are included with patents. Intangible assets are amortized on a straight-line basis over their estimated useful lives or terms of their agreement, whichever is shorter. There were no abandonments or impairment adjustments to intangible assets during the years ended December 31, 2018 and 2017.

Intangible assets at December 31, 2018 and 2017 consist of the following:

	December 31, 2018		**December 31, 2017**	
	Gross Carrying Amount	**Accumulated Amortization**	**Gross Carrying Amount**	**Accumulated Amortization**
Amortized intangible assets:				
Patents	$526,146	$ (149,740)	$476,177	$ (126,032)
License	—	—	50,000	(48,959)
	$526,146	$ (149,740)	$526,177	$ (174,991)

	2018	**2017**
Aggregate amortization expense:		
For the years ended December 31	$24,749	$25,919

Estimated amortization expense for the years ending December 31:

2019	$25,000
2020	24,000
2021	24,000
2022	24,000
2023	23,000

In connection with the license agreement, the Company has agreed to pay royalties ranging from 3% to 5% on the sales of products subject to the agreements. The Company incurred $13,000 and $11,000 of expense under these agreements during 2018 and 2017, respectively, which are included in selling, general and administrative expenses in the Statements of Operations.

4. RETIREMENT PLAN

The Company has established a salary deferral plan under Section 401(k) of the Internal Revenue Code. Such deferrals accumulate on a tax-deferred basis until the employee withdraws the funds. The Company contributes up to 5% of each eligible employee's compensation. Total retirement expense for the years ended December 31, 2018 and 2017 was approximately $239,000 and $235,000, respectively.

5. SEGMENT INFORMATION

The Company's reportable segments are strategic business units that offer different products and have varied customer bases. There are five reportable segments: Domestic, Export, IKONICS Imaging, DTX and AMS. Domestic sells screen printing film, emulsions, and inkjet receptive film to distributors located in the United States and Canada. IKONICS Imaging sells photo resistant film, art supplies, glass, metal medium and related abrasive etching equipment to end user customers located in the United States and Canada. AMS provides sound deadening technology to the aerospace industry along with products and services for etched composites, ceramics, glass and silicon wafers. DTX includes products and customers related to patented and proprietary inkjet technology used for mold texturing and prototyping. Export sells primarily the same products as Domestic and the IKONICS Imaging products not related to AMS or DTX. The accounting policies of the segments are the same as those described in the summary of significant accounting policies included in Note 1.

Management evaluates the performance of each segment based on the components of divisional income, and does not allocate assets and liabilities to segments except for trade receivables. Financial information with respect to the reportable segments follows:

For the year ended December 31, 2018:

	Domestic	**Export**	**IKONICS Imaging**	**DTX**	**AMS**	**Unalloc.**	**Total**
Net sales	$7,288,433	$4,877,718	$3,842,089	$420,714	$1,784,699	$—	$18,213,653
Cost of goods sold	4,397,353	3,841,712	2,034,254	137,039	1,549,268	—	11,959,626
Gross profit	2,891,080	1,036,006	1,807,835	283,675	235,431	—	6,254,027
Selling, general, and administrative*	1,289,923	509,549	1,001,147	150,698	367,533	2,032,116	5,350,966
Research and development*	—	—	—	—	—	677,242	677,242
Income (loss) from operations	$1,601,157	$526,457	$806,688	$132,977	$(132,102)	$(2,709,358)	$225,819

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For the year ended December 31, 2017:

	Domestic	Export	IKONICS Imaging	DTX	AMS	Unalloc.	Total
Net sales	$6,934,433	$4,722,950	$4,021,970	$817,640	$746,251	$—	$17,243,244
Cost of goods sold	4,100,497	3,721,800	1,915,390	487,509	1,287,503	—	11,512,699
Gross profit (loss)	2,833,936	1,001,150	2,106,580	330,131	(541,252)	—	5,730,545
Selling, general, and administrative*	1,345,427	645,973	1,065,957	168,553	376,498	1,904,058	5,506,466
Research and development*	—	—	—	—	—	688,688	688,688
Income (loss) from operations	$1,488,509	$355,177	$1,040,623	$161,578	$(917,750)	$(2,592,746)	$(464,609)

*The Company does not allocate all general and administrative expenses or any research and development expenses to its operating segments for internal reporting.

