Inrad Optics, Inc.
Form 10-K
March 30, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended: December 31, 2015

OR

o **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: 0-11668

Inrad Optics, Inc.

(Exact name of registrant as specified in its charter)

New Jersey	**22-2003247**
State or other jurisdiction of incorporation or organization	(I. R. S. Employer Identification No.)
181 Legrand Avenue, Northvale, NJ	**07647**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code **201-767-1910**

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

Title of each class	**Name of each exchange on which registered**	**N/A**

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

Common stock, par value $.01 Per Share

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

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

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections.

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.

YesxNoo

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data file required to be submitted and posted 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 and post such files).

YesxNoo

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated file, or a smaller reporting company. See definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b2 of the Exchange Act. (Check one):

Large accelerated filer ¨ Accelerated filer ¨ Non-accelerated filer ¨ Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

YesoNox

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter. $2,661,285. (For purposes of determining this amount, only directors, executive officers and shareholders with voting power of 10% or more of our stock have been deemed affiliates.)

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Common Shares outstanding as of March 30, 2016 – 12,737,808 shares

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2016 Annual Meeting of Shareholders, to be filed with the Commission not later than 120 days after the close of the registrant's fiscal year, have been incorporated by reference, in whole or in part, into Part III Items 10, 11, 12, 13 and 14 of this Annual Report on 10-K.

Inrad Optics, Inc.

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PART 1

Caution Regarding Forward Looking Statements

This Annual Report contains forward-looking statements as that term is defined in the federal securities laws. The Company wishes to insure that any forward-looking statements are accompanied by meaningful cautionary statements in order to comply with the terms of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. The events described in the forward-looking statements contained in this Annual Report may not occur. Generally, these statements relate to business plans or strategies, projected or anticipated benefits or other consequences of the Company's plans or strategies, or projections involving anticipated revenues, earnings, or other aspects of the Company's operating results. The words "may", "will", "expect", "believe", "anticipate", "project", "plan", "intend", "estimate "continue", and their opposites and similar expressions are intended to identify forward-looking statements. The Company cautions you that these statements are not guarantees of future performance or events and are subject to a number of uncertainties, risks, and other influences, many of which are beyond the Company's control, that may influence the accuracy of the statements and the projections upon which the statements are based. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) and Item 1A (Risk Factors) of Part I and Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Any one or more of these uncertainties, risks, and other influences could materially affect the Company's results of operations and whether forward-looking statements made by the Company ultimately prove to be accurate. Readers are further cautioned that the Company's financial results can vary from quarter to quarter, and the financial results for any period may not necessarily be indicative of future results. The foregoing is not intended to be an exhaustive list of all factors that could cause actual results to differ materially from those expressed in forward-looking statements made by the Company. The Company's actual results, performance and achievements could differ materially from those expressed or implied in these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward looking statements, whether from new information, future events, or otherwise, except as otherwise required by law.

Item 1. **Business**

Inrad Optics, Inc. (the "Company", "Inrad", or "we"), was incorporated in New Jersey in 1973. The Company develops, manufactures and markets products and services for use in photonics industry sectors via three distinct but complementary product areas - "Crystals and Devices", "Custom Optics" and "Metal Optics."

The Company is a vertically integrated manufacturer specializing in crystal-based optical components and devices, custom optical components from both glass and metal, and precision optical and opto-mechanical assemblies. Manufacturing capabilities include solution and high temperature crystal growth, extensive optical fabrication capabilities, including precision diamond turning and the ability to handle large substrates, optical coatings, as well as, in-process metrology.

Inrad Optics' customers include leading corporations in the defense, aerospace, laser systems, process control and metrology sectors of the photonics industry, as well as the U.S. Government, National Laboratories and universities worldwide.

Administrative, engineering and manufacturing operations are in a 42,000 square foot building located in Northvale, New Jersey. The Company vacated its Sarasota, Florida facility on March 31, 2014 and the Sarasota operations were transferred to Northvale, New Jersey.

The products produced by Inrad Optics, Inc. fall into two main categories: Optical Components and Laser System Devices/Instrumentation.

The Optical Components category is heavily focused on custom optics manufacturing. The Company specializes in high-end precision components. It develops, manufactures and delivers precision custom optics and thin film optical coating services through its Custom Optics and Metal Optics operations. Glass, metal, and crystal substrates are processed using modern manufacturing equipment, complex processes and techniques to manufacture components, deposit optical thin films, and assemble sub-components used in advanced photonic systems. The majority of custom optical components and optical coating services supplied are used in inspection, process control systems, defense and aerospace electro-optical systems, laser system applications, industrial scanners, and medical system applications.

The Laser Devices/Instrumentation category includes the growth and fabrication of crystalline materials with electro-optic (EO) and non-linear optical properties for use in both standard and custom products. This category also includes crystal based devices and associated instrumentation. The majority of crystals, crystal components and laser devices are used in laser systems, defense and security EO systems, medical lasers and R&D applications by engineers within corporations, universities and national laboratories.

The following table summarizes the Company's net sales by product categories during the past two years. Laser System Devices/Instrumentation includes all non-linear and electro-optical crystal components.

Category (In thousands)	Years Ended December 31, 2015 Net Sales	%	2014 Net Sales	%
Optical Components	$7,558	72.1	$7,789	80.1
Laser Devices /Instrumentation	2,934	27.9	1,937	19.9
Total	$10,492	100	$9,726	100

Products Manufactured by the Company

Optical Components

a) Custom Optics and Optical Coating Services

Manufacturing of high-performance custom optics is a major product area for Inrad Optics and is addressed in the marketplace by the Company's Custom Optics and Metal Optics product lines.

The Custom Optics product line focuses on products manufactured to specific customer requirements. It specializes in the manufacture of optical components, optical coatings (ultra-violet wavelengths through infra-red wavelengths) and subassemblies for the military, aerospace, industrial and medical marketplace. Planar, prismatic and spherical components are fabricated from glass and synthetic crystals, including fused silica, quartz, germanium, zinc selenide, zinc sulfide, magnesium fluoride and silicon. Components consist of mirrors, lenses, prisms, wave plates, polarizing optics, x-ray monochromators, x-ray mirrors, and cavity optics for lasers.

Most optical components and sub-assemblies require thin film coatings on their surfaces. Depending on the design, optical coatings can refract, reflect, or transmit specific wavelengths. The Custom Optics optical coating specialties include high laser damage resistance, polarizing, highly reflective, anti-reflective, infra-red, and coating to complex multi-wavelength requirements on a wide range of substrate materials. Coating deposition process technologies employed included electron beam, thermal, ion and plasma assisted deposition systems.

The Metal Optics product line is a fully integrated precision metal optics and optical assembly operation which employs high precision CNC and diamond machining, polishing, and plating of aluminum, AlBeMet™, beryllium and stainless steel. The Metal Optics product line offers opto-mechanical design and assembly services as part of its manufactured deliverables and can support prototyping through production of large and small metal mirrors, thermally stable optical mirrors, low RMS surface finish polished mirrors, diamond machined precision aspheric and planar mirrors, reflective porro prisms, and arc-second accuracy polygons and motor assemblies. Plating specialties include void-free gold and electroless nickel.

b) UV Filter Optical Components

This product line consists of crystals and crystal devices including UV filter materials of both patented and proprietary materials with unique transmission and absorption characteristics. These materials are used in critical applications in defense systems such as missile warning sensors. Such materials include nickel sulfate and other proprietary materials.

Laser Devices/Instrumentation

This product line consists of crystal-based products that are used in, or alongside, laser systems. Developing growth processes for high quality synthetic crystals is a core competency of the Crystals and Devices manufacturing team. These crystals are embedded in our value added devices and instrumentation products manufactured in our Northvale facility and include crystals for wavelength conversion, modulation and polarization, Pockels' cells, and wavelength conversion instruments. In addition to the filter materials used in the UV Filter Optical components described above, current materials produced include Beta Barium Borate (BBO), Lithium Niobate, Zinc Germanium DiPhosphide, Potassium Dihydrogen Phosphate, Potassium Dideuterium Phosphate and Stilbene. Applications for these materials include defense, homeland security, surgical lasers, and industrial processing lasers. The Crystals and Devices team is also engaged in ongoing R & D efforts to develop new materials for evolving applications. Some of the major products produced for the photonics marketplace include:

a) Crystal Components

The Company grows and fabricates electro-optic and nonlinear crystal devices for altering the intensity, polarization or wavelength of a laser beam. Other crystal components, produced as part of the Crystals and Devices product line, are used in laser research and in commercial laser systems.

b) Pockels Cells and Drivers

A line of Pockels' cells and associated electronics is manufactured for sale in multiple market sectors. Pockels' cells are devices that include one or more crystal components and are used in applications that require fast switching of the polarization direction of a beam of light. These uses include Q-switching of laser cavities to generate pulsed laser light, coupling light into and out from regenerative amplifiers, and light intensity modulation. These devices are sold to medical and industrial laser original equipment manufacturers, research institutes and laser system design engineers.

Sales by Market

The photonics industry serves a very broad, fragmented and expanding set of markets. As technologies are discovered, developed and commercialized, the applications for photonic systems and devices, and the components embedded within those devices, grow across traditional market boundaries. While a significant part of the Company's business remains firmly in the defense and aerospace markets, other markets served include the OEM medical and industrial laser market, and the OEM metrology and process control market, university research institutes and national labs worldwide. Scanning, detection and imaging technologies for homeland security and health care markets are beginning to provide opportunities for the Company and these new sectors are expected to account for future growth and demand for our products and capabilities.

In 2015 and 2014 the Company's product sales were made to customers in the following market areas:

	Years Ended December 31,			
	2015		2014	
Market (In thousands)	Net Sales	%	Net Sales	%
Defense/Aerospace	$3,549	33.8	$3,364	34.6
Process control & metrology	4,011	38.3	3,433	35.3
Laser systems	2,018	19.2	2,220	22.8

Universities & national laboratories	914	8.7	709	7.3
Total	$10,492	100	$9,726	100

Defense and Aerospace

This market consists of sales to OEM defense electro-optical systems and subsystems manufacturers, manufacturers of non-military satellite-based electro-optical systems and subsystems, and direct sales to governments where the products have the same end-use.

