PHOTONIC PRODUCTS GROUP INC Form 10-K March 31, 2011

UNITED STATES

### SECURITIES AND EXCHANGE COMMISSION Washington, D. C. 20549

### FORM 10-K

(Mark One)

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

For the fiscal year ended: December 31, 2010

OR

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

For the transition period from to

Commission file number: 0-11668

Photonic Products Group, Inc. (Exact name of registrant as specified in its charter)

New Jersey State or other jurisdiction of incorporation or organization 22-2003247 (I. R. S. Employer Identification No.)

181 Legrand Avenue, Northvale, NJ (Address of principal executive offices) 07647 (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

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 ý.

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  $\acute{y}$ .

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. Yes  $\circ$  No o

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. o

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	Accelerated filer o	Non-accelerated filer o	Smaller reporting company	ý
filer o				

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No  $\acute{y}$ 

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. \$8,454,339 (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, 2011 11,687,353 Documents Incorporated by Reference

Portions of the registrant's definitive proxy statement to be filed not later than 120 days after the end of the fiscal year covered by this report are incorporated by reference in Part III.

# Photonic Products Group, 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" "estimate", and "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 which may affect the Company's results include, but are not limited to, the risks and uncertainties discussed in Items 1A, 7 and 7A. 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

Photonic Products Group, Inc. (the "Company" or "PPGI"), incorporated in New Jersey in 1973, develops, manufactures and markets products and services for use in photonics industry sectors via three brand names ("Inrad", "Laser Optics", "MRC"). Prior to September, 2003, PPGI was named and did business solely as Inrad, Inc. Company management, the Board of Directors, and shareholders approved the name change in 2003.

In November 2003, the Company purchased the assets and certain liabilities of Laser Optics, Inc. of Bethel, CT. Laser Optics, Inc. was a custom optics and optical coating services provider, in business since 1966. PPGI integrated the Bethel team and their operations into the Company's Northvale, NJ operations in mid-2004. This integration leveraged Inrad's original crystalline products with the custom optics and optical coating capabilities of Laser Optics to provide an enhanced set of product offerings.

In October 2004, the Company acquired MRC Precision Metal Optics, Inc. ("MRC") of Sarasota, Florida, a precision metal optics and diamond-turned aspheric optics manufacturer, specializing in CNC and single point diamond machining, optical polishing, nickel plating, aluminum, AlBeMet<sup>TM</sup> and beryllium machining.

The original Inrad organization was known as one of the photonic industry's seminal crystalline products companies. Photonic Products Group, Inc. is now a vertically integrated organization 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 and in-process metrology expertise.

PPGI's 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, about 15 miles northwest of New York City, and in a 25,000 square foot building located in Sarasota, FL. The headquarters of the Company are located in the Northvale facility.

The products produced by PPGI's fall into two main categories: Optical Components and Laser System Devices and Instrumentation.

The Optical Components segment of the business 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 Laser Optics and MRC brand names. 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.

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

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

			Years Ended D	ecember 3	31,	
	2010		2009		200	8
Category	Sales	%	Sales	%	Sales	%
Optical Components	\$10,115,000	92	\$10,350,000	94	\$14,750,000	90
Laser System Devices and						
Instrumentation	939,000	8	701,000	6	1,551,000	10
TOTAL	\$11,054,000	100	\$11,051,000	100	\$16,301,000	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 PPGI, and is addressed in the marketplace under the Inrad, Laser Optics and MRC brand names.

The Laser Optics brand 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 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, waveplates, polarizing optics, monochrometers, 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. Laser 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, and ion assist.

The MRC metal optics facility in Sarasota, Florida is a fully integrated precision metal optics and optical assembly manufacturer. The facility employs high precision CNC and diamond machining, polishing, plating of aluminum, AlBeMet<sup>TM</sup>, beryllium and stainless steel. MRC offers opto-mechanical design and assembly services as part of its manufactured deliverables. MRC has developed processes to 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 electro-less nickel.

### b) UV Filter Optical Components

The Inrad crystal components product line includes 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 proprietary materials such as UVC-7 and LAC.

## Laser Devices and Instrumentation

The Inrad brand name covers crystal-based products that are used in, or alongside, laser systems. Developing growth processes for high quality synthetic crystals lies at the heart of the Inrad laser device and instrumentation products. Inrad products are manufactured in an extensive crystal growth facility. Products produced include crystals for wavelength conversion, modulation and polarization, Pockels cells, and wavelength conversion instruments. In addition to the filter materials consumed by the UV Filter Optical components described above, current materials produced include Beta Barium Borate (BBO), Lithium Niobate, Zinc Germanium DiPhosphide, and Potassium Dihydrogen Phosphate and Potassium Dideuterium Phosphate. Applications for these materials include defense, homeland security, surgical lasers, and industrial processing lasers. The Inrad team is also engaged in ongoing R & D efforts to develop new materials for evolving applications and offers contract growth of crystalline materials to customer specifications. Some of the major products sold under the Inrad brand 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 by PPGI are used in laser research and in commercial laser systems.

### b) Pockels Cells

A line of Pockels cells and associated electronics is manufactured for sale under the Inrad brand name. 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 on an OEM basis to medical and industrial laser manufacturers, researcher institutes and laser system design engineers.

## c) Harmonic Generation Systems

The Company designs and manufactures harmonic generation laser accessories for sale under the Inrad brand name. Harmonic generation systems enable the users of lasers to convert the fundamental frequency of the laser to another frequency required for specific applications. Harmonic generators are used in spectroscopy, semiconductor processing, medical lasers, optical data storage and scientific research.

Many commercial lasers have automatic tuning features, allowing them to produce a range of frequencies. The Inrad Autotracker product, when used in conjunction with these lasers, automatically generates tunable ultraviolet light or infrared light for use in spectroscopic applications.