Trade receivables by segment as of December 31, 2018 and December 31, 2017 were as follows:

	Dec 31, 2018	Dec 31, 2017
Domestic	$1,019,689	$1,119,228
Export	610,334	558,872
IKONICS Imaging	280,939	238,813
DTX	15,692	64,278
AMS	331,708	238,848
Unallocated	(43,147)	(29,779)
Total	$2,215,215	$2,190,260

Subsequent to year-end, the Company revised its composition of reportable segments to eliminate the Export segment which contains both screen printing and photo resist related financial information and allocated the related activity to the respective Domestic and IKONICS Imaging segments. Organizationally, the Company began focusing less on geography and more on the similarity of products sold when managing its product lines. To reflect how the Company and chief operating decision maker reviews and manages the businesses, the Company no longer captures discrete financial information for Export segment.

6. STOCKHOLDERS' EQUITY

The Company has a stock incentive plan for the issuance of up to 442,750 shares of common stock. The plan provides for granting eligible participants stock options or other stock awards, as described by the plan, at prices ranging from 85% to 110% of fair market value at date of grant. Options granted expire up to seven years after the date of grant. Such options generally become exercisable over a three year period. A total of 102,157 shares of common stock are reserved for additional grants of options under the plan as of December 31, 2018.

Under the plan, the Company charged compensation expense of $13,634 and $23,561 against income (loss) in 2018 and 2017, respectively.

As of December 31, 2018, there was approximately $13,000 of unrecognized compensation expense related to unvested share-based compensation awards granted which is expected to be recognized over the next three years.

Proceeds from the exercise of stock options were approximately $2,000 in 2017. No stock options were exercised in 2018.

The fair value of options granted during 2018 and 2017 was estimated using the Black-Scholes option pricing model with the following assumptions:

	2018	**2017**
Dividend yield	—	—
Expected volatility	40.0%	41.3%
Expected life of option	5	5
Risk-free interest rate	2.8%	1.8%
Fair value of each option on grant date	$3.38	$3.43

There were 2,750 and 2,250 options granted during 2018 and 2017, respectively.

A summary of the status of the Company's stock option plan as of December 31, 2018 and changes during the year then ended is presented below:

Weighted
Average

	Shares	Exercise Price
Outstanding at January 1, 2018	18,168	$ 13.81
Granted	2,750	8.63
Exercised	—	—
Expired and forfeited	(2,918)	12.56
Outstanding at December 31, 2018	18,000	$ 13.22
Exercisable at December 31, 2018	12,247	$ 15.09

The weighted-average grant date fair value of options granted was $3.38 and $3.43 for the years ended December 31, 2018 and 2017, respectively. The total intrinsic value of stock options exercised was $490 for the year ended December 31, 2017.

In prior years, the Company's board of directors had authorized the repurchase of up to 250,000 shares of common stock.   A total of 219,589 shares were repurchased under this program including 1,950 shares repurchased during the second quarter of 2017. As of August 2, 2017, the plan allowed for an additional 30,411 shares to be repurchased. On August 3, 2017, the Company's board of directors approved a new repurchase authorization for up to 100,000 shares of the Company's common stock, which replaces all prior authorizations. Shares repurchased under this new authorization may be made through open market and privately negotiated transactions from time to time. The new share repurchase authorization does not have an expiration date. Subsequent to August 2, 2017 the Company repurchased 33,500 shares for $278,620 including the repurchase of 25,000 shares for $218,750 from a beneficial shareholder holding more than 5% of outstanding common stock. No shares of common stock were repurchased in 2018.

7. CONCENTRATION OF CREDIT RISK

The Company maintains its cash balances primarily in two financial institutions. As of December 31, 2018, the balance at one of the institutions exceeded the Federal Deposit Insurance Corporation coverage.

Trade receivables are financial instruments that also expose the Company to concentration of credit risk. The large number of customers comprising the Company's customer base and their dispersion across different geographic areas limits such exposure. In addition, the Company routinely assesses the financial strength of its customers and maintains an allowance for doubtful accounts that management believes will adequately provide for credit losses.

8. LONG-TERM DEBT

On April 1, 2016, the Company entered into a financing agreement (the "Financing Agreement") under which the Duluth Economic Development Authority (the "Issuer") agreed to sell $3,415,000 of its Tax Exempt Industrial Revenue Bonds, Series 2016 (IKONICS Project) (the "Bonds") to Wells Fargo Bank, National Association (the "Bank"), and the Bank agreed to lend to the Company the proceeds received from the sale of the Bonds (the "Loan").

The closing of the sale of the Bonds occurred on April 29, 2016. The proceeds from the Loan were used to finance the construction of a 27,300-square foot building as well as related equipment for use in the Company's manufacture of sound deadening technology used in the aerospace industry and products consisting of etched composites, ceramics, glass and silicon wafers, to be located in Duluth, Minnesota (the "Project").