End-use applications for the Company's products in the defense and aerospace sector include military laser systems, military electro-optical systems, satellite-based systems, and missile warning sensors and systems that protect aircraft. The dollar volume of shipments of product within this sector depends in large measure on the U.S. Defense Department budget and its priorities, that of foreign governments, the timing of their release of contracts to their prime equipment and systems contractors, and the timing of competitive awards from this customer community to the Company.

Defense/Aerospace sales represented approximately 33.8% and 34.6% of sales in 2015 and 2014, respectively. Sales increased by approximately $185,000 or 5.5% from 2014. The increase in 2015 is primarily due to shipments to a new customer in this market.

The Company believes that the defense and aerospace sector will continue to represent a significant market for the Company's products and offers an ongoing opportunity for growth given the Company's capabilities in specialty crystal, glass and metal precision optics.

Process Control and Metrology

This market consists of customers who manufacture capital equipment used in manufacturing process and control, optics-based metrology, quality assurance, and inventory and product control. Examples of applications for such equipment include semiconductor fabrication and testing and inventory management and distribution systems control.

Sales in the Process Control and Metrology market increased in 2015 as a percentage of total sales to 38.3% from 35.3%, as sales rose $578,000 or approximately 16.8% compared to 2014. The increase in 2015 is mainly the result of increased demand from a number of customers, including one new customer in 2014 who had a significant increase in orders placed in 2015.

The Company believes that the optical and x-ray inspection segment of the semiconductor industry offers growth opportunities which match its capabilities in precision optics, crystal products, and monochromators.

Laser Systems

This market consists principally of customers who are OEM manufacturers of industrial, medical, and R&D lasers which the Company serves as an OEM supplier of standard and custom optical components and laser accessories, as well as a number of smaller customers in other markets that are not currently large enough to list individually.

Sales in this market decreased in 2015 as a percentage of sales, compared to 2014 from 22.8% to 19.2%, down $202,000. This was primarily attributable to lower sales to one large customer who experienced integration issues during the relocation of its operations to a new factory location.

Universities and National Laboratories

These sales consist of product sales directly to researchers at various educational and research institutions and through distributors into that market. Sales to customers within the University and National Laboratories market consist primarily of the Company’s legacy systems, Pockels cells and related repairs. Sales in 2015 increased by $205,000 and as a percentage of total sales to 8.7% compared to 7.3% in 2014. This was primarily attributable to an increase in order volume from one National Lab who received increased government funding in 2015.

Major Customers

Historically, the Company’s sales have been concentrated within a small number of customers, although the top customers have varied from year to year.

In 2015, the Company had sales to three major customers which accounted for approximately 29% of sales. One customer, a division of a major U.S. defense industry corporation who manufactures electro-optical systems for U.S. and foreign governments accounted for 10.3% of 2015 sales. The two other customers were foreign- based manufacturers of process control and metrology equipment whose sales represented 10.4% and 8.3% of sales, respectively. The same three customers represented 13.5%, 4.2% and 2.8 %, of sales in 2014, respectively.

Sales to the Company’s top five customers represented approximately 42.6% and 45.4% of sales, in 2015 and 2014, respectively. These customers are all OEM manufacturers either within the defense, process control and metrology or laser systems sector.

Export Sales

The Company’s export sales are primarily to customers in Europe, Israel, Asia and Japan and amounted to approximately 25.2%, and 19.2% of product sales in 2015 and 2014, respectively.

Long-Term Contracts

Certain of the Company’s agreements with customers provide for periodic deliveries at fixed prices over a long period of time. In such cases, the Company negotiates to obtain firm price commitments, as well as cash advances from its customers for the purchase of the materials necessary to fulfill the order.

Marketing and Business Development

The Company markets its products domestically, through the coordinated efforts of the sales, marketing and customer service teams.

The Company has moved towards a strategy of utilizing these combined sales and marketing resources for cross-selling all products, across all business lines. This strategy is well suited to the diverse and fragmented markets that utilize photonic technologies.

Independent sales agents are used in countries in major non-U.S. markets, including Canada, the United Kingdom, the European Union, Israel, and Japan.

Sales and marketing efforts to promote our product lines and our participation in trade shows, internet-based marketing, media and non-media advertising and promotion, and management of international sales representatives and distributor relationships are coordinated at the corporate level under the auspices of the Vice President, Sales and Marketing.

Backlog

The Company's order backlog at December 31, 2015 was $5,195,092. The Company's order backlog as of December 31, 2014 was $6,455,000, respectively.

We anticipate shipping a majority of the present backlog during fiscal year 2016. However, our backlog at any given date may consist of orders with delivery schedules that extend beyond twelve months into the future or that may be subject to adjustment or cancellation.

Competition

Within each product category in which the Company's business units are active, there is competition.

Changes in the photonics industry have had an effect on suppliers of custom optics. As end users have introduced products requiring large volumes of optical components, suppliers have responded either by staying small and carving out niche product areas, or by ramping up manufacturing capacity and modernizing their manufacturing methods to meet higher volume production rates. Additionally, the availability of an increasingly large variety of inventoried inexpensive catalog optics has led some OEM manufacturers to "design in" these low-cost solutions rather than utilizing custom designed and manufactured products.

Competition for the Company's crystal devices and instrumentation is more limited and the Company's laser devices are considered to be high quality and generally offer a combination of features not available elsewhere. As a result of the Company's in-house crystal growth capability, this area of the business is highly vertically integrated, providing a competitive advantage over other suppliers.

For crystal products, the market is highly competitive. Many of the Company's competitors who supply non-linear optical crystals are located overseas, and can offer significantly reduced pricing for some crystal materials. On many occasions, the quality of the crystal component drives the ultimate performance of the component or instrument into which it is installed. Quality and technical support are considered to be valuable attributes for a crystal supplier by some, but not all, OEM customers.

Our metal optics product line has several key competitors who are larger and better equipped to compete on high volume work. There are also several large and small competitors who compete with our products on large form factor optics. The Company has made recent inroads within this competitive landscape, and is building brand awareness in the marketplace.

Although price is a principal factor in many product categories, competition is also based on product design, performance, customer confidence, quality, delivery, and customer service. Based on its performance to date, the Company believes that it can continue to compete successfully, although no assurances can be given in this regard.

Employees

As of the close of business on March 18, 2016, the Company had 68 employees.

Patents and Licenses

The Company mainly relies on its manufacturing and technological expertise, know-how and trade secrets in addition to its patents, to maintain its competitive position in the industry. The Company takes precautionary and protective measures to safeguard its technical design and manufacturing processes. The Company executes nondisclosure agreements with its employees and, where appropriate, with its customers, suppliers and other associates.

Regulation

Foreign sales of certain of the Company's products to certain countries may require export licenses from the United States Department of Commerce. Such licenses are obtained when required. All requested export licenses of Inrad Optics products have been granted or deemed not-required.

International Traffic in Arms Regulations (“ITAR”) governs much of the Company’s domestic defense sector business, and the Company is capable of handling its customers’ technical information under these regulations. Inrad Optics, Inc. is registered with the Directorate of Defense Trade Controls, and utilizes a supplier base of similarly registered companies.

There are no other federal regulations or any unusual state regulations that directly affect the sale of the Company’s products other than those environmental compliance regulations that generally affect companies engaged in manufacturing operations in New Jersey.

Availability of Reports

Our principal executive offices are located at 181 Legrand Avenue, Northvale, N.J. 07647 which also houses our manufacturing operations. Our telephone number is 201-767-1910 and our corporate website address is www.inradoptics.com. We include our website address in this annual report on Form 10-K only as an inactive textual reference and do not intend it to be an active link to our website. The information on our website is not incorporated by reference in this annual report on Form 10-K.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports, as well as other documents we file with the Securities and Exchange Commission, are available free of charge on our web site at www.inradoptics.com as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC") (www.sec.gov). We will also provide electronic or paper copies of such reports free of charge, upon request made to our Corporate Secretary.

Item 1A. Risk Factors

The Company cautions investors that its performance (and, therefore, any forward looking statement) is subject to risks and uncertainties. The risks described below are not the only ones we face, but those we currently consider to be material. There may be other risks which we now consider immaterial, or which are unknown or unpredictable, with respect to our business, the markets in which we operate, our competition, the regulatory environment or otherwise that could have a material adverse effect on our business, financial condition and results of operation.

a) The Company has incurred a net loss for the past two years

The Company has historically incurred substantial net losses. We had a net loss of $0.5 million and $2.5 million for the fiscal years ended December 31, 2015 and 2014, respectively. These losses have had, and will continue to have, an adverse effect on our working capital, total assets and stockholders' equity. We are unable to predict, with certainty, when we will become profitable and our inability to achieve and sustain profitability will negatively affect our business, financial condition, results of operations and cash flows.

b) The Company may need to raise additional capital to repay indebtedness and to fund our operations

We may need to raise additional financing to repay our outstanding indebtedness of approximately $3.2 million, as well as, to fund our current level of operations. Additional financing, which is not in place at this time, may be from the sale of equity or convertible or other debt securities in a public or private offering, or from an additional credit facility. We may be unable to raise sufficient additional capital on favorable terms, if at all, to supply the working capital needs of our existing operations or to expand our business.

c) The Company has exposure to Government Markets

Sales to customers in the defense industry represent a significant part of our business. These customers in turn generally contract with government agencies. Most governmental programs are subject to funding approval through congressional appropriations which can be modified or terminated without warning upon the determination of a legislative or administrative body. Appropriations can also be affected by legislation that addresses larger budgetary issues of the U.S. Government which could reduce available funding for most federal agencies, including the Department of Defense. It is difficult to assess how this may impact our defense industry customers and the business we do with them in the future. The loss or failure to obtain certain contracts or a loss of a major government customer could have a material adverse effect on our business, results of operations or financial condition.

