PowerFilm® SOLAR

MADE IN THE USA

2018 Annual Report

PowerFilm, Inc.

2018 Annual Report

Highlights for Fiscal Year 2018

- Revenue of $3.5 million for the year ended December 31, 2018 (2017: $3.3 million).
- Net loss after tax of $2.4 million for the year ended December 31, 2018 (2017: loss of $5.0 million which included an asset impairment of $1.8 million for obsolete equipment).
- At December 31, 2018, the Company had $3.5 million in cash and cash equivalents (2017: $4.6 million).
- There is no long-term debt on the balance sheet.
- Gross margin for the year ended December 31, 2018 was negative 3.1% (2017: negative 18.5%).
- The building consolidation project was completed, combining all active manufacturing activities under a single roof, a project initiated as part of the cost restructuring of 2017.
- The addition of semi-flexible crystalline silicon (cSi) products to the product line, using cells purchased from SunPower, is resulting in new sales and significant new opportunities.
- We continue refining our marketing message to target product developers, entrepreneurs, and businesses instead of consumers, which plays to our strengths. This is taking hold as we begin 2019 with orders in hand that exceed 50% of total sales for 2018.
- Internet of Things (IoT) applications remain a growth opportunity for the intermediate term.

Chairman and CEO's Statement

In last year's report, we identified four areas of focused change that were underway:

- Defocusing on consumer markets in favor of those where lives or livelihoods depend on the unique advantages of amorphous silicon (aSi) photovoltaics (PV). These advantages include lightweight, portability, flexibility, durability, and performance under low-light conditions.

- Expanding our product range with semi-flexible crystalline silicon PV for outdoor applications in the 25-100 W range where lower cost outweighs some of the advantages of amorphous silicon.

- Retargeting marketing efforts towards product developers and entrepreneurs, emphasizing our best-in-class ability to provide engineering guidance and prototypes for solar-based power supply system solutions.

- Restarting our revenue-generating contract research engine.

We continued these strategies throughout 2018 and realized our first growth in revenues since 2011. While admittedly only a seven percent increase on a small 2017 base, this occurred as sales to our traditional military base market again fell from roughly 33 percent of our total in 2017 to 17 percent in 2018. Sales to another strong legacy market, oil exploration, were nil during 2018.

In effect, we have transitioned from a point where sales to military and oil exploration markets made up roughly 60 percent of our total in 2016 to less than 20 percent today. The result is obviously a much smaller PowerFilm, but also an organization with a more diversified list of markets served upon which we can build.

We see no indications that the military or oil exploration markets will dramatically rise for us. If so, we will gladly accept it as a windfall. Instead, we continue to see the greatest potential in the areas bulleted above. A quick summary of these is included below:

<u>Marketing aSi Products Where Lives or Livelihoods Are at Stake</u>:
The commoditization of solar has provided consumers and outdoor enthusiasts with many low cost (and unfortunately, often low quality) alternatives. We are marketing our aSi products, and focusing our engineering resources, on applications that truly value one or more of its unique characteristics. These include:

- Low-light performance in an indoor or less than full sun environment such as a point of purchase (POP) display in a retail environment or the tracking of cargo containers on a cloudy day.

- Extremely small profile and ultra-lightweight, perhaps to power a sensor for animal location tracking.

- High flexibility to enable mounting to a contoured surface such as an outboard motor or a curved monitoring device in an industrial application.

- Portability and ruggedness for those who work in environments where electrical outlets simply don't exist.

Adding cSi Products:
We successfully converted a major aSi application to a cSi application where we were susceptible to replacement by competitors due to the lower price of cSi as a technology. In the process we are developing a much stronger relationship with this customer, based on our deep technical expertise and commitment to best-in-class quality in all our products. Several other cSi opportunities are now in various phases of development with this customer.

We won back business with our cSi product which was lost several years ago due to price at a distributor focused on the marine market. Several other discussions are underway with OEMs within the marine market.