The Loan requires monthly payments of approximately $18,000, including interest. The Loan bears interest at a rate of 2.60% per year, subject to change based upon changes to the maximum federal corporate tax rate, payable monthly, and matures on April 1, 2041. Including debt costs of approximately $139,000, the Loan's effective interest rate was 3.23% at December 31, 2018.

The Loan is subject to mandatory purchase provisions, under which any owners of the Bonds (the "Owners") may tender the Bonds to the Issuer on April 1, 2021, which would result in the Company repaying the outstanding loan principal and any outstanding accrued and unpaid interest to the Issuer at that time. If in the event the Bonds are not repurchased on April 1, 2021, the Bonds shall be subject to the interest rate and redemption provisions set forth in the associated covenant agreement.

Subject to limitations in the associated covenant agreement, the Company may cause a redemption of the Bonds, in whole or in part, in authorized denominations at the redemption prices set forth in the Financing Agreement, together with any accrued or unpaid interest to the date of redemption. The Bonds are also subject to redemption in whole in the event of certain extraordinary events related to the Project.

The Company is subject to certain customary covenants set forth in the associated covenant agreement, including a requirement that the Company maintain a debt service coverage ratio as of the end of each calendar quarter of not less than 1.25 to 1.00 on a rolling four-quarter basis.

The remaining principal payments required under the agreement for years ended December 31, and the current and long-term portion of the principal, are as follows:

2019	140,000
2020	144,000
2021	148,000
2022	152,000
2023	156,000
Thereafter	2,318,000
Total Principal	3,058,000
Less: Unamortized debt issuance costs	107,000
Less: Current portion	129,000
Long-term portion	$2,822,000

In connection with the agreement, the Company incurred debt issuance costs of approximately $139,000 during 2016, which were deferred and are being amortized over the term of the Financing Agreement. Amortization of debt issuance costs was approximately $12,000 for 2018 and 2017 and is included in interest expense. Debt issuance costs of $96,000 and $11,000 are netted against long-term debt and current portion of long-term debt, respectively as of December 31, 2018. Amortization of debt costs is expected to be approximately $10,000 annually for each of the next five years.

In addition to the $3,415,000 in indebtedness pursuant to the Loan, the Company has a bank line of credit providing for borrowings of up to $2,050,000, expiring on June 30, 2019 that bears interest at 1.8 percentage points over the 30-day LIBOR rate. The Company did not utilize this line of credit during 2018 or 2017 and there were no borrowings outstanding as of December 31, 2018 and 2017. There are no financial covenants related to the line of credit and the Company expects to obtain a similar line of credit when the current line of credit expires.

Both the $3,415,000 financing pursuant to the Loan and the line of credit are collateralized by substantially all assets of the Company.

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

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures. As of December 31, 2018, an evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")). Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms.

Management's Annual Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting 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 assets of the Company;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2018. In making this assessment, management used the 2013 criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control — Integrated Framework*. Based on management's assessment and those criteria, management believes that, as of December 31, 2018, the Company maintained effective internal control over financial reporting.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Our management's report of the effectiveness on the design and operation of our internal control over financial reporting was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

Changes in Internal Control Over Financial Reporting. As of the end of the period covered by this report, the Company conducted an evaluation, under the supervision and with the participation of the principal executive officer and principal financial officer, of the Company's disclosure control and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")). Based on this evaluation, the principal executive officer and principal financial officer concluded that the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and (ii) accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Except for the implementation of certain internal controls related to the adoption of the new revenue recognition standard (Topic 606), there were no changes in our internal control over financial reporting that occurred during the first quarter of 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. The Company implemented new controls as part of its effort to adopt Topic 606. The adoption of Topic 606 required the implementation of new accounting processes which changed the company's internal controls over revenue recognition and financial reporting. The Company implemented these internal controls to ensure the Company adequately evaluated our contracts and properly assessed the impact of the new revenue recognition standard on our financial statements to facilitate its adoption. The Company has completed the design of these controls and they were implemented as of January 1, 2018.

Item 9B. Other Information

None.

PART III

Item 10. Directors and Executive Officers of the Registrant

The information to be included in the Company's definitive proxy statement for the 2019 Annual Meeting of Shareholders under the captions "Election of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" is incorporated by reference. The following information completes the Company's response to this Item 10.

The Company has adopted a code of ethics that applies to the Company's Chief Executive Officer, Chief Financial Officer, Controller and other employees performing similar functions. This code of ethics is filed as Exhibit 14 to this report. The Company intends to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or a waiver from, this code of ethics by posting such information on its web site which is located at www.ikonics.com.