d) The Company’s revenues are concentrated in its largest customer accounts

For the year ended December 31, 2015, five customer accounts represented approximately 42.6% of total revenues and two of these customers each accounted for more than 10% of revenues. Since we are a supplier of custom manufactured components to OEM customers, and have a number of large customers in both the commercial and defense markets, the relative size and identity of our largest customers change year to year. In the short term, the loss of any of these large customer accounts or a decline in demand in the markets which they represent could have a material adverse effect on our business, results of operations, and financial condition.

e) The Company depends on, but may not succeed in, developing and acquiring new products and processes

To meet the Company’s strategic objectives, the Company needs to continue to develop new processes, improve existing processes, and manufacture and market new products. As a result, the Company may continue to make investments in process development and additions to its product portfolio. There can be no assurance that the Company will be able to develop and introduce new products or enhancements to its existing products and processes in a way that achieves market acceptance or other pertinent targeted results. The Company also cannot be sure that it will have the human or financial resources to pursue or succeed in such activities.

f) The Company’s stock price may fluctuate widely

The Company’s stock is thinly traded. Many factors, including, but not limited to, future announcements concerning the Company, its competitors or customers, as well as quarterly variations in operating results, announcements of technological innovations, seasonal or other variations in anticipated or actual results of operations, changes in earnings estimates by analysts or reports regarding the Company’s industries in the financial press or investment advisory publications, could cause the market price of the Company’s stock to fluctuate substantially. In addition, the Company’s stock price may fluctuate widely for reasons which may be unrelated to operating results. These fluctuations, as well as general economic, political and market conditions such as recessions, military conflicts, or market or related declines, may materially and adversely affect the market price of the Company’s common stock. In addition, any information concerning the Company, including projections of future operating results, appearing in investment advisory publications or on-line bulletin boards or otherwise emanating from a source other than the Company could in the future contribute to volatility in the market price of the Company’s common stock.

g) The Company’s business success depends on its ability to recruit and retain key personnel

The Company depends on the expertise, experience, and continuing services of certain scientists, engineers, production and management personnel, and on the Company’s ability to recruit additional personnel. There is competition for the services of these personnel, and there is no assurance that the Company will be able to retain or attract the personnel necessary for its success, despite the Company’s efforts to do so. The loss of the services of the Company’s key personnel could have a material adverse effect on its business, results of operations, or financial condition.

h) Many of the Company’s customers are in cyclical industries

The Company’s business is significantly dependent on the demand its customers experience for their products. Many of their end users are in industries that historically have experienced a cyclical demand for their products. The industries include, but are not limited to, the defense electro-optics industry and the manufacturers of process control capital equipment for the semiconductor tools industry. As a result, demand for the Company’s products are subject to cyclical fluctuations, and this could have a material adverse effect on our business, results of operations, or financial condition.

i) The Company’s manufacturing processes require products from limited sources of supply

The Company utilizes many relatively uncommon materials and compounds to manufacture its products. Examples include optical grade quartz, specialty optical glasses, scarce natural and manmade crystals, beryllium and its alloys, and high purity chemical compounds. The Company’s suppliers could fail to deliver sufficient quantities of these necessary materials on a timely basis, or deliver contaminated or inferior quality materials, or markedly increase their prices. Any such actions could have an adverse effect on the Company's business, despite the Company's efforts to secure long term commitments from its suppliers. Adverse results might include reducing the Company's ability to meet commitments to its customers, compromising the Company's relationship with its customers, adversely affecting the Company's ability to meet expanding demand for its products, or causing the Company's financial results to deteriorate.

j) The Company faces competition

The Company encounters substantial competition from other companies positioned to serve the same market sectors. Some competitors may have financial, technical, capacity, marketing or other resources more extensive than ours, or may be able to respond more quickly than the Company to new or emerging technologies and other competitive pressures. Some competitors have manufacturing operations in low-cost labor regions such as the Far East and Eastern Europe and can offer products at lower prices than the Company. The Company may not be successful in winning orders against the Company's present or future competitors, and competition may have a material adverse effect on our business, results of operations or financial condition.

k) The Company may not be able to fully protect its intellectual property

The Company currently holds one patent for a material applicable to an important product, but does not in general rely on patents to protect its products or manufacturing processes. The Company generally relies on a combination of trade secrets and employee non-compete and nondisclosure agreements to protect its intellectual property rights. There can be no assurance that the steps the Company takes will be adequate to prevent misappropriation of the Company's technology. In addition, there can be no assurance that, in the future, third parties will not assert infringement claims against the Company. Asserting the Company's rights or defending against third-party claims could involve substantial expense, thus materially and adversely affecting the Company's business, results of operations or financial condition.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

Administrative, engineering and manufacturing operations are housed in a 41,935 square foot building located in Northvale, New Jersey. The lease for the Northvale facility was renewed for a term of two years from June 1, 2015 to May 31, 2017, at substantially the same terms. The Company has an option to renew the Northvale lease for two additional one year terms running through May 31, 2019, with fixed terms.

The Company's wholly-owned subsidiary, MRC Precision Metal Optics Inc., moved its operations from Sarasota, Florida into the Northvale location in 2014 and the lease for the Florida facility was terminated.

We believe that our existing facility is adequate to meet current and future projected production needs.

Item 3. Legal Proceedings

We are not party to any legal proceedings as of the date hereof.

Item 4. Mine Safety Disclosures

Not Applicable

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

a) Market Information

The Company's Common Stock, with a par value of $0.01 per share, is traded on the OTC Bulletin Board under the symbol INRD.

The following table sets forth the range of high and low closing prices for the Company's Common Stock in each fiscal quarter from the quarter ended March 31, 2014 through the quarter ended December 31, 2015, as reported by the OTC Bulletin Board. Such over-the-counter quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	Price	
	High	Low
Quarter ended December 31, 2015	$ .50	$ .25
Quarter ended September 30, 2015	.43	.30
Quarter ended June 30, 2015	.49	.23
Quarter ended March 31, 2015	.50	.16
Quarter ended December 31, 2014	.21	.14
Quarter ended September 30, 2014	.24	.12
Quarter ended June 30, 2014	.35	.10
Quarter ended March 31, 2014	.35	.22

As of March 24, 2016 the Company's closing stock price was $0.38 per share.

b) Shareholders

As of March 19, 2016, there were approximately 123 shareholders of record of our Common Stock based upon the Shareholders' Listing provided by the Company's Transfer Agent. As of the same date, the Company estimates that there are an additional 250 beneficial shareholders.

c) Dividends

The Company has not historically paid cash dividends. Payment of cash dividends is at the discretion of the Company's Board of Directors and depends, among other factors, upon the earnings, capital requirements, operations and financial condition of the Company. The Company does not anticipate paying cash dividends in the foreseeable future.

d) Recent Sales of Unregistered Securities

There have been no sales of unregistered securities during the past year.

e) Securities Authorized for Issuance under Equity Compensation Plans

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining for future issuance under equity compensation plans
2000 Equity Compensation Program approved by shareholders	156,671	$ 1.22	—
2010 Equity Compensation Program approved by shareholders	542,933	$ 0.56	3,457,067

Item 6. Selected Financial Data

The following data is qualified in its entirety by the financial statements presented elsewhere in this Annual Report on Form 10-K.

	As of December 31, or For the Year Ended December 31,				
	2015	2014	2013	2012	2011

Revenues	$10,492,229	$9,726,145	$11,235,654	$11,403,827	$13,177,194
Net (loss) income	(478,935)	(2,514,851)	(1,649,961)	(1,420,833)	164,746
Earnings per share					
Basic (loss) earnings per share	(0.04)	(0.21)	(0.14)	(0.12)	0.01
Diluted (loss) earnings per share	(0.04)	(0.21)	(0.14)	(0.12)	0.01
Weighted average shares					
Basic	12,570,867	12,221,734	11,975,900	11,825,583	11,658,891
Diluted	12,570,867	12,221,734	11,975,900	11,825,583	11,753,669
Total assets	7,074,989	7,396,415	9,848,055	11,425,139	11,838,003
Long-term obligations	2,878,906	3,048,747	3,212,868	3,369,135	2,825,633
Shareholders' equity	2,622,028	2,995,647	5,363,840	6,794,848	7,857,995

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

The following discussion and analysis should be read in conjunction with the Company's consolidated financial statements and the notes thereto presented elsewhere herein. The discussion of results should not be construed to imply any conclusion that such results will necessarily continue in the future.

Critical Accounting Policies

The Company's significant accounting policies are described in Note 1 of the Consolidated Financial Statements that were prepared in accordance with accounting principles generally accepted in the United States of America. In preparing the Company's financial statements, the Company made estimates and judgments that affect the results of its operations and the value of assets and liabilities the Company reports. The Company's actual results may differ from these estimates.

The Company believes that the following summarizes critical accounting policies that require significant judgments and estimates in the preparation of the Company's consolidated financial statements.

Revenue Recognition

The Company records revenue from the sale of its products and services when all four of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the sales price is fixed or determinable; and collectability is reasonably assured. Losses on contracts are recorded when identified.

Inventory

Inventories are stated at the lower of cost (first-in, first-out method) or market. Cost of manufactured goods includes material, labor and overhead.

The Company records a reserve for slow moving inventory as a charge against earnings for all products identified as surplus, slow moving or discontinued. Excess work-in-process costs are charged against earnings whenever estimated costs-of-completion exceed unbilled revenues.

Stock-based compensation

Stock based compensation expense is estimated at the grant date based on the fair value of the award. The Company estimates the fair value of stock options granted using the Black-Scholes option pricing model. The fair value of restricted stock units granted is estimated based on the closing market price of the Company's common stock on the date of the grant. The fair value of these awards, adjusted for estimated forfeitures, is amortized over the requisite service period of the award, which is generally the vesting period.

Income Taxes

Deferred income taxes are provided on the asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carry forwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the amounts of assets and liabilities recorded for income tax and financial reporting purposes. 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 recognizes the financial statement benefit of an uncertain tax position only after determining that the relevant tax authority would more likely than not sustain the position. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

The Company classifies interest and penalties related to income taxes as income tax expense in its Consolidated Financial Statements

Results of Operations

The following table sets forth, for the past two years, the percentage relationship of statement of operations categories to total revenues.