Retargeting Marketing Efforts:
Our website was redesigned in spring 2018 with an updated layout and content structure to focus on custom solutions, as well as an improved back end to support mobile browsing. We also launched our Soltronix website to promote our cSi products.

Our blog focus shifted from consumer-oriented applications to detailed portable solar industry education including more technical information on various solar technologies, charge controller options, sizing solar solutions, battery chemistry/capacity, and building low-light applications.

We brought Digi-Key and Sparkfun online as distributors for Electronic Component Panel products and our Development Kits. Both distributors reach a much broader and more technical audience than any previous PowerFilm distributor.

We completed a relaunch of our printed materials to align with the visual identity of the new website. We shifted from a "one size fits all catalog" to smaller, dedicated pieces of material written for specific events and audiences or focused on specific product lines.

Finally, we are transitioning our industry conference and trade show attendance to focus on those serving technical, IoT audiences. We support our attendance with speaking slots for PowerFilm engineering and executive staff.

Restarting Revenue-Generating Research Contracts:
PowerFilm has implemented a team and processes to identify and vet potential contracts which match well with our capabilities and align with technologies that we believe can help us grow. For example, we are currently learning exciting things about photovoltaic cell cutting which may prove to be extremely

beneficial to the company long-term, all while being compensated for our research as part of a contract exploring the potential for wearable solar.

As stated in prior reports, we continue to focus on what we can control. We are especially grateful to our employees for their open-mindedness, dedication, and can-do attitude as we transform to a sales culture that proactively “hunts” for new opportunities, many of which were unknown to us three years ago.

In short, we believe that 2017 will be a low water mark for PowerFilm and that 2018 will be the first of many years of regrowth. The challenges facing our company are still significant and our success is certainly not guaranteed. But we both trust our team and the progress made during the past year.

Rick Brimeyer
Chairman

Frank R. Jeffrey
CEO

Operational Review

Sales and Marketing

PowerFilm develops, manufactures, markets, and delivers a full and diversified line of solar products for the custom business to business (B2B), government, and consumer markets.

Custom Business to Business (B2B)

The Company engineers and supplies custom solar solutions optimized to meet the specific power needs of diverse OEM customers in a wide array of applications. Our experience and ability to collaborate with customers on the design of optimized electronic systems applying solar as an energy source is considered to be a competitive core competency.

Electronic component panels are available in a variety of sizes, voltage outputs and total power. Custom solar panels are encapsulated in different materials depending upon the customer's requirements and operating environment and can be affixed to a wide range of substrates. Custom die cuts, cabling accessories and assembly configurations are available.

A promising industry is the need for powering IoT applications, both indoors and outdoors. While most applications have very low power requirements, potential volumes in some cases are very high and can benefit from the low-light capabilities of aSi. The sales cycle for custom panels into this emerging market is long with some opportunities in the sales funnel for years. Marketing efforts and exposure tools such as electronic component distributors, development kits, instructional videos and technical blogs are targeting this market.

Beginning in 2017 there has been increased focus on the addition of semi-flexible crystalline silicon (cSi) products to our product line, which is a radical departure from the Company's amorphous silicon (aSi) only strategy that had been in place since the founding of the Company in 1988. These products are marketed and sold under the Soltronix brand name, white labels and private labels.

Soltronix products combine high-efficiency cSi solar cells, custom semi-flexible panel designs, and proprietary PowerBoost integrated charge controllers specifically targeted for price-sensitive applications where various advantages of aSi are not required.

PowerFilm is having success displacing competitive solar products with Soltronix products. In some cases, these were originally PowerFilm aSi applications. The existence of the application using competitive products means that our ramp up can be relatively short and the sales opportunity significant when we successfully compete.

Government

PowerFilm develops and sells rugged, lightweight "Made in USA" solar products for military, government, and border security applications in a variety of configurations. Historically a primary market, sales dropped significantly with the budget sequestration of 2013 and have not recovered. In 2018, efforts to grow this part of PowerFilm's business resulted in a custom panel sale to the Israeli Defense Force as well as adding government-focused distributors to our network in both Canada and Mexico. We continue to pursue opportunities with non-military US government agencies and NATO allies for military applications.