## Sales by Market

Photonics, by its nature, 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 PPGI'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. Scanning, detection and imaging technologies for homeland security and health care markets are beginning to provide opportunities for PPGI products moving forward, and these new sectors are expected to provide increasing opportunities for PPGI's set of capabilities.

In 2010, 2009 and 2008 the Company's product sales were made to customers in the following market areas:

Market (In thousands)	2010		2009		2008		
Defense/Aerospace	\$ 6,968	(63)%	\$ 7,454	(68)%	\$ 10,329	(63)	%
Process control & metrology	2,751	(25)%	2,339	(21)%	4,629	(29)	%
Laser systems and other	796	(7)%	766	(7)%	1,077	(7)	%
Universities & national laboratories	539	(5)%	492	(4)%	203	(1)	%
Total	\$ 11,054	(100)%	\$ 11,051	(100)%	\$ 16,301	(100)	)%

Major market sectors currently served by the Company include defense and aerospace, process control & metrology, laser systems including various other markets not separately classified, and to a lesser extent, universities and national laboratories.

Defense and Aerospace

This area 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 PPGI'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 sector sales represented approximately 63%, 68% and 63% of sales in 2010, 2009 and 2008. In spite of the decrease in 2010, 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 area consists of customers who are OEM manufacturers of capital equipment used in manufacturing process implementation and control, optics-based metrology and quality assurance, and inventory and product control equipment. Examples of applications for such equipment include semiconductor (i.e., chip) fabrication and testing and inventory management and distribution control.

Sales in the Process Control and Metrology market sector, the Company's second largest market, increased in 2010, both as a percentage of total sales and in relative sales dollars, compared to 2009 This increase in this sector correlates with the recovery of the semi-conductor market and the Company believes that the optical and x-ray inspection segment of the semiconductor industry offers continued opportunities which match its capabilities in precision optics, crystal products, and monochrometers.

#### Laser Systems and Other

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, representing market areas that while they may be the object of penetration plans by the Company, are not currently large enough to list individually. This market has remained relatively unchanged, at 7% of the Company's sales, over the last three years.

The Company serves the industrial and medical laser industry as an OEM supplier of standard and custom optical components and laser accessories.

Universities and National Laboratories

These sales consist of product sales to researchers at such institutions.

Sales to customers within the University and National Laboratories market sector consist primarily of the Company's legacy systems, Pockels cells and related repairs. In 2010, sales increases reflect the availability of stimulus funding for the National Labs. This follows a year over year sales increase in 2009 when sales were \$492,000 and 4% of sales over 2008 sales of \$203,000, representing 1% of total sales.

#### Major Customers

The Company had sales to three major domestic customers which accounted for 15.3% and 10.8%, and 10.3% of sales in 2010. Each customer is an electro-optical systems division of a major U.S. defense corporation who manufactures systems for U.S. and allied foreign governments. In 2009, the same three customers represented 17.7%, 9.8% and 4.7% of sales, respectively

During the past three years, sales to the Company's top five customers represented approximately 53.3%, 55.3% and 58.8% of sales, respectively. These top customers have been manufacturers either in the Defense sector or the process control and metrology sector. 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.

#### **Export Sales**

The Company's export sales, which are primarily to customers in countries within Europe, Asia and Japan, amounted to approximately 14.9%, 12.5%, and 5.2% of product sales in 2010, 2009 and 2008, 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, as in most other cases as well, the Company attempts to obtain firm price commitments, as well as, cash advances from these suppliers for the purchase of the materials necessary to fulfill the order.

### Marketing and Business Development

The Company's markets products for all three brands, 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 in multiple form factors.

Independent sales agents are used in countries in major non-U.S. markets, including Canada, UK, the EU, Israel, and Japan.

All sales efforts, trade show participation, internet-based marketing, media and non-media advertising and promotion, and international sales representative and distributor relationships are coordinated at the corporate level under the auspices of the corporate Vice President – Marketing and Sales.

### Backlog

The Company's order backlog at December 31, 2010 was \$5,407,000, essentially all of which is expected to be shipped in 2011. The Company's order backlog as of December 31, 2009 and 2008 was \$4,359,000 and \$6,102,000, respectively.

### 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 cost-effective solutions rather than utilizing custom designed and manufactured products.

Competition for the Company's laser devices and instrumentation is limited, but competitors' products are generally lower priced. The Company's laser devices are considered to be high quality and generally offer a combination of features not available elsewhere. Because 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, price, quality, delivery and customer service are market drivers. With advancing globalization, 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.

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 29, 2011, the Company had 83 full-time employees.

### Patents and Licenses

The Company relies on its manufacturing and technological expertise, know-how and trade secrets rather than on 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 customers, where appropriate.

### 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 PPGI products have been granted or deemed not-required.

ITAR regulations govern much of the PPGI domestic defense sector business, and the Company is well versed in handling its customers' technical information under these regulations. PPGI 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 and Florida.

Item 1A.

**Risk Factors** 

The Company cautions investors that its performance (and, therefore, any forward looking statement) is subject to risks and uncertainties. Various important factors, including but not limited to the following, may cause the Company's future results to differ materially from those projected in any forward looking statement.

a) As general economic conditions deteriorate, the Company's financial results may suffer

Significant economic downturns or recessions in the United States, Europe or Asia could adversely affect the Company's business by causing a temporary or longer term decline in demand for the Company's goods and services and thus its revenues.

### 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 and can be modified or terminated with no warning upon the determination of a legislative or administrative body. The recent economic crisis had significant effects on government spending and it is particularly difficult, at this time, to assess how this will continue to impact our defense industry customers and the timing and volume of business we do with them, in future periods. 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.