	Years ended December 31,			
	2015		2014	
Revenues:				
Product sales	100	%	100	%
Costs and expenses:				
Cost of goods sold (Including Restructuring)	78.7	%	91.2	%
Gross profit margin	21.3	%	8.8	%
Selling, general and administrative expenses	24.2	%	31.3	%
Goodwill impairment charge	—	%	3.2	%
Operating (loss) income	(2.9	)%	(25.7	)%
Net (loss) income	(4.6	)%	(25.9	)%

Revenues

Sales were $10,492,000 in 2015, an increase of 7.9%, or $766,000 compared to $9,726,000 in 2014.

Sales to the defense and aerospace market increased 5.5% to $3,549,000 from $3,364,000 in 2014. This increase primarily reflects sales to a new customer in this market.

Sales in the process control and metrology market increased in 2015 by 16.8% to $4,011,000 compared to $3,433,000 in 2014 or a percentage of total sales of 38.3% and 35.3%, respectively. The increase in sales was $578,000 or approximately 16.8% higher compared to 2014. The increase in 2015 is mainly the result of increased demand from several customers, including one new customer in 2014 who had a significant increase in orders placed in 2015.

The Company serves the non-military laser industry as an OEM supplier of standard and custom optical components and laser accessories. Sales to this and related markets were $2,018,000 in 2015 compared to $2,220,000 in 2014. Overall, sales of laser devices and related products represented 19.2% of total sales in 2015, a decrease from 22.8% in 2014. Sales to one large customer decreased by approximately $272,000 as a result of production integration issues it experienced with the relocation of its facility during the year.

Sales to customers within the university and national laboratories market sector increased in 2015 to $914,000 compared to $709,000 in 2014, up 28.9%, mainly due to an increase in orders from one national laboratory customer who received increased government funding in 2015.

Bookings

The Company booked new orders totaling approximately $9.5 million in 2015, a decrease from $12.0 million in 2014 as the result of a decrease in orders from the custom optics and metal optics product lines offset by an increase in crystals and devices product line. In addition, a few large customers pushed anticipated Q4 2015 bookings into the first quarter of 2016.

The Company’s backlog as of December 31, 2015 was $5.2 million compared to $6.5 million as of December 31, 2014.

Cost of Goods Sold and Gross Profit Margin

Cost of goods sold as a percentage of sales was 78.7% and 91.2% for the years ended December 31, 2015 and 2014, respectively. In 2015, cost of goods sold was $8,258,000. In 2014, cost of goods sold was $8,869,000, including restructuring costs of $189,000 related to the closing and relocation of the Sarasota, FL. facility and associated costs of relocating the operations to the Northvale, NJ facility. Restructuring costs in 2015 were $0.

The decrease in cost of goods sold in 2015 was mainly attributable to cost reductions from the consolidation of operations in Northvale for a full twelve month period, as compared to nine months in 2014, offset by an increase in direct labor and material costs related to higher sales.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SG&A") were $2,543,000 in 2015, a decrease of $498,000 or 16.4% from 2014. The decrease partially reflects ongoing expense reductions related to the consolidation of the Sarasota operations into the Northvale, NJ location for a full twelve month period compared to nine months in 2014. However the decrease is primarily attributable to reductions in SG&A salaries, wages and associated benefits of approximately $380,000 related to a reduction in employee numbers versus 2014.

As a percentage of sales, SG&A decreased to 24.2% of sales in 2015 compared to 31.3% in 2014, primarily due to the higher sales in 2015.

Operating (Loss)

The Company had an operating loss of $308,000 in 2015, compared to $2,496,000 in 2014. The operating loss for 2014 included a non-cash charge for impairment of goodwill totaling $312,000 and a one-time charge for restructuring costs of $189,000 related to the consolidation of the Company's Florida operations in its New Jersey facility.

Other Income and Expenses

Net interest expense of $176,000 in 2015 decreased from $181,000 in 2014. Interest expense was $177,000 in 2015 compared to $184,000 in 2014 mainly due to lower debt balances. This was offset by a decrease in interest income which was $1,000 in 2015 as compared to $3,000 in 2014.

The Company recorded a gain of $5,500 on the sale of plant equipment in 2015. In 2014, the Company sold and disposed of surplus equipment and recorded a gain of $65,000. Additionally, the Company recorded a gain of $97,000 as part of a transaction which included the sale of a platinum crucible for $145,000 and the purchase of a re-designed replacement crucible for $127,000 for use in the production of high-temperature crystals.

Income Taxes

In 2015 and 2014, the Company did not record a current provision for either state tax or federal alternative minimum tax due to the losses incurred for both income tax and financial reporting purposes.

Net (Loss)

In 2015, the Company recorded a net loss of $479,000 compared to a net loss of $2,515,000 in 2014. The decrease in the net loss was mainly as a result of the higher sales levels, improved margins and manufacturing and selling, general and administrative cost reductions related to the consolidation of the Company's Florida operations as of March 31, 2014.

Liquidity and Capital Resources

The Company's primary source of liquidity is cash and cash equivalents and on-going collection of our accounts receivable. The Company's major uses of cash in the past three years have been for operating expenses, capital expenditures and for repayment and servicing of outstanding debt and accrued interest.

As of December 31, 2015 and December 31, 2014, cash and cash equivalents were $674,000 and $1,003,000, respectively.

On July 26, 2012, the Company entered into a term loan agreement with Valley National Bank, Wayne, NJ, in the amount of $750,000. The loan is secured with a security interest in equipment, is repayable in equal monthly installments over five years beginning in August 2012 and bears an interest rate of 4.35% annually.

On July 29, 2014, the maturity dates of a $1,500,000 Subordinated Convertible Promissory Note to Clarex Limited ("Clarex") and a $1,000,000 Subordinated Convertible Promissory Note to an affiliate of Clarex were each extended to April 1, 2017 from April 1, 2015. The notes bear interest at 6%. Interest accrues yearly and is payable on maturity. Unpaid interest, along with principal, may be converted into securities of the Company as follows: the notes are convertible in the aggregate into 1,500,000 units and 1,000,000 units, respectively, with each unit consisting of one share of common stock and one warrant. Each warrant allows the holder to acquire 0.75 shares of common stock at a price of $1.35 per share. As part of the agreement, the expiration dates of the warrants were extended from April 1, 2018 to April 1, 2020. The Company is currently paying interest of $37,500 quarterly.

The Company paid $177,000 of interest in 2015 and $183,000 of interest in 2014 on its outstanding debt.

In 2015, the Company had capital expenditures of $30,000. In 2014, capital expenditures were $410,000. Of the total, $311,000 were for leasehold improvements and other capital expenditures related to the consolidation of the Florida operations in the Northvale, New Jersey facility.

In 2015, cash decreased by $330,000 compared to a decrease of $1,448,000 in 2014.

Cash flows pertaining to our source and use of cash are presented below (in thousands):

	Years ended December 31, 2015	2014
Net cash used in operations	$ (141)	$ (978)
Capital Expenditures & down payment on equipment	(30)	(410)
Proceeds from sale of precious metals	—	18
Proceeds on sale or disposal of plant and equipment	5	78

Principal payments on debt obligations	(163)	(157)

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Overview of Financial Condition

The Company recorded a net loss of $479,000 compared to a net loss of $2,515,000 in 2014 which included a non-cash charge for goodwill of impairment of $312,000 and a one-time restructuring charge of $189,000.

In 2015, net cash used in operations was $141,000 compared to net cash used by operations of $978,000 in 2014. The decrease in net cash used by operations was primarily the result of improved operating margins and increased sales as compared to 2014.

The Company's management expects that future cash flow from operations and its existing cash reserves will provide adequate liquidity for the Company's operations and working capital requirements through at least March 31, 2017.

Contractual Obligations

The following table describes our contractual obligations as of December 31, 2015 (in thousands).

Contractual Obligations	Total	Less than 1 Year	1-3 Years	4-5 Years	Greater Than 5 Years
Convertible notes payable, including interest	$2,688	$ 150	$ 2,538	$ —	$ —
Notes payable-other, including interest	676	190	167	46	273
Total contractual cash obligations	$3,364	$ 340	$ 2,705	$ 46	$ 273

Off-Balance Sheet Arrangements

The Company did not have any off-balance sheet arrangements at December 31, 2015 and 2014.

Item 7A. **Quantitative and Qualitative Disclosures about Market Risk**

N/A

Item 8. Financial Statements and Supplementary Data

The financial statements and supplementary financial information required to be filed under this Item are presented commencing on page 22 of the Annual Report on Form 10-K, and are incorporated herein by reference.

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

None

Item 9A. Controls and Procedures

a) Evaluation of Disclosure Controls and Procedures

The Company's management, including the Chief Executive Officer and the Chief Financial Officer, has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Annual Report on Form 10-K. Based upon that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the disclosure controls and procedures as of December 31, 2015 are effective to ensure that information required to be disclosed in the reports the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to the Company's management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding disclosure.

b) Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining an adequate system of internal control over financial reporting. 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 our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of our financial statements in accordance with generally accepted accounting principles in the United States, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Because of the inherent limitations of internal control, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Our management assessed the effectiveness of our system of internal control over financial reporting as of December 31, 2015. In making this assessment, management used the framework in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on our assessment and the criteria set forth by COSO, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2015.

c) Changes in Internal Control over Financial Reporting

There have been no significant changes in the Company’s internal control over financial reporting identified in connection with the evaluation that occurred during the Company’s last fiscal quarter that have materially affected, or that are reasonably likely to materially affect, the Company’s internal controls over financial reporting.

Item 9B Other Information

None

PART III

Item 10. Directors and Executive Officers of the Registrant and Corporate Governance

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders which we anticipate will be filed within 120 days after our fiscal year ended December 31, 2015.

Item 11. Executive Compensation

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders which we anticipate will be filed within 120 days after our fiscal year ended December 31, 2015.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders which we anticipate will be filed within 120 days after our fiscal year ended December 31, 2015.