Consumer

Standard out-of-the-box consumer products are sold by a network of distributors and dealers, including:

- Standard rollable and foldable solar panels using our aSi modules across multiple sizes.
- Integrated LightSaver products including a charge controller, lithium ion battery, and solar panel in one handy package.
- PowerDrive golf car solar panels fitted for a range of models.
- Soltronix (cSi) panels across multiple sizes that include integrated charge controllers for easy plug-and-play use with 12V battery systems.

Engineering/Research and Development (R&D)

PowerFilm engineers work closely with customers to optimize their solution design. This is a PowerFilm competitive edge versus other companies, especially solar companies with generic commodity products. Our technical team also develops the manufacturing processes and tools to produce them. In addition, they perform revenue-generating contract research in fields related to solar power. These research projects are often synergistic with our core business, allowing us to expand our knowledge and manufacturing capabilities.

Two active areas of research are continuing to improve aSi solar efficiency under low-light conditions in order to support a wide array of potential IoT applications and exploring means for cutting cSi cells for use in low power systems.

Manufacturing Operations

During 2018 we completed the building consolidation project. In addition to cutting expenses, this project resulted in improved communication, employee utilization, and overall culture.

Significant knowledge and capability were gained on working with cSi modules. We are through the steep portion of the learning curve but continue to make improvements.

We reinvigorated our Lean efforts with an emphasis on establishing our cSi assembly capability. Eliminating waste will be critical to our efforts to respond to growing orders while maintaining the lower cost structure established during 2017.

Financial Review

Financial Results

Revenue of $3,496,038 was realized for the year ended December 31, 2018, compared with $3,255,783 for the year ended December 31, 2017. The increase in 2018 over 2017 was attributable primarily to growth within the transportation and asset tracking markets and increased contract revenue.

Gross Margin for the year ended December 31, 2018 was negative 3.1%, compared with negative 18.5% for the year ended December 31, 2017. The net loss was $2,417,374 for the year ended December 31, 2018, compared with a net loss of $4,985,211 for the year ended December 31, 2017. An asset impairment charge of $1,839,392 for obsolete equipment increased the net loss in fiscal year 2017.

To improve product margins and profitability, a major cost restructuring was completed in the middle of 2017. Savings of roughly $1.2 million from this effort were sustained throughout 2018.

The Company’s balance sheet at December 31, 2018 includes cash and cash equivalents of $1,160,724, short-term certificates of deposit of $2,373,313 and no long-term certificates of deposit. These accounts total $3,534,037 at December 31, 2018, compared to a total of $4,624,863 at December 31, 2017.

The Company has no long-term debt.

Interest and dividend income for the year ended December 31, 2018 was $96,320, compared to $53,699 for the previous year. The Company’s policy is to place its cash and certificates of deposit with high credit quality financial institutions in order to limit the amount of credit exposure. Although globally interest rates still are at a low level, the Company seeks investments in higher yielding certificates of deposit to get the maximum yields for highly secure investments.

Accounts Reviewed

The financial information in this announcement is from the Company's reviewed accounts for the year ended December 31, 2018.

The information presented herein has been prepared on the basis of current accounting principles generally accepted in the United States of America (US GAAP).

Outlook

The outlook for 2019 will continue to be challenging. However, we expect revenue growth over 2018 fueled primarily by an increase in cSi product sales.

Realization of one or two significant (over $500K) orders should return us to a cash neutral position. In order of likelihood, the sources of these potential orders are:

- Conversion of an existing application to solar using PowerFilm's Soltronix product.
- Emergence of a high volume IoT application from our sales funnel.
- A significant order from the military or oil exploration markets; as stated earlier either of these would be considered a windfall.

A risk is the loss of an existing significant application to a competitor. The addition of the Soltronix product lessens the likelihood of this as it gives us the potential to “replace ourselves” in cost sensitive applications where aSi is not required. It is critical that we respond as an organization to new opportunities as they become available.