### c) The Company's revenues are concentrated in its largest customer accounts

b)

For the year ended December 31, 2010, five customer accounts represented approximately 53% of total revenues, and three customers individually accounted for more than 10% of revenues. These three customers each represented approximately 15%, 11% and 10% of sales, respectively. Since we are a supplier of custom manufactured components to OEM customers, the relative size and identity of our largest customer accounts changes somewhat from year to year. In the short term, the loss of any of these large customer accounts or a decline in demand in the sectors which they represent could have a material adverse effect on business, our results of operations, and our financial condition.

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

In order to meet the Company's strategic objectives, the Company needs to continue to develop new processes, to improve existing processes, and to manufacture and market new products. As a result, the Company may continue to make investments in the future 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.

e) 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 effort to do so. The loss of the services of the Company's key personnel could have a material adverse effect on its business, on its results of operations, or on its financial condition.

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

The Company currently holds one material patent 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 secret and employee non-competition 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.

#### g)

### Many of the Company's customer's industries are cyclical

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.

### h) 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. Failure of the Company's suppliers to deliver sufficient quantities of these necessary materials on a timely basis, or to deliver contaminated or inferior quality materials, or to markedly increase their prices could have an adverse effect on the Company's business, despite its efforts to secure long term commitments from the Company's 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.

i)

The Company faces competition

The Company encounters substantial competition from other companies positioned to serve the same market sectors that the Company serves. 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.

j)

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 market-sector 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.

Item 1B.

Unresolved Staff Comments

Not applicable

Item 2.

#### Properties

Administrative, engineering and manufacturing operations are housed in a 42,000 square foot building located in Northvale, New Jersey and in a 25,000 square foot building located in Sarasota, Florida. The headquarters of the Company are in its Northvale facility. On November 1, 2010, the Company exercised the final option on its Northvale lease extending the term for an additional two years to October 31, 2012.

Photonic Products Group, Inc's subsidiary, MRC Precision Metal Optics, has its manufacturing operations located in the Sarasota, Florida facility pursuant to a net lease expiring on August 31, 2013.

These facilities are adequate to meet current and future projected production requirements.

The total rent for these leases was approximately \$569,000, \$582,000 and \$588,000 in 2010, 2009 and 2008, respectively. The Company also paid real estate taxes and insurance premiums that totaled approximately \$165,000 in 2010, \$172,000 in 2009 and \$179,000 in 2008.

Item 3.

Legal Proceedings

There are no legal proceedings involving the Company as of the date hereof.

Item 4.

None

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## 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 PHPG.

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, 2009 through the quarter ended December 31, 2010, as reported by the National Association of Securities Dealers NASDAQ System. 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, 2010	\$1.05	\$0.90	
Quarter ended September 30, 2010	1.15	0.97	
Quarter ended June 30, 2010	1.15	1.00	
Quarter ended March 31, 2010	1.35	0.90	
Quarter ended December 31, 2009	1.50	1.00	
Quarter ended September 30, 2009	1.50	0.96	
Quarter ended June 30, 2009	1.90	1.27	
Quarter ended March 31, 2009	2.00	1.50	

As of March 29, 2011 the Company's closing stock price was \$1.03 per share.

### b) Shareholders

As of March 15, 2010, there were approximately 146 shareholders of record of our Common Stock. The number of shareholders of record of common stock was approximated 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 590 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 immediate future.

d) Recent Sales of Unregistered Securities

There were no sales of unregistered securities during 2010.

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 (1)
2000 Equity Compensation Program approved by shareholders	800,474	\$ 1.13	
2010 Equity Compensation Program approved by shareholders	5,000	\$ 1.00	3,995,000

(1) The 2000 Equity Compensation Program expired on June 2, 2010 but each outstanding option, warrant and right granted under the Program shall expire on the date determined under the terms of the original award, which in no event shall exceed 10 years. The 2010 Equity Compensation Program was adopted by the Company's shareholders at the Annual Meeting held on June 2, 2010. Under this Program, an aggregate of up to 4,000,000 shares of common stock may be granted.

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, 2010 2009 2008 2007 2006								
	2010	2007	2000	2007	2000				
Revenues	\$11,054,178	\$11,051,127	\$16,301,209	\$15,099,878	\$13,921,127				
Net (loss) income	(733,813)	(2,799,992)	1,098,421	1,880,081	772,266				
Net (loss) income applicable to common									
shareholders	\$(733,813)	\$(2,799,992)	\$1,098,421	\$1,641,914	\$537,766				
Earnings per share									
Basic (loss) earnings per share	(0.06)	(0.25)	0.10	0.19	0.07				
Diluted (loss) earnings per share	(0.06)	(0.25)	0.08	0.13	0.06				
Weighted average shares									
Basic	11,522,297	11,331,258	10,902,061	8,609,822	7,572,637				
Diluted	11,522,297	11,331,258	15,619,304	13,777,114	11,915,090				
Common stock dividends on Preferred									
shares	—		—	238,167	234,500				
Total assets	12,621,803	12,610,740	15,732,149	16,077,947	15,316,260				
Long-term obligations (1)	3,960874	3,819,946	3,678,663	3,665,730	6,824,767				
Shareholders' equity	7,373,752	7,777,715	10,124,175	7,712,799	5,236,703				

(1)

Prior year amounts have been reclassified to conform with the current years' presentation

### 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 in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, "Revenue Recognition" ("SAB 104"). Under SAB 104, revenues are recorded 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.

#### Goodwill and Intangible assets

Intangible assets with finite lives are amortized on a straight-line basis over the assets' estimated useful life up to 14 years. The Company periodically evaluates on an annual basis, or more frequently when conditions require, whether events or circumstances have occurred indicating the carrying amount of intangible assets may not be recoverable. When factors indicate that intangible assets should be evaluated for possible impairment, the Company uses an estimate of the associated undiscounted future cash flows compared to the related carrying amount of assets to determine if an impairment loss should be recognized.