Item 11. Executive Compensation

The information to be included in the Company's definitive proxy statement for the 2019 Annual Meeting of Shareholders under the captions "Election of Directors—Director Compensation," "Summary Compensation Table," "Outstanding Equity Awards at Fiscal Year-End" and "Employment Contracts; Termination of Employment and Change-In-Control Arrangements" is incorporated by reference.

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

The information to be included in the Company's definitive proxy statement for the 2019 Annual Meeting of Shareholders under the captions "Security Ownership of Principal Shareholders and Management" and "Equity Compensation Plan Information" is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information to be included in the Company's definitive proxy statement for the 2019 Annual Meeting of Shareholders under the caption "Election of Directors" is incorporated by reference. The Company has not engaged in any transaction since the beginning of its last fiscal year and does not currently propose to engage in any transaction required to be disclosed pursuant to Item 404 of Regulation S-K.

Item 14. Principal Accountant Fees and Services

The information to be included in the Company's definitive proxy statement for the 2019 Annual Meeting of Shareholders under the caption "Principal Accounting Firm Fees" is incorporated by reference.

Item 15. Exhibits and Financial Statement Schedules

(a)(1) The following financial statements of the Company are filed as part of this Annual Report on Form 10-K;

(i) Report of RSM US LLP, independent registered public accounting firm

(ii) Balance Sheets as of December 31, 2018 and 2017

(iii) Statements of Operations for the years ended December 31, 2018 and 2017

(iv) Statements of Stockholders' Equity for the years ended December 31, 2018 and 2017

(v) Statements of Cash Flows for the years ended December 31, 2018 and 2017

(vi) Notes to the Financial Statements

(b) The following exhibits are filed as part of this Annual Report on Form 10-K for the fiscal year ended December 31, 2018:

Exhibit	Description
3.1	Restated Articles of Incorporation of Company, as amended. (Incorporated by reference to the like numbered Exhibit to the Company's Registration Statement on Form 10-SB filed with the Commission on April 7, 1999 (Registration No. 000-25727)).
3.2	Amended and Restated By-Laws of the Company, as amended. (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 30, 2018 (File No. 000 25757)).
4	Specimen of Common Stock Certificate. (Incorporated by reference to the like numbered Exhibit to Amendment No. 1 to the Company's Registration Statement on Form 10-SB filed with the Commission on

	May 26, 1999 (Registration No. 000-25727)).
10.1*	IKONICS Corporation 1995 Stock Incentive Plan, as amended. (Incorporated by reference to the like numbered Exhibit to the Company's Annual Report on Form 10-K filed with the Commission on March 3, 2011 (File No. 000-25727)).
10.2	Confidentiality Agreement, dated March 11, 2013, between the Company and Joseph R. Nerges. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the Commission on March 13, 2013 (File No. 000-25727)).
14	Code of Ethics. (Incorporated by reference to the like numbered Exhibit to the Company's Annual Report on Form 10-KSB for the year ended December 31, 2003 (File No. 000-25727)).
23	Consent of Independent Registered Public Accounting Firm.
24	Powers of Attorney.
31.1	Rule 13a-14(a)/15d-14(a) Certifications of CEO.
31.2	Rule 13a-14(a)/15d-14(a) Certifications of CFO.
32	Section 1350 Certifications.
101	Interactive data files pursuant to Rule 405 of Regulation S-T.**

* Management contract or compensatory plan, contract or arrangement required to be filed as an exhibit to this Annual Report on Form 10-K.

** In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Annual Report on Form 10-K is deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise is not subject to liability under those sections.

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 on March 1, 2019.

IKONICS CORPORATION

By /s/ William C. Ulland
William C. Ulland, Chairman, Chief Executive Officer and President

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons (including a majority of the Board of Directors) on behalf of the registrant and in the capacities indicated on March 1, 2019.

/s/ William C. Ulland
William C. Ulland, Chairman, Chief Executive Officer and President
(Principal Executive Officer)

/s/ Jon Gerlach
Jon Gerlach, Chief Financial Officer and Vice President of Finance
(Principal Financial and Accounting Officer)

Marianne Bohren*	Director
Lockwood Carlson*	Director
Gregory W. Jackson*	Director
Ernest M. Harper Jr.*	Director
Darrell B. Lee*	Director
Jeffrey D. Engbrecht*	Director

*William C. Ulland, by signing his name hereto, does hereby sign this document on behalf of each of the above named Directors of the registrant pursuant to powers of attorney duly executed by such persons.

/s/ William C. Ulland
William C. Ulland, Attorney-in-Fact