Another risk could be a significant downturn in the U.S. and/or global economy. Many of the end uses for the Soltronix product are in economically cyclical markets and could be adversely impacted by a recession. Our traditional aSi business, particularly with our increased emphasis on applications where “lives or livelihoods” require its unique features, is perhaps not as sensitive, but an economic downturn could delay the product development process at customers.

We continue to be pleased with and proud of our employees. Our current management team which was put in place during the 2017 cost restructuring is achieving traction with several improved processes and systems in place.

As stated in last year’s report, the next couple years will be pivotal for the future of the Company. We are relieved but certainly not satisfied with the incremental improvement in results during 2018. We believe it is reasonable to expect continued improvement during 2019.

Forward-looking Statements

This release includes forward-looking statements which are based on certain assumptions and reflect management's current expectations as contemplated under the Safe Harbor provisions of the US Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to a number of risks and uncertainties that could cause actual results or events to differ materially from current expectations. Some of these factors include: uncertainty as to whether our strategies, partnerships and business plans will yield the expected benefits; general global economic conditions; general industry and market conditions and growth rates; increasing competition; the ability to identify, develop and achieve commercial success for new products, services and technologies; changes in technology; changes in laws and regulations, including government incentive programs; intellectual property rights; our ability to secure and maintain strategic relationships, including key supply relationships; the availability and cost of capital; the availability of, and our ability to retain, key personnel; and the failure of the Company to effectively integrate acquisitions. Additional factors are discussed in our public disclosure materials from time to time. We disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

PowerFilm, Inc. and Subsidiary

Consolidated Financial Report
(Reviewed)
December 31, 2018

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RSM US LLP

Independent Accountant's Review Report

Board of Directors and Stockholders
PowerFilm, Inc. and Subsidiary

We have reviewed the accompanying consolidated financial statements of PowerFilm, Inc. and Subsidiary (the Company), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, the related consolidated statements of operations, stockholders' equity and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively, the financial statements). A review includes primarily applying analytical procedures to management's financial data and making inquiries of management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Accountant's Responsibility
Our responsibility is to conduct the review engagements in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the financial statements for them to be in accordance with accounting principles generally accepted in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

Accountant's Conclusion
Based on our reviews, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

RSM US LLP

Des Moines, Iowa
May 24, 2019

PowerFilm, Inc. and Subsidiary

Consolidated Balance Sheets
December 31, 2018 and 2017
See Independent Accountant's Review Report

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	**$ 1,160,724**	$ 967,825
Certificates of deposit	**2,373,313**	3,657,038
Accounts receivable, less allowance for doubtful accounts, 2018 and 2017 $13,545	**467,496**	259,060
Inventories	**1,817,986**	2,425,690
Prepaid expenses and other assets	**127,200**	103,522
Income tax receivable	**2,749**	19,785
Total current assets	**5,949,468**	7,432,920
Property and equipment, net	**8,322,031**	9,380,811
Other assets	**28,682**	31,082
	$ 14,300,181	$ 16,844,813
Liabilities and Stockholders' Equity		
Current liabilities:		
Trade accounts payable	**$ 48,286**	$ 67,644
Other payables and accrued expenses	**288,259**	375,369
Total current liabilities	**336,545**	443,013
Commitments		
Stockholders' equity:		
Common stock	**381,731**	381,687
Additional paid-in capital	**32,748,436**	32,744,422
Retained deficit	**(18,712,621)**	(16,270,399)
Treasury stock, at cost	**(453,910)**	(453,910)
Total stockholders' equity	**13,963,636**	16,401,800
	$ 14,300,181	$ 16,844,813

See notes to consolidated financial statements.