Goodwill and intangible assets not subject to amortization are tested in December of each year for impairment, or more frequently if events and circumstances indicate that the assets might have become impaired. An impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value.

#### 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 summarizes the Company's product sales by product categories during the past three years:

	Years Endec	l December	31,				
	20	010	20	009	2008		
Category	Sales	%	Sales	%	Sales	%	
(In thousands)							
Optical Components	\$10,115	92	\$10,350	94	\$14,750	90	
Laser System Devices and							
Instrumentation	939	8	701	6	1,551	10	
TOTAL	\$11,054	100	\$11,051	100	\$16,301	100	

The following table provides information on the Company's sales to its major business sectors during the past three years:

Market	2010			2009		2008		
			(Iı	n thousan	ds)			
Defense/Aerospace	\$ 6,968	(63)%	\$	7,454	(68)%	\$ 10,329	(63)	%
Process control & metrology	2,751	(25)%		2,339	(21)%	4,692	(29)	%
Laser systems and other	796	(7)%		766	(7)%	1,077	(7)	%
Universities & national laboratories	539	(5)%		492	(4)%	203	(1)	%
Total	\$ 11,054	(100)%	\$	11,051	(100)%	\$ 16,301	(100)	)%

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

		ember	er 31,			
	2010		2009		2008	
Revenues:						
Product sales	100.0	%	100.0	%	100.0	%
Costs and expenses:						
Cost of goods sold	77.3	%	80.5	%	70.5	%
Gross profit margin	22.7	%	19.5	%	29.5	%
Selling, general and administrative expenses	28.1	%	29.7	%	23.7	%
Goodwill impairment charge			14.1	%		
(Loss) income from operations	(5.4	) %	(24.3	) %	5.9	%
Net (loss) income	(6.6	) %	(25.3	) %	6.7	%

#### Revenues

Total revenues were \$11,054,000 in 2010, \$11,051,000 in 2009 and \$16,301,000 in 2008 reflecting the consolidated results from all business units. Revenues were unchanged in 2010 from 2009, following a decrease of 32% in 2009 compared with 2008. Overall, the Company's sales in 2010 continued to reflect the reduced spending by the defense/aerospace customers we serve and the lingering effects of the economic recession on many of our commercial customers that negatively affected the demand for the Company's products that began in 2009.

Sales to the Defense and Aerospace sector declined by 6.5% in 2010 compared to 2009 as the Company continued to feel the impact of the economic downturn in defense spending for products or systems supplied by our

customers. However, the decline was less than in 2009 in which sales in this sector fell by almost 27.8% from 2008. Sales were \$6,968,000 in 2010 compared to sales of \$7,454,000 in 2009 and \$10,329,000 in 2008. Defense spending on electro-optical systems over the last two fiscal periods has slowed, impacting the demand for the Company's services in manufacturing custom products for its OEM customers.

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Sales in the Process Control and Metrology market sector, the Company's second largest market, increased in 2010 by 17.6% to \$2,751,000 compared to \$2,339,000 in 2009. In addition, as a percentage of sales, this sector increased to 25% of total sales. This occurred as many of our customers in this sector experienced an increase in demand for their systems that contain the products that we supply to them. In 2009, sales in this sector decreased both as a percentage of total sales and in relative sales dollars. This reflected the impact of the economic downturn, particularly in the commercial and semi-conductor markets and in particular, the customer base that the Company serves. Sales were \$2,339,000 or 21% of total sales compared to sales in 2008 of \$4,692,000 or 29% of total sales.

The Company serves the non-military laser industry as an OEM supplier of standard and custom optical components and laser accessories. This sector's sales increased to \$193,000 from \$138,000 in 2009 principally from increased demand in the medical laser industry but remained below sales in 2008 of \$463,000. The Company includes sales of other products that are not currently large enough to list individually, in this market segment. Sales of these other products have been in the \$500,000 to \$700,000 range historically and were \$603,000 in 2010, \$628,000 in 2009 and \$614,000 in 2008. Overall, the market for laser systems and other products represented 7% of total sales in 2010, 2009 and 2008, respectively.

Sales to customers within the University and National Laboratories market sector increased in 2010 to \$539,000 or 5% of total sales from \$492,000 or 4% of total sales in 2009 as demand for our products serving this market increased slightly.

### Bookings

The Company booked new orders totaling \$12.3 million in 2010, an increase from the \$9.5 million in 2009 and comparable with \$13.0 million in 2008. The increase in 2010 was incurred across all the business sectors that the Company serves. However, a significant portion of the 2010 bookings were recorded in the second half of the year as the result of orders from the new customers and increases from most of our existing customer base.

In 2009, the Company booked new orders of \$9.5 million compared with \$13.0 million in 2008. The decrease in bookings from the prior year reflects a decline across all the business sectors that the Company serves. Despite the decrease, the Company was able to add several new customers while maintaining most of its existing customer base.

In 2008, the Company booked new orders of \$13.0 million The Company had two large bookings near the end of 2007 which were scheduled to carry through 2008 and into 2009. In the second half of 2008, MRC orders decreased as the impact of the economic downturn and defense sector slowdown affected our commercial customer's and they experienced a slowdown in their business activities and demand for products. This carried over into 2009.

As a result of the increase in bookings in 2010, the Company's backlog as of December 31, 2010 increased to \$5.4 million compared to \$4.4 million in 2009. The Company's backlog as of December 31, 2009 was \$4.4 million, down from \$6.1 million at December 31, 2008.