Item 13. Certain Relationships and Related Transactions

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders which we anticipate will be filed within 120 days after our fiscal year ended December 31, 2015.

Item 14. Principal Accountant Fees and Services

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2016 Annual Meeting of Stockholders which we anticipate will be filed within 120 days after our fiscal year ended December 31, 2015.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements.
Reference is made to the Index to Financial Statements and Financial Statement Schedule commencing on Page 20

(a) (2) Financial Statement Schedule.
Reference is made to the Index to Financial Statements and Financial Statement Schedule on Page 20. All other schedules have been omitted because the required information is not present or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the Financial Statements or Notes thereto.

(a) (3) Exhibits.

Exhibit No.	**Description of Exhibit**
3.1	Restated Certificate of Incorporation of Photonics Products Group, Inc. (incorporated by reference to Exhibit 3.1 to the Company’s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
3.2	By-Laws of Photonic Products Group, Inc. (incorporated by reference to Exhibit 3.2 to the Company’s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
3.3	Certificate of Amendment to Restated Certificate of Incorporation of Photonics Products Group, Inc., dated June 2, 2010 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 7, 2010).
3.4	Certificate of Amendment to Restated Certificate of Incorporation of Photonics Products Group, Inc., dated January 23, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 23, 2012).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company’s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
4.2	Subordinated Convertible Promissory Note dated July 25, 2014 held by Clarex, Ltd. (incorporated by reference to Exhibit 4.4 to the Company’s Annual Report on Form 10-K filed with the Securities and Exchange Commission on April 13, 2015)
4.3	Subordinated Convertible Promissory Note dated July 25, 2014 held by Welland, Ltd. (incorporated by reference to Exhibit 4.5 to the Company’s Annual Report on Form 10-K filed with the Securities and Exchange Commission on April 13, 2015)

10.1	2000 Equity Compensation Program (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
10.2	2010 Equity Compensation Program (incorporated by reference to Exhibit B to the Company's Proxy Statement for the 2010 Meeting of Stockholders filed with the Securities and Exchange Commission on April 30, 2010)
10.3*	Proposal to Renew and Extend Lease dated June 1, 2015 between Inrad Optics, Inc. ("Tenant") and S & R Costa Realty, LLP ("Landlord")
14.1	Code of Ethics (incorporated by reference to Exhibit 14.1 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2006)
21.1	List of Subsidiaries (incorporated by reference to Exhibit 21.1 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2006)
23.1*	Consent of Baker Tilly Virchow Krause, LLP Independent Registered Public Accounting Firm
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** Furnished herewith.

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.

INRAD OPTICS, INC.

By: /s/ Amy Eskilson
Amy Eskilson
Chief Executive Officer

Dated: March 30, 2016

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

Signature	**Title**	**Date**
/s/ Jan M. Winston Jan M. Winston	Chairman of the Board of Directors	March 30, 2016
/s/ Luke P. LaValle, Jr. Luke P. LaValle, Jr.	Director	March 30, 2016
/s/ Dennis G. Romano Dennis G. Romano	Director	March 30, 2016
/s/ N.E. Rick Strandlund N.E. Rick Strandlund	Director	March 30, 2016
/s/ Amy Eskilson Amy Eskilson	President, Chief Executive Officer and Director	March 30, 2016

/s/ William J. Foote William J. Foote	Chief Financial Officer, Secretary, Treasurer and Principal Accounting Officer	March 30, 2016

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INRAD OPTICS, INC. AND SUBSIDIARIES

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

CONTENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders, Audit Committee and Board of Directors

Inrad Optics, Inc. and Subsidiaries

Northvale, New Jersey

We have audited the accompanying consolidated balance sheets of Inrad Optics, Inc. and Subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations, shareholders' equity and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of its internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Inrad Optics, Inc. and Subsidiaries as of December 31, 2015 and 2014 and the results of their operations and cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Baker Tilly Virchow Krause, LLP

New York, New York

March 30, 2016

INRAD OPTICS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2015	2014
Assets		
Current Assets:		
Cash and cash equivalents	$673,685	$1,003,254
Accounts receivable (net of allowance for doubtful accounts of $15,000 in 2015 and 2014)	1,345,197	1,126,655
Inventories, net	2,995,365	2,686,721
Other current assets	143,293	142,576
Total Current Assets	5,157,540	4,959,206
Plant and Equipment:		
Plant and equipment at cost	14,493,611	15,741,243
Less: Accumulated depreciation and amortization	(13,364,216)	(14,172,811)
Total plant and equipment	1,129,395	1,568,432
Precious Metals	553,925	553,925
Intangible Assets, net of accumulated amortization	201,633	280,196
Other Assets	32,496	34,656
Total Assets	$7,074,989	$7,396,415
Liabilities and Shareholders' Equity		
Current Liabilities:		
Current portion of long-term notes payable -other	$170,500	$164,100
Accounts payable and accrued liabilities	1,035,487	1,017,755
Customer advances	368,068	170,166
Total Current Liabilities	1,574,055	1,352,021
Related Party Convertible Notes Payable	2,500,000	2,500,000
Long-Term Notes Payable -other, net of current portion	378,906	548,747
Total Liabilities	4,452,961	4,400,768
Commitments		
Shareholders' Equity:		
Common stock: $.01 par value; 60,000,000 authorized shares 12,737,808 issued at December 31, 2015 and 12,354,093 issued at December 31, 2014	127,380	123,543
Capital in excess of par value	18,538,884	18,437,405
Accumulated deficit	(16,029,286)	(15,550,351)
	2,636,978	3,010,597

Less - Common stock in treasury, at cost (4,600 shares)	(14,950)	(14,950)
Total Shareholders' Equity	2,622,028	2,995,647
Total Liabilities and Shareholders' Equity	$7,074,989	$7,396,415

See notes to consolidated financial statements

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INRAD OPTICS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,	
	2015	2014
Revenues		
Net sales	$10,492,229	$9,726,145
Cost and expenses		
Cost of goods sold	8,257,634	8,680,050
Restructuring costs	—	189,341
Selling, general and administrative expense	2,543,072	3,041,289
Goodwill Impairment	—	311,572
	10,800,706	12,222,252
Operating (loss)	(308,477)	(2,496,107)
Other income (expense), net		
Interest expense, net	(175,958)	(180,827)
Gain on sale or disposal of plant and equipment	5,500	65,075
Gain on sale of precious metals	—	97,008
	(170,458)	(18,744)
(Loss) before income taxes	(478,935)	(2,514,851)
Income tax provision	—	—
Net (loss)	$(478,935)	$(2,514,851)
Net (loss) per share – basic	$(0.04)	$(0.21)
Net (loss) per share – diluted	$(0.04)	$(0.21)
Weighted average shares outstanding – basic	12,570,867	12,221,734
Weighted average shares outstanding – diluted	12,570,867	12,221,734

See notes to consolidated financial statements

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INRAD OPTICS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock Shares	Amount	Capital in excess of par value	Accumulated Deficit	Treasury Stock	Total Shareholders' Equity
Balance, January 1, 2014	12,050,603	$120,508	$18,293,782	$(13,035,500)	$(14,950)	$5,363,840
401K contribution	298,490	2,985	68,270	—	—	71,255
Common stock issued on vesting of stock grants	5,000	50	(50)	—	—	—
Stock-based compensation expense	—	—	75,403	—	—	75,403
Net loss for the year	—	—	—	(2,514,851)	—	(2,514,851)
Balance, December 31, 2014	12,354,093	123,543	18,437,405	(15,550,351)	(14,950)	2,995,647
401K contribution	383,715	3,837	75,700	—	—	79,537
Stock-based compensation expense	—	—	25,779	—	—	25,779
Net loss for the year	—	—	—	(478,935)	—	(478,935)
Balance, December 31, 2015	12,737,808	$127,380	$18,538,884	$(16,029,286)	$(14,950)	$2,622,028

See notes to consolidated financial statements

INRAD OPTICS, INC AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December31,	
	2015	2014
Cash flows from operating activities:		
Net (loss)	$(478,935)	$(2,514,851)
Adjustments to reconcile net (loss) to net cash (used in) operating activities:		
Depreciation and amortization	548,089	615,976
Goodwill impairment charge	—	311,572
401K common stock contribution	79,537	71,255
(Gain) on sale or disposal of plant and equipment	(5,500)	(65,075)
(Gain) on sale of precious metals	—	(97,008)
Stock-based compensation expense	25,779	75,403
Change in inventory reserve	227,389	116,270
Changes in operating assets and liabilities:		
Accounts receivable	(218,542)	110,303
Inventories	(536,033)	326,864
Other current assets	(717)	2,005
Other assets	2,160	(4,060)
Accounts payable and accrued liabilities	(19,768)	12,292
Customer advances	197,902	23,382
Accrued interest on Related Party Convertible Note Payable	37,500	37,500
Total adjustments and changes	337,796	1,536,679
Net cash used in operating activities	(141,139)	(978,172)
Cash flows from investing activities:		
Purchase of plant and equipment	(30,489)	(409,639)
Proceeds from sale of plant and equipment	5,500	78,380
Proceeds from sale of precious metals	—	18,043
Net cash used in investing activities	(24,989)	(313,216)
Cash flows from financing activities:		
Principal payments of notes payable-other	(163,441)	(156,621)
Net cash used in provided by financing activities	(163,441)	(156,621)
Net decrease in cash and cash equivalents	(329,569)	(1,448,009)
Cash and cash equivalents at beginning of the year	1,003,254	2,451,263

Cash and cash equivalents at end of the year	$673,685	$1,003,254
Supplemental Disclosure of Cash Flow Information:		
Interest paid	$177,000	$146,000
Income taxes paid	$2,800	$3,500
Non Cash Financing Activities:		
Exchange of Precious Metals	$—	$126,765

See notes to consolidated financial statements

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INRAD OPTICS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

TWO YEARS ENDED DECEMBER 31, 2015

1. Nature of Business and Operations and Summary of Significant Accounting Policies and Estimates

a. Nature of Business and Operations

Inrad Optics, Inc. and Subsidiaries (the “Company”), formerly known as Photonic Products Group, Inc., was incorporated in the state of New Jersey and is a manufacturer of crystals, crystal devices, electro-optic and optical components, and sophisticated laser devices and instruments. The Company has manufacturing operations in Northvale, New Jersey. In 2014, the Company’s Sarasota Florida operations were consolidated within the Northvale, New Jersey facility and the Florida facility was vacated as of March 31, 2014.