PowerFilm, Inc. and Subsidiary

Consolidated Statements of Operations
Years Ended December 31, 2018 and 2017
See Independent Accountant's Review Report

	2018	2017
Operating revenues:		
Sales	**$ 3,414,153**	$ 3,249,943
Development contracts	**81,885**	5,840
	3,496,038	3,255,783
Cost of revenues	**3,604,987**	3,858,876
Gross loss	**(108,949)**	(603,093)
Operating expenses:		
Research and development	**784,812**	1,101,315
Selling, general and administrative	**1,491,464**	1,521,573
Asset impairment loss	**165,884**	1,839,392
	2,442,160	4,462,280
Operating loss	**(2,551,109)**	(5,065,373)
Other income:		
Interest income	**96,320**	53,699
Other	**9,818**	6,678
	106,138	60,377
Loss before income tax benefit	**(2,444,971)**	(5,004,996)
Income tax benefit	**(27,597)**	(19,785)
Net loss	**$ (2,417,374)**	$ (4,985,211)

See notes to consolidated financial statements.

Powerfilm, Inc. and Subsidiary

Consolidated Statements of Stockholders' Equity
Years Ended December 31, 2018 and 2017
See Independent Accountant's Review Report

	Common Stock	Additional Paid-In Capital	Retained Deficit	Treasury Stock	Total Equity
Balance, December 31, 2016	$ 381,687	$ 32,736,279	$ (11,285,188)	$ (462,173)	$ 21,370,605
Net loss	-	-	(4,985,211)	-	(4,985,211)
Restricted shares issued	-	(14,400)	-	15,000	600
Restricted shares forfeited to treasury shares	-	6,737	-	(6,737)	-
Restricted shares repurchased	-	(273)	-	-	(273)
Stock-based compensation expense	-	16,079	-	-	16,079
Balance, December 31, 2017	381,687	32,744,422	(16,270,399)	(453,910)	16,401,800
Net loss	-	-	(2,417,374)	-	(2,417,374)
Adoption of ASU No. 2016-19	44	(44)	(24,848)	-	(24,848)
Stock-based compensation expense	-	4,058	-	-	4,058
Balance, December 31, 2018	**$ 381,731**	**$ 32,748,436**	**$ (18,712,621)**	**$ (453,910)**	**$ 13,963,636**

See notes to consolidated financial statements.

PowerFilm, Inc. and Subsidiary

Consolidated Statements of Cash Flows
Years Ended December 31, 2018 and 2017
See Independent Accountant's Review Report

	2018	2017
Cash flows from operating activities:		
Net loss	**$ (2,417,374)**	$ (4,985,211)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	**1,042,400**	1,135,743
Gain loss on disposal of equipment	**(39,540)**	(450)
Asset impairment loss	**165,884**	1,839,392
Adoption of ASU 2016-19	**(24,848)**	-
Stock-based compensation expense	**4,058**	16,079
Changes in working capital components:		
Accounts receivable	**(208,436)**	107,934
Inventories	**607,704**	276,749
Prepaid expenses and other assets	**(23,678)**	54,098
Income tax receivable	**17,036**	10,818
Trade accounts payable	**(19,358)**	(1,809)
Other payables and accrued expenses	**(87,110)**	(244,528)
Net cash used in operating activities	**(983,262)**	(1,791,185)
Cash flows from investing activities:		
Purchase of property and equipment	**(147,104)**	(319,753)
Proceeds from sale of property and equipment	**39,540**	450
Proceeds from maturities of certificates of deposits	**1,788,358**	780,130
Purchase of certificates of deposits	**(504,633)**	(1,814,461)
Net cash provided by (used by) investing activities	**1,176,161**	(1,353,634)
Cash flows from financing activities:		
Proceeds from issuance of restricted shares	**-**	327
Net cash provided by financing activities	**-**	327
Net increase (decrease) in cash and cash equivalents	**192,899**	(3,144,492)
Cash and cash equivalents:		
Beginning	**967,825**	4,112,317
Ending	**$ 1,160,724**	$ 967,825

(Continued)

PowerFilm, Inc. and Subsidiary

Consolidated Statements of Cash Flows (Continued)
Years Ended December 31, 2018 and 2017
See Independent Accountant's Review Report

	2018	2017
Supplemental disclosures of cash flow information:		
Refunds received for income taxes	**$ 19,785**	$ 30,603
Supplemental schedule of noncash investing and financing activities:		
Restricted shares awarded from treasury shares, net of forfeitures	**$ -**	$ 8,263

See notes to consolidated financial statements.