### Cost of Goods Sold and Gross Profit Margin

Cost of goods sold as a percentage of sales was 77.3%, 80.5% and 70.5%, for the years ended December 31, 2010, 2009 and 2008, respectively. In dollar terms, 2010 cost of goods sold was \$8,545,000 which is down 3.9% from \$8,897,000 in 2009 even though revenues remained unchanged.

The slight decrease in cost of goods sold in 2010 compared to 2009 is primarily due to declines in labor and operating costs partially offset by an increase in material costs. Compared to last year, total manufacturing wages and salaries decreased by \$332,000 as operations continued to implement process improvements and resulted in a decrease in

non-labor operating expenses of \$184,000. Conversely, material costs increased by \$213,000 for the Company which was mainly due to product mix at our Florida facility.

The increase in cost of goods sold percentage in 2009 compared to 2008 is primarily due to the significant decline in sales volume during the year, net of cost reductions implemented by the Company during the year. Compared to the prior year, material costs as a percentage of sales remained unchanged from 2008 although in dollar terms material costs declined by \$913,000, as expected with the lower sales volume levels. Total manufacturing wages and salaries declined by approximately \$832,000 but rose by 5.6 percentage points, as a percentage of sales. Non-labor operating costs excluding depreciation also fell in dollar terms in 2009 by approximately \$606,000 or 26.7% from 2008, but as a percentage of sales, increased by about 1.1 percentage points from the prior year.

Gross margin in 2010 was \$2,509,000 or 22.7% which was an increase from 2009 gross margin of \$2,154,000 or 19.5%. This compares with a gross margin of \$4,815,000 or 29.5% in 2008.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("S&A") were \$3,105,000 in 2010, down \$174,000 or 5.3% from 2009. As a percentage of sales, SG&A expenses were 28.1% of 2010 sales compared to 29.7% of sales in 2009. The decline resulted mainly from reductions in SG&A salaries and wages and fringe benefits from personnel reductions in the second half of the year and continued cost management of other SG&A expenses throughout the year.

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SG&A expenses were \$3,278,000 in 2009, down \$580,000 or 15% from 2008, and as a percentage of sales represented 29.7% of sales in 2009 and 23.7% of sales in 2008. The decline in dollar expense resulted mainly from reductions in SG&A salaries and wages and fringe benefits reflecting personnel reductions implemented in the first quarter of 2009 and continued cost management throughout the year. Overall, SG&A salary and wages decreased by 14.5% over the prior year. Non-payroll SG&A expenses, excluding depreciation, also declined by 15.5% compared to 2008.

### Operating (Loss) Income

The Company had an operating loss of \$596,000 in 2010 which was an improvement over the loss incurred during the prior year. In 2009, the Company had an operating loss of \$1,124,000 excluding a non-cash charge for the impairment of goodwill of \$1,558,000, as discussed in Note 4 of the Company's Consolidated Financial Statements. The losses in 2010 and 2009, primarily, reflect the significant decrease in sales, as discussed above, compared to 2008 when the Company had operating income of \$957,000.

### Other Income and Expenses

Net interest expense of \$138,000 in 2010 increased 5.7% from \$130,000 in 2009. Interest expense was \$164,000 in 2010 compared to \$167,000 in 2009 which is the result of the Company's normal scheduled debt repayments. Interest income for 2010 was \$26,000 down from \$38,000 in 2009 mainly as a result of reductions in bank interest rates on invested cash balances.

Net interest expense of \$130,000 in 2009 declined 23.5% from \$170,000 in 2008. Interest expense was \$167,000 in 2009 compared to \$236,000 in 2008 which reflects the positive impact of the Company's continued reduction in debt and long term notes. Interest income for 2009 was \$37,000 down from \$66,000 in 2008 mainly as a result of reductions in bank interest rates on invested cash balances.

#### Income Taxes

In 2010 and 2009, 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.

In 2008, the Company recorded a current provision for state tax and federal alternative minimum tax of \$100,000 and \$5,000, respectively, after the application of net operating losses of \$523,000 against federal tax

The Company recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns. Deferred tax liabilities and assets are determined based on the difference between the financial statements carrying amounts and the tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse.

At December 31, 2010, the Company had a net deferred tax asset balance of \$2,787,000, an increase of \$271,000 from 2009. Most of the increase relates primarily to the addition to the Company's net operating loss carry forward position which resulted from net operating losses in 2010. Although the Company believes that the current year's losses were caused by the recessionary economic conditions that are improving, the Company has increased the valuation allowance to \$2,379,000 to fully offset the current year's increase in the deferred tax asset.

At December 31, 2009, the Company had a total net deferred tax asset balance of \$2,516,000, an increase of \$375,000 from 2008 primarily from the increase to the net operating loss carry forward position that resulted from the losses incurred in 2009.

As of December 31, 2010 and 2009, the Company recognized a portion of the net deferred tax assets in the amount of \$408,000 which the Company's management is reasonably assured will be fully utilized in future periods. 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 that management is using to manage the underlying business. The Company's valuation allowance as of December 31, 2010 will be maintained until management concludes that it is more likely than not that the remaining deferred tax assets will be realized. When sufficient positive evidence exists, the Company's income tax expense will be reduced by the decrease in its valuation allowance. An increase or reversal of the Company's valuation allowance could have a significant negative or positive impact on the Company's future earnings.

During the year ended December 31, 2008, Company determined that based on its recent history of consistent earnings and future income projections, a full valuation allowance was no longer required. Accordingly, the Company reduced the valuation allowance and recognized a deferred tax benefit available from the Company's net operating loss carry forward position of \$408,000 based on the effective federal tax rate of 34%. This resulted in the Company recording a net benefit from income taxes of \$303,000 after offsetting the deferred tax benefit against the current tax provision of \$105,000. At December 31, 2008, the Company had a net deferred tax asset balance of \$2,141,000 offset by a valuation allowance of \$1,733,000.