The Company’s principal customers include commercial instrumentation companies and OEM laser systems manufacturers, research laboratories, government agencies, and defense contractors. The Company’s products are sold domestically using its own sales staff, and in major overseas markets, principally Europe, Israel, Japan, and Asia, using independent sales agents.

b. Liquidity

As of December 31, 2015, the Company had working capital of $3,583,485 and cash and cash equivalents of $673,684. In 2014, the Company’s Sarasota operations were consolidated within the Company’s Northvale, New Jersey facility and the Florida facility was vacated as of March 31, 2014. Management believes based on the consolidation of the Company’s operations and its existing working capital resources together with existing cash flows, the Company has sufficient cash flows to fund operations through at least March 31, 2017.

c. Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Upon consolidation, all inter-company accounts and transactions are eliminated.

d. Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make certain estimates and assumptions. These estimates and assumptions affect the reported amounts in the consolidated financial statements and accompanying notes. Actual results could differ from these estimates.

e. Cash and cash equivalents

The Company considers cash-on-hand and highly liquid investments with original maturity dates of three months or less at the date of purchase to be cash and cash equivalents. Investments with original maturity dates exceeding three months are separately disclosed on the Consolidated Balance Sheets and as cash flows from investing activities on the Consolidated Statements of Cash Flows.

f. Accounts receivable

Accounts receivable are carried at net realizable value, net of write-offs and allowances. The Company establishes an allowance for doubtful accounts based on estimates as to the collectability of accounts receivable. Management specifically analyzes past-due accounts receivable balances and, additionally, considers bad debt history, customer credit-worthiness, current economic trends and changes in customer payment terms when evaluating the adequacy of the allowance for doubtful accounts. Uncollectible accounts receivable are written-off when it is determined that the balance will not be collected.

g. Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or market. Cost of manufactured goods includes material, labor and overhead.

The Company records a reserve for slow moving inventory as a charge against earnings for all products identified as surplus, slow moving or discontinued. Excess work-in-process costs are charged against earnings whenever estimated costs-of-completion exceed unbilled revenues.

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h. Plant and Equipment

Plant and equipment are depreciated using the straight-line method over the estimated useful lives of the related assets which range between five and seven years. Amortization of leasehold improvements is computed using the straight-line method over the lesser of 10 years or the remaining term of the lease including optional renewal periods, as appropriate, when failure to renew the lease imposes an economic penalty on the Company in such an amount that renewal appears to be probable. In determining the amount of the economic penalty, management considers such factors as (i) the costs associated with the physical relocation of the offices, manufacturing facility and equipment, (ii) the economic risks associated with business interruption and potential customer loss during relocation and transition to new premises (iii) the significant costs of leasehold improvements required at any new location to custom fit our specific manufacturing requirements, and (iv) the economic loss associated with abandonment of existing leasehold improvements or other assets whose value would be impaired by vacating the facility.

Maintenance and repairs of property and equipment are charged to operations and major improvements are capitalized. Upon retirement, sale or other disposition of property and equipment, the cost and accumulated depreciation are eliminated from the accounts and a gain or loss is recorded.

i. Income taxes

Deferred taxes are provided on the asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carry forwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the amounts of assets and liabilities recorded for income tax and financial reporting purposes. 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 recognizes the financial statement benefit of an uncertain tax position only after determining that the relevant tax authority would more likely than not sustain the position. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 % likelihood of being realized upon ultimate settlement with the relevant tax authority.

The Company classifies interest and penalties related to income taxes as income tax expense in its Consolidated Financial Statements.

The Company had no unrecognized tax benefits or liabilities, and no adjustment to its financial position, results of operations, or cash flows relating to uncertain tax positions taken on all open tax years. The Company is no longer subject to federal, state or local income tax examinations by tax authorities for the years before 2012.

j. Impairment of long-lived assets

Long-lived assets, such as plant and equipment and purchased intangibles with finite lives, which are subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the assets. Long-lived assets held for sale would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell and would no longer be depreciated.

k. Stock-based compensation

Stock based compensation expense is estimated at the grant date based on the fair value of the award. The Company estimates the fair value of stock options granted using the Black-Scholes option pricing model. The fair value of restricted stock units granted is estimated based on the closing market price of the Company's common stock on the date of the grant. The fair value of these awards, adjusted for estimated forfeitures, is amortized over the requisite service period of the award, which is generally the vesting period.

l. Revenue recognition

The Company records revenue from the sale of products and services used in the photonics industry when all four of the following criteria are met:

- persuasive evidence of an arrangement exists;
- delivery has occurred or services have been rendered;
- the sales price is fixed or determinable; and

· collectability is reasonably assured.

Losses on contracts in progress are recorded when identified.

m. Internal research and development costs

Internal research and development costs are charged to expense as incurred.

n. Precious metals

Precious metals are stated at the lower of cost or market and consist of various fixtures used in the high temperature crystal growth manufacturing process. From time to time the quoted market values of these precious metals may be below cost. Management evaluates these market adjustments on a recurring basis and if it is determined that they are other than temporary the carrying value would be adjusted.

o. Advertising costs

Advertising costs included in selling, general and administrative expenses were $6,400 and $9,900 for the years ended December 31, 2015 and 2014, respectively. Advertising costs are charged to expense when the related services are incurred or related events take place.

p. Concentrations and credit risk

The concentration of credit risk in the Company's accounts receivable is mitigated by the Company's credit evaluation process, familiarity with its small base of recurring customers and reasonably short collection terms and the geographical dispersion of revenue. The Company generally does not require collateral but, in some cases, the Company negotiates cash advances prior to the undertaking of the work. These cash advances are recorded as current liabilities on the balance sheet until corresponding revenues are realized.

The Company utilizes many relatively uncommon materials and compounds to manufacture its products and relies on outside vendors for certain manufacturing services. Therefore, any failure by its suppliers to deliver materials of an adequate quality and quantity could have an adverse effect on the Company's ability to meet the commitments of its customers.

For the year ended December 31, 2015, the Company’s top five customer accounts in the aggregate represented approximately 42.6% of total revenues, and the top three customers accounted for 29.0% of revenues. These three customers each represented approximately 10.4%, 10.3% and 8.3% of sales, respectively. Since the Company is a supplier of custom manufactured components to OEM customers, the relative size and identity of the largest customer accounts changes somewhat from year to year. In the short term, the loss of any one of these large customer accounts could have a material adverse effect on business, results of operations, and financial condition.

q. Fair value measurements

The Company follows U.S. GAAP accounting guidance which establishes a framework for measuring fair value and expanded related disclosures. The framework requires fair value to be determined based on the exchange price that would be received for an asset, or paid to transfer a liability (an exit price), in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants.

The valuation techniques required are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company’s market assumptions. The accounting guidance requires the following fair value hierarchy:

- Level 1 - Quoted prices (unadjusted) for identical assets and liabilities in active markets that the Company has the ability to access at the measurement date.

- Level 2 - Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; and inputs other than quoted prices that are observable for the asset or liability, including interest rates, yield curves and credit risks, or inputs that are derived principally from or corroborated by observable market data through correlation.

- Level 3 - Values determined by models, significant inputs to which are unobservable and are primarily based on internally derived assumptions regarding the timing and amount of expected cash flows.

Long-lived assets, including goodwill and other intangible assets, may be measured at fair value if such assets are held for sale or if there is a determination that the asset is impaired. Managements’ determination of fair value, although highly subjective, is based on the best information available, including internal projections of future earnings and cash flows discounted at an appropriate interest rate, quoted market prices when available, market prices for similar assets, broker quotes and independent appraisals, as appropriate.

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r. New Accounting Guidance

In April 2014, the FASB issued an ASU that changes the criteria for determining which disposals can be presented as discontinued operations and modifies related disclosure requirements. Under the new guidance, a discontinued operation is defined as a disposal of a component or group of components that is disposed of or is classified as held for sale and represents a strategic shift that has or, will have, a major effect on an entity's operations and financial results. The new standard will be effective for annual periods beginning on or after December 15, 2014 with early adoption permitted and will be effective for the Company beginning in the first quarter of fiscal year 2016. The adoption of this standard is not expected to have a significant impact on the Company's Financial Statements.

In May 2014, the Financial Accounting Standards Board (the "FASB") issued an Accounting Standards Update ("ASU") which supersedes virtually all existing revenue recognition guidance under U.S. GAAP. The update's core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The update is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017 and prohibits early adoption. The update allows for the use of either the retrospective or modified retrospective approach of adoption. Management is currently evaluating the available transition methods and the potential impact of adoption on the Company's Financial Statements.

In April 2015, the FASB issued ASU 2015-03, Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. In August 2015, FASB issued ASU 2015-15, Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements. ASU 2015-15 allows an entity to present debt issuance costs associated with a revolving line of credit arrangement as an asset, regardless of whether a balance is outstanding. The recognition and measurement guidance for debt issuance costs are not affected by ASU 2015-03 or ASU 2015-15. These ASU's are effective for annual reporting periods beginning after December 15, 2015, including interim periods within that reporting period, with early adoption permitted. We expect the adoption of this guidance will not have a material impact on our financial statements

In April 2015, the FASB issued ASU 2015-05, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40). This ASU provides guidance about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the software license element of the arrangement should be accounted for consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the arrangement should be accounted for as a service contract. For public business entities, the amendments will be effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2015. We expect the adoption of this guidance will not have a material impact on our financial statements.

In July 2015, the FASB issued ASU 2015-11, "Inventory (Topic 330): Simplifying the Measurement of Inventory." ASU 2015-11 requires an entity to measure inventory at the lower of cost and net realizable value, removing the consideration of current replacement cost. It is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016, with early adoption permitted. The Company does not expect this ASU to have a material effect on the Company's financial condition, results of operations, or cash flows.