Note 1. Summary of Significant Accounting Policies

Nature of business: PowerFilm, Inc. was incorporated on October 13, 1988, for the purpose of research and development of thin film technologies. PowerFilm, Inc.'s focus is now the use of such developed technologies to manufacture solar modules. PowerFilm, Inc. sells its solar modules throughout the world and continues to enter into research contracts to further develop the thin film technology for use in the manufacturing of solar cells. Phicot, Inc. was incorporated as a subsidiary during 2008 for the purpose of conducting further research and development under certain research contracts. The Phicot, Inc. related contracts expired during 2012 and the entity has not had any activities since the contract expiration.

Principles of consolidation: The consolidated financial statements include the accounts of PowerFilm, Inc. and its 92 percent owned subsidiary, Phicot, Inc. (collectively, the Company). All intercompany balances and transactions have been eliminated in consolidation.

Use of estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and cash equivalents: The Company considers all cash accounts and all highly liquid investments with an original maturity of three months or less to be cash equivalents.

Certificates of deposit: Certificates of deposit not meeting the definition of a cash equivalent are classified as current or long-term based on remaining months to maturity as of December 31, 2018 and 2017. As of December 31, 2018, all certificates of deposit are in United States banks, are recorded at cost and mature from January 2019 through October 2019. Interest income on these certificates is recorded on the accrual basis.

Accounts receivable: Accounts receivable are carried at original invoice amount less an estimate for doubtful receivables based on a review of outstanding amounts. Management determines the allowance for doubtful accounts by identifying troubled accounts and by using historical experience applied to an aging of accounts. Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded when received.

Inventories: Inventories are stated at the lower of cost or net realizable value, with cost determined on the first-in, first-out (FIFO) basis.

Property and equipment: Property and equipment is recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the related assets. Construction in progress is not depreciated until items are complete and placed in service.

Long-lived assets: The Company evaluates the recoverability of the carrying value of long-lived assets whenever events or circumstances indicate the carrying amount may not be recoverable. If a long-lived asset is tested for recoverability and the undiscounted future cash flows expected to result from the use and eventual disposition of the asset are less than the carrying amount of the asset, an impairment loss is recognized as the amount by which the carrying amount of a long-lived asset exceeds its fair value. An impairment loss of approximately $166,000 and $1,839,000 was recognized during the years ended December 31, 2018 and 2017, respectively.

Note 1. Summary of Significant Accounting Policies (Continued)

Revenue recognition: Revenue from product sales is recognized upon shipment of the product to the customer. Revenue from development contracts is recognized as services are performed. Shipping and handling charges to customers are included in operating revenue. Shipping and handling costs incurred by the Company are included in cost of revenues.

Foreign sales: Sales to customers located in foreign countries (primarily Canada and Norway) totaled approximately $249,000 and $446,000 for the years ended December 31, 2018 and 2017, respectively.

Concentration of credit risk: The Company's financial instruments that are subject to concentrations of credit risk consist primarily of cash, certificates of deposit and accounts receivable. The Company's policy is to place its cash and certificates of deposit with high credit quality financial institutions in order to limit the amount of credit exposure. The Company maintains cash in bank accounts and certificates of deposit that at times may exceed federally insured limits. The Company has not experienced any losses in such accounts.

Stock-based compensation: Compensation cost for all stock-based awards is measured at fair value on the date of grant and is recognized as compensation expense over the requisite service period for awards expected to vest. The Company's consolidated statements of operations include stock-based compensation expense of approximately $4,100 and $16,100 for the years ended December 31, 2018 and 2017, respectively.

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 bases. 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 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 de-recognition, classification, interest and penalties on income taxes. The Company has evaluated their material tax positions and determined no effects on the financial statements related to uncertainty to income taxes.