### Net (Loss) Income

The Company had a net loss of \$734,000 in 2010, improving from a net loss in 2009. Despite comparable sales levels the improvement can be attributed, in part, to continued improvements in manufacturing costs and SG&A cost reductions during 2010. In 2009, the Company had a net loss of \$2,800,000 which included a \$1,558,000 non-cash charge for goodwill impairment. This compares with net income of \$1,098,000 in 2008. Both 2010 and 2009 results were impacted by the decline in sales volumes and reduced profit margins compared to 2008, which was somewhat offset by manufacturing and SG&A cost reductions in both years.

### Liquidity and Capital Resources

A major source of cash in recent years has been from operating cash flows. Other sources of cash include proceeds received from the exercise of stock options, short-term borrowing, and issuance of common stock. The Company's major uses of cash in the past three years have been for capital expenditures and for repayment and servicing of outstanding debt.

Supplemental information pertaining to our source and use of cash is presented below:

Selected Sources (uses) of cash	Ye	ars ended Dec	ember 31,		
	2010 2009 2				
		(In thousar	nds)		
Net cash provided by operations	\$576	\$815	\$548		
Net Proceeds from issuance of common stock, exercise of stock options					
and warrants	7	162	1,064		
Capital Expenditures	(278	) (211	) (785	)	
Principal payments on lease obligations			(47	)	
Principal payments on debt obligations	(9	) (137	) (1,715	)	

In 2010 and 2009, the Company primarily used excess cash to finance capital expenditures and repay outstanding debt. In 2008, excess cash was used to retire a convertible promissory note in the amount of \$1,700,000, in addition to accelerating the repayment of other notes payable and lease obligations, as well as, financing capital expenditures.

In 2010, proceeds from the exercise of 10,000 stock options and issuance of 5,906 common shares totaled \$7,102. During 2009, 84,500 stock options were exercised for proceeds of \$96,600 at a weighted exercise price of \$1.14 per share and converted into an equivalent number of shares of the Company's common stock. Proceeds from the exercise of stock options were \$285,000 in 2008, with 182,000 stock options exercised at a weighted average exercise price of approximately \$1.42 per share.

During 2009, a total of 50,000 warrants issued pursuant to a 2004 private placement were exercised by warrant holders with a total exercise price of \$67,500. Also in July 2009, 893,790 warrants with an exercise price of \$1.35 expired unexercised. These warrants were originally issued as part of a private placement of common stock in 2004.

During 2008, 518,635 warrants from the private placement were exercised by warrant holders. A total of 375,520 warrants with a total exercise price of \$507,000 were surrendered to the Company in exchange for the issuance of 375,250 shares of the Company's common stock. An additional 142,385 placement agent warrants were exercised using a cashless feature available for these warrants, in exchange for 89,702 shares of the Company's common stock.

In March 2011, 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 extended to April

1, 2013. The remaining terms and conditions of the notes were unchanged. These notes were previously issued on April 1, 2009 and had a maturity date of April 1, 2011. The notes bear interest at 6%. Interest accrues yearly, is payable on maturity and 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 and have an expiration date of April 1, 2016. Clarex is a significant shareholder of the Company.

On March 30, 2011, the Company paid accrued interest of \$180,000 and \$120,000 on the \$1,500,000 Note and the \$1,000,000 Note, respectively. In addition the Company also paid \$22,500 and \$15,000 of interest relating to the \$1.5 million Note and \$1 million Note, respectively, as the Company intends to stay current with interest payments for amounts that would accrue against these notes in 2011 and going forward. Therefore the Company expects to make a payment of \$37,500 each quarter in 2011 and through the maturity date to satisfy the amounts of accrued interest each quarter.

In May 2009, the Company repaid a Promissory Note prior to maturity, in the amount of \$125,000 and accrued interest of \$4,212, which represented the balance of a Note issued by the Company as part of the purchase price of MRC in 2004, to the sole shareholder of the acquired company.

On January 29, 2008, the Company repaid a \$1,700,000 Secured Promissory Note held by a major shareholder, including accrued interest of \$477,444. The note was originally issued in June 2003 for a period of 18 months at an interest rate of 6% per annum and was secured by all assets of the Company. As additional consideration for the note, the Company issued 200,000 warrants.

In March 2008, 200,000 warrants due to expire on March 31, 2008 were exercised and the Company issued 200,000 shares of its common stock for proceeds of \$85,000.

In May 2008, an additional 200,000 warrants set to expire on May 18, 2008 were exercised for \$216,000 and the Company issued 200,000 shares of its common stock.

In 2009, certificate of deposits totaling \$800,000 were redeemed compared to an investment of \$800,000 in certificates of deposit 2008.

The Company had capital expenditures in 2010 in the amount of \$278,000, primarily to replace or refurbish manufacturing equipment and for additional equipment required to increase our crystal growth capacity at our Northvale, New Jersey location. For the year ended December 31, 2009 capital expenditures of \$211,000 included planned expenditures primarily for manufacturing and optical testing equipment designed to increase production efficiency at our Northvale, New Jersey location. In addition, the Company purchased a manufacturing tool made from platinum at a net cost of \$53,000. The cost was offset by proceeds from the sale of platinum for \$16,000, as part of the purchase arrangement.

This compares to capital expenditures in 2008 of approximately \$784,000. In 2008, capital expenditures were primarily for increased production capacity and capability in both our Sarasota, Florida and Northvale, New Jersey locations. Offsetting the impact of capital expenditures on cash flows was the receipt of \$10,000 from the sale of surplus manufacturing equipment during the second quarter of 2008.

Cash increased by \$296,000 in 2010 compared to an increase of \$597,000 for 2009 (including certificates of deposit). In 2008, cash decreased by \$924,000 (including certificates of deposit) reflecting lower cash provided from operations and used for capital expenditures and repayment of convertible debt.