In November 2015, the FASB issued ASU 2015-17, Income Taxes (Subtopic 740-10). The amendments in this update require deferred tax liabilities and assets be classified as noncurrent regardless of the classification of the underlying assets and liabilities. For public companies, the amendments will be effective for financial statements issued for annual periods beginning after December 15, 2016. Earlier application is permitted. We expect the adoption of this guidance will not have a material impact on our financial statements.

In February 2016, the FASB created Topic 842 and issued ASU 2016-02, Leases. The guidance in this update supersedes Topic 840, Leases. This ASU requires lessees to recognize a right-of-use assets and a lease liability, initially measured at the present value of the lease payments on the balance sheet. For public companies, the amendments will be effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Earlier application is permitted. Management is currently evaluating the impact of the adoption of ASU 2016-02 on our financial statements and disclosure.

2. Inventories, net

Inventories are comprised of the following and are shown net of inventory reserves of approximately $2,010,000 for 2015 and $1,783,000 for 2014:

	December 31,	
	2015	2014
	(In thousands)	
Raw materials	$1,110	$1,049
Work in process, including manufactured parts and components	1,224	956
Finished goods	661	682
	$2,995	$2,687

3. Plant and Equipment

Plant and equipment are comprised of the following:

	December 31,	
	2015	2014
	(In thousands)	
Office and computer equipment	$1,312	$1,389
Machinery and equipment	10,935	11,907
Leasehold improvements	2,246	2,445
	14,493	15,741
Less accumulated depreciation and amortization	(13,364)	(14,173)
	$1,129	$1,568

Depreciation expense recorded by the Company totaled approximately $470,000 and $535,000 for 2015 and 2014, respectively. Plant and equipment with a net book value of $0 and $13,000 was disposed of in 2015 and 2014, respectively.

The Company evaluates its property and equipment for impairment when events or circumstances indicate and impairment may exist. Based on this evaluation, the Company concluded that, at December 31, 2015, its long-lived assets were not impaired.

4. Goodwill

In 2014, the Company recorded an impairment charge of $312,000 against the remaining carrying value of goodwill.

5. Intangible Assets

Intangible assets include acquired intangible assets with finite lives, consisting principally of non-contractual customer relationships, completed technology and trademarks. Intangible assets with finite lives are amortized on a straight-line basis over the assets' estimated useful life up to 14 years.

Based on management's judgement, there were no events or circumstances that would lead us to conclude that a possible impairment of intangible assets exists as of December 31, 2015.

Amortization expense was approximately $79,000 for each of the years ended December 31, 2015 and 2014, respectively. Aggregate amortization is expected to be approximately $201,000, accumulating at the rate of $79,000, $79,000 and $43,000 for the next three years, respectively.

The weighted average remaining life of the Company's intangible assets is approximately 2.5 years.

The following schedule details the Company's intangible asset balance by major asset class.

	At December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
		(In thousands)	
Customer-related	$ 550	(455)	$ 95
Completed technology	363	(297)	66
Trademarks	187	(147)	40
Total	$ 1,100	(899)	$ 201

	At December 31, 2014		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(In thousands)		
Customer-related	$550	$ (414)	$ 136
Completed technology	363	(271)	92
Trademarks	187	(135)	52
Total	$1,100	$ (820)	$ 280

6. <u>Related Party Transactions</u>

On July 29, 2014, the maturity dates of a $1,500,000 Subordinated Convertible Promissory Note to Clarex Limited ("Clarex") and a $1,000,000 Subordinated Convertible Promissory Note to an affiliate of Clarex were each extended to April 1, 2017 from April 1, 2015. The notes bear interest at 6%. Interest accrues yearly and is payable on maturity. Unpaid interest, along with principal, may be converted into securities of the Company as follows: the notes are convertible in the aggregate into 1,500,000 units and 1,000,000 units, respectively, with each unit consisting of one share of common stock and one warrant. Each warrant allows the holder to acquire 0.75 shares of common stock at a price of $1.35 per share. As part of the agreement, the expiration dates of the warrants were extended from April 1, 2018 to April 1, 2020.

The Company paid $150,000 and $112,500 for interest on the notes in 2015 and 2014, respectively. Accrued interest of $37,500 is included in Accounts payable and accrued liabilities as of December 31, 2015 and is expected to be paid in the first quarter of 2016. Accrued interest of $37,500 included in Accounts payable and accrued liabilities as of December 31, 2014 was paid in January, 2015. The Company expects to continue to make quarterly interest payments of $37,500 through the maturity dates of the notes.

7. <u>Other Long-Term Notes</u>

On July 26, 2012, the Company entered into a term loan agreement in the amount of $750,000 with Valley National Bank, Wayne, NJ. The loan is payable in equal monthly installments over five years beginning in August 2012 and bears an interest rate of 4.35% annually. The loan is secured with a security interest in equipment.

The Company also has a note payable to the U.S. Small Business Administration which bears interest at the rate of 4.0% and is due in 2032.

Other Long-Term Notes consist of the following:

	December 31,	
	2015	2014
	(In thousands)	
Term Note Payable, payable in equal monthly installments of $13,953 and bearing an interest rate of 4.35% and expiring in July 2017	$256	$408
U.S. Small Business Administration term note payable in monthly installments of $1,922 and bearing an interest rate of 4.0% and expiring in April 2032.	$294	$305
	550	713
Less current portion	(171)	(164)
Other Long-Term Notes, excluding current portion	$379	$549

Other Long-Term Notes mature as follows:

Year ending December 31:	(In thousands)
2016	$ 171
2017	108
2018	12
2019	13
2020	13
Thereafter	233
	$ 550

8. Accounts Payable and Accrued Liabilities

Accounts payable and accrued expenses are comprised of the following:

	December 31, 2015	2014
	(In thousands)	
Trade accounts payable and accrued purchases	$599	$580
Accrued payroll	148	122
Accrued 401K company matching contribution	136	146
Accrued restructuring costs	—	35
Accrued expenses – other	152	135
	$1,035	$1018

9. Income Taxes

The Company's income tax provision consists of the following:

	Years Ended December 31, 2015	2014
Current:		
Federal	$ —	$ —
State	—	—
Deferred:		
Federal	—	—
State	—	—
Total	$ —	$ —

A reconciliation of the income tax provision computed at the statutory Federal income tax rate to our effective income tax rate follows (in percent):

	Years Ended December 31, 2015	2014

Federal statutory rate	(34.0)%	(34.0)%
State statutory rate	(7.0)	(8.9)
Change in Valuation Allowance	38.6	43.5
Permanent Differences	2.5	(1.4)
Prior year adjustments	(0.8)	1.3
Other	0.7	(0.5)
Effective income tax rate	0 %	0 %

At December 31, 2015 and 2014, the Company had estimated Federal and State net operating loss carry forwards of approximately $9,192,000 and $9,313,000, respectively. These tax loss carry forwards expire at various dates through 2034.

Internal Revenue Code Section 382 places a limitation on the utilization of Federal net operating loss and other credit carry forwards when an ownership change, as defined by the tax law, occurs. Generally, this occurs when a greater than 50 percentage point change in ownership occurs. Accordingly, the actual utilization of the net operating loss and carryforwards for tax purposes may be limited annually to a percentage (based on the risk free interest rate) of the fair market value of the Company at the time of any such ownership change. The Company has not prepared an analysis of ownership changes but does not believe that a greater than 50% change of ownership has occurred and such limitations would not apply to the Company.

Deferred tax assets (liabilities) are comprised of the following:

	December 31,	
	2015	2014
	(In thousands)	
Account receivable reserves	$6	$6
Inventory reserves	844	749
Inventory capitalization	134	113
Depreciation	338	188
Loss carry forwards	3,442	3,523
Gross deferred tax assets	4,764	4,579
Valuation allowance	(4,764)	(4,579)
Net deferred tax asset	$—	$—

In evaluating the Company’s ability to recover deferred tax assets in future periods, management considers the available positive and negative factors, including the Company’s recent operating results, the existence of cumulative losses and near term forecasts of future taxable income that is consistent with the plans and estimates management is using to manage the underlying business. A significant piece of objective negative evidence evaluated was the cumulative loss incurred by the Company over the three-year period ended December 31, 2015. Such objective evidence limits the ability to consider other subjective evidence such as our projections for future growth.

On the basis of this evaluation, as of December 31, 2015 and 2014, the Company concluded it was more likely than not that it would not be able to realize any portion of the benefit on the deferred tax assets and the valuation allowance was increased by $185,000 and $959,000, respectively, to provide a full valuation against the deferred tax assets.

The Company files income tax returns in the United States, which typically provides for a three-year statute of limitations on assessments. The Company is no longer subject to federal, state or local income tax examinations by tax authorities for the years before 2012.

The guidance for accounting for uncertainties in income taxes requires that we recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination. There were no unrecognized tax benefits that impacted our effective tax rate and accordingly, there was no material effect to our financial position, results of operations or cash flows.

Our policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense. To date, there have been no interest or penalties charged to us in relation to the underpayment of income taxes.

We do not anticipate that our unrecognized tax benefits will significantly increase in the next 12 months.

10. Equity Compensation Program and Stock-based Compensation

a. 2010 Equity Compensation Program

The Company's 2010 Equity Compensation Program provides for grants of options, stock appreciation rights and restricted stock awards to employees, officers, directors, and others who render services to the Company. The Program is comprised of four parts including: (i) the Incentive Stock Option Plan which provides for grants of "incentive stock options", (ii) the Supplemental Stock Option Plan which provides for grants of stock options that shall not be "incentive stock options", (iii) the Stock Appreciation Rights Plan which allows the granting of stock appreciation rights and, (iv) the Restricted Stock Award Plan which provides for the granting of restrictive shares of Common Stock and restricted stock units. The plan is administered by the Compensation Committee of the Board of Directors. Under this plan, an aggregate of up to 4,000,000 shares of common stock may be granted.

b. 2000 Equity Compensation Program

The Company’s 2000 Equity Compensation Program expired on June 2, 2010. All outstanding grants of options, stock appreciation rights and performance shares issued under the Program will remain outstanding and shall expire on the date determined by the terms of the original grant. The latest date of expiration for outstanding grants under the plan is March 28, 2020.

c. Stock Option Expense

The Company's results for the years ended December 31, 2015 and 2014 include stock-based compensation expense for stock option grants totaling $26,000 and $75,000, respectively. Such amounts have been included in the Consolidated Statements of Operations within cost of goods sold ($5,000 for 2015 and $33,000 for 2014), and selling, general and administrative expenses ($21,000 for 2015 and $42,000 for 2014).