Note 1. Summary of Significant Accounting Policies (Continued)

Recent accounting pronouncements: In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers (Topic 606),* requiring an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The updated standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either a full retrospective or retrospective with cumulative effect transition method. In August of 2015, the FASB issued ASU No. 2015-14, which defers the effective date of ASU 2014-09 one year making it effective for annual reporting periods beginning after December 15, 2018. The Company is currently evaluating the effect that the updated standard will have on its financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The guidance in this update supersedes the requirements in ASC Topic 840, Leases. The update will require business entities to recognize lease assets and liabilities on the balance sheet and to disclose key information about leasing arrangements. A lessee would recognize a liability to make lease payments and a right-of-use asset representing its right to use the leased asset for the lease term. This update will be effective for annual periods beginning after December 15, 2019, and is to be applied on a modified retrospective basis. The Company is currently assessing the impact that this guidance will have on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The ASU revises various aspects of accounting for share-based compensation arrangements such as stock options. The new guidance, among other provisions, requires a beginning retained earnings adjustment in certain circumstances related to excess tax benefits on stock options. The Company adopted the ASU in 2018 and recognized an approximate $25,000 cumulative-effect adjustment to beginning accumulated deficit.

Note 2. Inventories

Inventories were composed of the following at December 31:

	2018	2017
Raw materials	$ 774,482	$ 748,940
Work in process	662,624	1,068,532
Finished products	380,880	608,218
	$ 1,817,986	$ 2,425,690

Note 3. Property and Equipment

Property and equipment consisted of the following at December 31, 2018 and 2017:

	2018	2017
Land	$ 972,432	$ 972,432
Building and improvements	5,059,825	5,059,825
Machinery and equipment	9,301,711	12,068,686
Leasehold improvements	-	272,276
Construction in progress	2,211,462	2,343,571
	17,545,430	20,716,790
Less accumulated depreciation	(9,223,399)	(11,335,979)
	$ 8,322,031	$ 9,380,811

Note 4. Income Taxes

Approximate income tax benefit consists of the following for the years ended December 31, 2018 and 2017:

	2018	2017
Current benefit	$ (28,000)	$ (20,000)
Deferred expense	-	-
	$ (28,000)	$ (20,000)

Approximate income tax benefit differs from the amount expected by applying the statutory federal tax rate to loss before taxes as a result of the following:

	2018	2017
Tax benefit at the statutory tax rate	$ (513,000)	$ (1,702,000)
Increase in tax resulting from:		
Tax credit carryforward	(8,000)	(61,000)
Refundable state tax credit	(3,000)	(20,000)
Change in effective tax rate (A)	-	2,011,000
Change in valuation allowance	486,000	(287,000)
Other, net	10,000	39,000
Tax benefit at effective tax rate	$ (28,000)	$ (20,000)

Note 4. Income Taxes (Continued)

(A) On December 22, 2017, the Tax Cuts and Jobs Act (the Act) was signed into law. The Act includes numerous changes in existing tax law, including a permanent reduction in the federal corporate income tax rate to 21 percent. The rate reduction took effect on January 1, 2018. As a result of the reduction of the federal corporate income tax rates, the Company's deferred tax assets and liabilities were revalued. The effect on deferred tax assets and liabilities of the change in tax rate is recognized in income in the period of enactment of the bill (December 22, 2017). The corporate rate reduction component resulted in an additional income tax expense and corresponding reduction of the net deferred tax asset of approximately $2,011,000 in 2017 related to the revaluation of its deferred tax assets and liabilities. This expense only impacted the valuation allowance and thus there was no impact on income or loss from continuing operations.

The tax effects of significant items comprising the Company's net deferred tax assets (liabilities) as of December 31, 2018 and 2017, is as follows:

	2018	2017
Deferred tax assets:		
Accrued expenses	$ 34,000	$ 29,000
Tax credit carryforward	464,000	455,000
Net operating loss carryforward	3,856,000	3,478,000
Other	7,000	10,000
	4,361,000	3,972,000
Less valuation allowance	(4,225,000)	(3,739,000)
	136,000	233,000
Deferred tax liabilities:		
Property and equipment	(101,000)	(198,000)
Other	(35,000)	(35,000)
	(136,000)	(233,000)
Net deferred tax assets	$ -	$ -

As of December 31, 2018 and 2017, the Company has recorded a valuation allowance against its net deferred tax assets due to the uncertainty of future utilization.