A summary of the Company's contractual cash obligations at December 31, 2010 is as follows:

					Greater
		Less than		4-5	Than 5
Contractual Obligations	Total	1 Year	1-3 Years	Years	Years
-			(In thousands)	)	
Convertible notes payable	\$2,500	\$—	\$2,500	\$—	\$—

Accrued interest on related party convertible					
notes payable	1,125		1,125		—
Notes payable-other, including interest	527	23	69	46	389
Operating leases	1,015	480	535		
Total contractual cash obligations	\$5,167	\$503	\$4,229	\$46	\$389

Overview of Financial Condition

As shown in the accompanying financial statements, the Company reported a net loss of \$734,000, a net loss of \$2,800,000, which included a non-cash charge for goodwill of \$1,558,000 and recorded net income of \$1,098,000 in 2008. During 2010, 2009 and 2008, the Company's working capital requirements were provided by positive cash flow from its operations.

Net cash provided by operations was \$576,000 in 2010, \$815,000 in 2009, \$548,000 in 2008. The decrease in cash provided by operations was primarily the results of the net changes in working capital requirements in 2010, which results from an increase in accounts receivable and inventory (excluding reserves) during the year, offset by an increase in accounts payable and accrued liabilities and customer advances. 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 in 2011.

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**Off-Balance Sheet Arrangements** 

The Company did not have any off-balance sheet arrangements at December 31, 2010 and 2009.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company believes that it has limited exposure to changes in interest rates from investments in certain money market accounts. The Company does not utilize derivative instruments or other market risk sensitive instruments to manage exposure to interest rate changes.

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 24 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, 2010 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, 2010. In making this assessment, management used the framework in Internal Control — Integrated Framework 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, 2010.

## 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

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### 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 2011 Annual Meeting of Stockholders.

Item 11. Executive Compensation

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2011 Annual Meeting of Stockholders.

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 2011 Annual Meeting of Stockholders.

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 2011 Annual Meeting of Stockholders.

Item 14.

Principal Accounting Fees and Services

The information required under this item is incorporated by reference to the Company's Proxy Statement for the 2011 Annual Meeting of Stockholders.

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## 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 24.

(a) (2) Financial Statement Schedule.

Reference is made to the Index to Financial Statements and Financial Statement Schedule on Page 24. 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
	Restated Certificate of Incorporation of Photonics Products Group, Inc. (incorporated by reference to
3.1	Exhibit 3.1 to the Company's Registration Statement on Form S-1 filed with the Securities and Exchange
	Commission on August 25, 2004)
	By-Laws of Photonic Products Group, Inc. (incorporated by reference to Exhibit 3.2 to the Company's
3.2	Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
	Certificate of Amendment to Restated Certificate of Incorporation of Photonics Products Group, Inc.,
3.3	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).
	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's
4.1	Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25, 2004)
	Form of Warrants issued pursuant to June 2004 Private Placement (incorporated by reference to
4.2	Exhibit 4.2 to the Company's Registration Statement on Form S-1 filed with the Securities and Exchange
1.2	Commission on August 25, 2004)
	Form of Placement Agent Warrants issued pursuant to June 2004 Private Placement (incorporated by
4.3	reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1 filed with the Securities
	and Exchange Commission on August 25, 2004)
	Promissory Note Dated June 30, 2003 held by Clarex, Ltd. (incorporated by reference to Exhibit 4.4 to
4.4	the Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission
	on August 25, 2004)
	Subordinated Convertible Promissory Note dated April 1, 2004 held by Clarex, Ltd. (incorporated by
4.5	reference to Exhibit 4.5 to the Company's Registration Statement on Form S-1 filed with the Securities
	and Exchange Commission on August 25, 2004)
	Warrant dated March 31, 2004 issued to Clarex, Ltd. (incorporated by reference to Exhibit 10.2 to the
4.6	Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on
	August 25, 2004)
	Warrant dated May 19, 2004 issued to Clarex, Ltd. (incorporated by reference to Exhibit 10.3 to the
4.7	Company's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on
4.8	August 25, 2004) Subordinated Convertible Promissory Note dated April 1, 2009 held by Clarex, Ltd. (incorporated by
4.0	reference to Exhibit 4.12 to the Company's Annual Report on Form 10-K filed with the Securities and
	reference to Exmon 4.12 to the Company's Annual Report on Form To-K filed with the Securities and

Exchange Commission on March 31, 2009)

- 4.9 Subordinated Convertible Promissory Note dated April 1, 2009 held by Welland, Ltd. (incorporated by reference to Exhibit 4.13 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2009)
- Subordinated Convertible Promissory Note dated April 1, 2011 held by Clarex, Ltd. (which will
  supersede document 4.10) (incorporated by reference to Exhibit 4.12 to the Company's Annual Report on
  - 10-K filed with the Securities and Exchange Commission on March 31, 2011)
- Subordinated Convertible Promissory Note dated April 1, 2011 held by Welland, Ltd. (which will
   supersede document 4.10) (incorporated by reference to Exhibit 4.13 to the Company's Annual Report on 10-K filed with the Securities and Exchange Commission on March 31, 2011)
- 2000 Equity Compensation Program (incorporated by reference to Exhibit 10.1 to the Company's10.1Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 25,
  - 2004)

2010 Equity Compensation Program (incorporated by reference to Exhibit B to the Company's Proxy

- 10.2 Statement for the 2010 Meeting of Stockholders filed with the Securities and Exchange Commission on April 30, 2010)
- 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)
- 21.1List of Subsidiaries (incorporated by reference to Exhibit 21.1 to the Company's Annual Report on<br/>Form 10-K filed with the Securities and Exchange Commission on March 31, 2006)
- 23.1 Consent of Holtz Rubenstein Reminick 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
- Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to 32.1 Section 906 of the Sarbanes-Oxley Act of 2002
- Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to 32.2 Section 906 of the Sarbanes-Oxley Act of 2002

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#### 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.