As of December 31, 2015 and 2014, there were $26,000 and $28,000 of unrecognized compensation costs, net of estimated forfeitures, related to non-vested stock options, which are expected to be recognized over a weighted average period of approximately 0.9 years and 1.1 years, respectively.

The weighted average estimated fair value of stock options granted in the two years ended December 31, 2015 and 2014 was $0.19 and $0.26, respectively. The Company uses the Black-Scholes option pricing model to calculate the grant-date fair value of an option award. The Company assumes a dividend yield of zero, as the Company has not paid dividends in the past and does not expect to in the foreseeable future. The expected volatility is based upon the historical volatility of our common stock which the Company believes results in the best estimate of the grant-date fair value of employee stock options because it reflects the market’s current expectations of future volatility. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of the grant with maturity dates approximately equal to the expected life at the grant date. The expected life is based upon the period of expected benefit based on the Company’s evaluation of historical and expected future employee exercise behavior.

The following range of weighted-average assumptions were used for to determine the fair value of stock option grants during the years ended December 31, 2015 and 2014:

	Years Ended December 31,	
	2015	2014
Dividend yield	— %	— %

Volatility	122-127 %	116 %
Risk-free interest rate	1.96 %	1.9 %
Expected life	10 years	10 years

d. Stock Option Activity

A summary of the Company's outstanding stock options as of and for the years ended December 31, 2015 and 2014 is presented below:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (In Years)	Aggregate Intrinsic Value(a)
Outstanding as of January 1, 2014	979,021	$ .96		
Granted	103,000	.27		
Exercised	—	—		
Forfeited /Expired	(204,204)	$ .76		
Outstanding as of December 31, 2014[(b)]	877,817	$ .93	5.1	—
Granted	133,000	.20		
Exercised	—	—		
Forfeited /Expired	(311,213)	1.10		
Outstanding as of December 31, 2015[b)]	699,604	$ .71	4.9	32,230
Exercisable as of December 31, 2015	492,942	$ .91	4.5	8,803

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(a) Intrinsic value for purposes of this table represents the amount by which the fair value of the underlying stock, based on the respective market prices as of December 31, 2015 exceeds the exercise prices of the respective options. All of the options used in the calculation of the aggregate intrinsic value for outstanding options are exercisable as of December 31, 2015.

(b) Based on the Company's historical forfeiture rate, the number of options expected to vest is the same as the total outstanding at December 31, 2015.

The following table represents non-vested stock options granted, vested, and forfeited for the year ended December 31, 2015.

Non-vested Options	Options	Weighted-Average Grant-Date Fair Value - $
Non-vested - January 1, 2015	150,059	.27
Granted	133,000	.19
Vested	(59,730)	.29
Forfeited	(16,667)	.23
Non-vested – December 31, 2015	206,662	.21

The total weighted average grant date fair value of options vested during the years ended December 31, 2015 and 2014, was $17,000 and $86,000, respectively.

The following table summarizes information about stock options outstanding at December 31, 2015:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number Outstanding	Weighted Average Exercise Price
$0.19 - $0.35	284,333	8.2	$ .25	77,656	$ .29
$0.50 - $1.03	359,300	5.2	$ .94	359,315	$ .94
$1.20 - $1.75	55,971	1.4	$ 1.62	55,971	$ 1.62

e. Restricted Stock Unit Awards

The Company did not grant any restricted stock unit awards in 2015 and 2014.

The Company recognized related stock compensation expense of $0 in Selling, General and Administrative expenses in 2015 and $1,000 in 2014, respectively, related to these grants.

11. Net (Loss) per Share

Basic income (loss) per common share is computed by dividing net income (loss) by the weighted average number of common shares outstanding. Diluted income (loss) per common share is computed by dividing net income (loss) by the weighted average number of common shares and common stock equivalents outstanding, calculated on the treasury stock method for options, stock grants and warrants using the average market prices during the period, including potential common shares issuable upon conversion of outstanding convertible notes, except if the effect on the per share amounts is anti-dilutive.

For the year ended December 31, 2015, a total of 2,500,000 anti-dilutive common shares issuable upon conversion of outstanding convertible notes and 1,875,000 warrants issuable upon conversion of outstanding related party convertible notes have been excluded from the diluted computation because their effect is anti-dilutive. In addition, 699,604 common stock equivalents related to outstanding options have been excluded from the diluted computation because their effect is anti-dilutive.

For the year ended December 31, 2014, all common equivalent shares outstanding have been excluded from the diluted computation because their effect is anti-dilutive. This included 877,817 common stock equivalents related to outstanding options and grants, in addition to 2,500,000 common shares and 1,875,000 warrants issuable upon conversion of outstanding related party convertible notes which were anti-dilutive.

12. Commitments

a. Lease commitments

The Company occupies approximately 42,000 square feet of space located at 181 Legrand Avenue, Northvale, New Jersey pursuant to a net lease. Under the terms of the lease, the Company is obligated for all real estate taxes, maintenance and operating costs of the facility. The lease was renewed for a two year term from June 1, 2015 to May 31, 2017, at substantially the same terms. The Company has options to renew the Northvale lease for two additional one year terms running through May 31, 2019, with fixed terms.

The Company’s wholly-owned subsidiary, MRC Precision Metal Optics Inc., had its manufacturing operations in a leased facility located in Sarasota, Florida. The Company vacated the facility on March 31, 2014 and the operations in Sarasota were fully consolidated within the Northvale, New Jersey facility.

The total rent for the Sarasota facility was $0 and $52,000 in 2015 and 2014, respectively. Adding in total rent for the New Jersey facility of $279,000 and $273,000 over the same time periods results in total company rent payments of $279,000 and $325,000 in 2015 and 2014, respectively.

Future minimum annual rentals which cover the remaining lease terms, excluding uncommitted option renewal periods at December 31, 2015 are as follows:

Year ending December 31,

	Operating Leases
2016	$283,061
2017	117,942
2018	—
2019	—
2020	—
Thereafter	—
	$401,003

The Company also paid real estate taxes and insurance premiums that totaled approximately $140,000 in 2015 and $140,000 in 2014. Included in these amounts were real estate taxes and insurance premiums solely for the Sarasota location of $0 in 2015 and $16,000 in 2014, respectively.

b. Retirement plans

The Company maintains a 401(k) savings plan (the "Plan") for all eligible employees (as defined in the plan). The 401(k) plan allows employees to contribute up to 70% of their compensation on a salary reduction, pre-tax basis up to the statutory limitation. The 401(k) plan also provides that the Company, at the discretion of the Board of Directors, may match employee contributions based on a pre-determined formula.

In 2015, the Company's 401(k) matching contribution for employees was $135,196. This will be funded by way of a contribution of 466,181 shares of the Company's common stock, which will be issued to the Plan in April, 2016. In 2014, the Company's 401(k) matching contribution for employees was $132,559. This was funded by way of a cash contribution of $53,025 in April 2015 and a contribution of 383,715 shares of the Company's common stock, which were issued to the Plan in April 2015. The Company records the distribution of the common shares in the Consolidated Statement of Shareholders' Equity as of the date of distribution to the 401(k) plan administrator.

13. Product Sales, Foreign Sales and Sales to Major Customers

The Company's export sales, which are primarily to customers in countries within Europe, Asia and Japan, amounted to approximately 25.2% and 19.2% of product sales in 2015 and 2014, respectively.

The Company had sales to three major customers which accounted for approximately 29% of sales in 2015. One customer, a division of a major U.S. defense industry corporation who manufactures electro-optical systems for U.S. and foreign governments accounted for 10.3% of 2015 sales. The two other customers were foreign- based manufacturers of process control and metrology equipment whose sales represented 10.4% and 8.3% of sales, respectively. The same three customers represented 13.5%, 4.2% and 2.8 %, of sales in 2014, respectively.

During the past two years, sales to the Company's top five customers represented approximately 42.6%, and 45.4% of sales, respectively. Given the concentration of sales within a small number of customers, the loss of any of these customers would have a significant negative impact on the Company and its business units.

14. Shareholders' Equity

a. Common shares reserved at December 31, 2015, are as follows:

2010 Equity compensation plan	4,000,000
2000 Equity compensation plan	156,671
Subordinated convertible notes	2,500,000
Warrants issuable on conversion of Subordinated convertible notes	1,875,000
	8,531,671

b. Warrants

The Company had no outstanding warrants as of December 31, 2015 and 2014.

15. Fair Value of Financial Instruments

The methods and assumptions used to estimate the fair value of the following classes of financial instruments were:

Current Assets and Current Liabilities: The carrying amount of cash, current receivables and payables and certain other short-term financial instruments approximate their fair value as of December 31, 2015 due to their short-term maturities.

Long-Term Debt: The fair value of the Company’s long-term debt, including the current portion, for notes payable and subordinated convertible debentures, was estimated using a discounted cash flow analysis, based on the Company’s assumed incremental borrowing rates for similar types of borrowing arrangements. The carrying amount of debt at December 31, 2015 in the amount of $3,049,000 approximates fair value.

16. Restructuring Costs

The Company completed the transfer of its Sarasota operations to the Northvale facility and the Florida facility was closed as of March 31, 2014. Restructuring costs of approximately $189,000 were expensed in 2014 and the consolidation of the operation was complete by December 31, 2014. There were no restructuring costs expensed in the twelve months ended December 31, 2015.