As of December 31, 2018, the Company has unused net operating loss carryforwards of approximately $18,494,000, of which approximately $16,577,000 expire beginning in 2030 through 2038 and approximately $1,917,000 do not expire.

Note 5. Related-Party Lease and Subsequent Event

The Company leases its offices and manufacturing facility from a stockholder. The lease matures on December 31, 2020, and requires monthly lease payments of $7,500. Subsequent to year end, a lease amendment reduced monthly lease payments to $3,750 for the remaining term of the lease. Future rental commitments are $45,000 for each of the years ended December 31, 2019 and 2020. Rent expense under this lease totaled $90,000 for each of the years ended December 31, 2018 and 2017. Rent expense was offset by approximately $47,000 of sublease income during each of the years ended December 31, 2018 and 2017.

Note 6. 401(k) Profit Sharing Plan

The Company has a 401(k) profit sharing plan which covers substantially all employees of the Company. The Company may make annual contributions to the plan at the discretion of the Board of Directors. The Company contributed approximately $171,000 and $185,000 during the years ended December 31, 2018 and 2017, respectively.

Note 7. Major Customers

The Company considers a customer which accounts for 10 percent or more of sales to be a major customer. Sales for the year ended December 31, 2018, include sales to the following major customers, together with the approximate accounts receivable due from those customers. There were no major customers for the year ended December 31, 2017.

	Net Sales	Accounts Receivable
Customer A	19%	$ 81,000
Customer B	13%	68,000
Customer C	13%	-

Note 8. Components of Common Stock

Information regarding components of $0.01 par value common stock at December 31, 2018 and 2017, is as follows:

	Authorized Shares	Issued Shares	Outstanding Shares
2018 and 2017	60,000,000	38,168,779	36,306,964

The Company issued 60,000 shares of restricted stock out of treasury shares during the year ended December 31, 2017. An additional 27,300 shares previously issued under the restricted stock plans discussed in Note 10 were forfeited during 2017, prior to vesting. Per the terms of the restricted stock plan, these shares are to be held in treasury and are available for future grant under the plans. There were no issuances or forfeitures of restricted stock during the year ended December 31, 2018.

Note 9. Stock-Based Compensation

The Company's Board of Directors adopted the 2012 Restricted Stock Plan (2012 Plan) during May 2012, the 2013 Restricted Stock Plan (2013 Plan) during January 2014, and the 2016 Restricted Stock Plan (2016 Plan) during June 2016. Under these plans, restricted shares may be granted to any full-time employee of the Company, except officers and directors. Common shares issued under the plans may not be sold or otherwise transferred until restrictions have lapsed. During the vesting period, participants have voting rights and receive dividends on the restricted shares. The 2012 Plan, 2013 Plan and 2016 Plan authorized a total of 61,500, 38,000 and 167,500 shares, respectively, to be available for grant. Awards that are forfeited prior to vesting are held in treasury. At December 31, 2018 and 2017, there were 54,000 shares remaining available for future grant under these plans.

The fair value of restricted stock awards, based on the fair value of the Company's common stock on the date of grant, is being amortized as compensation expense on a straight-line basis over the period the restrictions lapse. Compensation expense related to restricted share awards totaling approximately $4,100 and $16,100 is included in selling, general and administrative expenses on the consolidated statement of operations for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018, unrecognized compensation cost for restricted stock totaled approximately $8,800 which is expected to be recognized over a weighted average remaining period of approximately 1.9 years.

Note 10. Subsequent Events

Subsequent events have been evaluated for potential recognition and disclosure through May 24, 2019, the date the financial statements were issued. Through that date, there were no events requiring recognition or disclosure with the exception of the lease amendment disclosed in Note 5.