#### PHOTONIC PRODUCTS GROUP, INC.

By: /s/ Joseph J. Rutherford Joseph J. Rutherford Chief Executive Officer

Dated: March 31, 2011

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 31, 2011
/s/ Luke P. LaValle, Jr. Luke P. LaValle, Jr.	Director	March 31, 2011
/s/ Thomas H. Lenagh Thomas H. Lenagh	Director	March 31, 2011
/s/ Dennis G. Romano Dennis G. Romano	Director	March 31, 2011
/s/ N.E. Rick Strandlund N.E. Rick Strandlund	Director	March 31, 2011
/s/ Joseph J. Rutherford Joseph J. Rutherford	President, Chief Executive Officer and Director	March 31, 2011
/s/ William J. Foote William J. Foote	Chief Financial Officer, Secretary and Treasurer	March 31, 2011

## PHOTONIC PRODUCTS GROUP, INC. AND SUBSIDIARIES

## INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

## THREE YEARS ENDED DECEMBER 31, 2010

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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders Photonic Products Group, Inc. and Subsidiaries Northvale, New Jersey

We have audited the accompanying consolidated balance sheets of Photonic Products Group, Inc. and Subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2010. We have also audited the schedule listed in Item 15(a)(2) of this Form 10-K for the years ended December 31, 2010, 2009 and 2008. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule 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 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 Photonic Products Group, Inc. and Subsidiaries as of December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/Holtz Rubenstein Reminick LLP

New York, New York March 31, 2011

## PHOTONIC PRODUCTS GROUP, INC AND SUBSIDIARIES

### CONSOLIDATED BALANCE SHEETS

	December 31,	
Assets	2010	2009
Current assets:		
Cash and cash equivalents	\$4,365,045	\$4,069,310
Accounts receivable (after allowance for doubtful accounts of \$15,000 in 2010 and	φ+,505,0+5	ψ+,002,510
2009)	2,224,592	1,927,672
Inventories, net	2,390,876	2,265,973
Other current assets	119,243	164,081
Total Current Assets	9,099,756	8,427,036
Plant and equipment:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,127,030
Plant and equipment at cost	14,879,508	14,604,728
Less: Accumulated depreciation and amortization	(12,876,163)	(12,016,247)
Total plant and equipment	2,003,345	2,588,481
Precious Metals	157,443	157,443
Deferred Income Taxes	408,000	408,000
Goodwill	311,572	311,572
Intangible Assets, net of accumulated amortization	594,452	673,016
Other Assets	47,235	45,192
Total Assets	\$12,621,803	\$12,610,740
Liabilities and Shareholders' Equity	+ , • , • • • •	+, • _ • , • • •
Current Liabilities:		
Current portion of notes payable -other	\$9,000	\$9,000
Accounts payable and accrued liabilities	836,190	657,650
Customer advances	441,987	346,429
Total Current Liabilities	1,287,177	1,013,079
Related Party Convertible Notes Payable	2,500,000	2,500,000
Accrued Interest on Related Party Convertible Note Payable	1,125,000	975,000
Notes Payable – Other, net of current portion	335,874	344,946
Total Liabilities	5,248,051	4,833,025
Commitments		
Shareholders' equity:		
Common stock: \$.01 par value; 60,000,000 authorized shares 11,562,656 issued at		
December 31, 2010 and 11,443,347 issued at December 31, 2009	115,626	114,433
Capital in excess of par value	17,402,528	17,073,871
Accumulated deficit	(10,129,452)	(9,395,639)
	7,388,702	7,792,665
Less - Common stock in treasury, at cost (4,600 shares)	(14,950)	(14,950)
Total Shareholders' Equity	7,373,752	7,777,715
Total Liabilities and Shareholders' Equity	\$12,621,803	\$12,610,740

See notes to consolidated financial statements

# PHOTONIC PRODUCTS GROUP, INC AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF OPERATIONS

10       2009       2008         554,178       \$ 11,051,127       \$ 16,301,209
\$ 11,051,127 \$ 16,301,209
\$ 11,051,127 \$ 16,301,209
5,153 8,896,539 11,486,620
3,278,161 3,857,805
1,558,074 —
13,732,774 15,344,425
5,038 ) (2,681,647) 956,784
7,775 ) (130,387 ) (170,476 )
4,671 9,113
7,371 —
7,775 ) (118,345 ) (161,363 )
3,813 ) (2,799,992 ) 795,421
— 303,000
3,813 ) \$ (2,799,992 ) \$ 1,098,421
6 ) \$ (0.25 ) \$ 0.10
6 ) \$ (0.25 ) \$ 0.08
11,331,258 10,902,061
11,331,258 15,619,304

See notes to consolidated financial statements

# PHOTONIC PRODUCTS GROUP, INC. AND SUBSIDIARIES

# CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

			Capital in				Total
	Common Stock		excess of		Treasury		Shareholders'
	Shares	Amount	par value	Deficit	Stock		Equity
Balance, January 1, 2008	10,104,719	\$101,046	\$15,320,771	\$(7,694,068)	\$(14,950	)	\$7,712,799
401K contribution	75,907	759	159,422	—	_		160,181
Common stock issued on							
exercise of options	185,100	1,851	254,919	—			256,770
Common stock issued on							
conversion of warrants	864,952	8,650	798,937				807,587
Stock-based compensation							
expense		_	88,417		—		88,417
Net income for the year				1,098,421			1,098,421
Balance, December 31, 2008	11,230,678	112,306	16,622,466	(6,595,647)	(14,950	)	10,124,175
401K contribution							