FORM 10-K

NOVANTA INC - NOVT

Filed: March 13, 2014 (period: December 31, 2013)

Annual report with a comprehensive overview of the company

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☑ ANNUALREPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2013

Or

☐ TRANSITIONREPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission File No. 001-35083

GSI Group Inc.
(Exact name of registrant as specified in its charter)

New Brunswick, Canada	**98-0110412**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
125 Middlesex Turnpike Bedford, Massachusetts, USA (Address of principal executive offices)	**01730** (Zip Code)

(781) 266-5700
(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Exchange on Which Registered
Common Shares, no par value	**The NASDAQ Stock Market LLC**

Securities Registered Pursuant to Section 12(g) of the Act:

None

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

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

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

Indicate by check mark whether the registrant has submitted electronically 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 (Section 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). Yes ☑ No ☐

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☑	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

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

The aggregate market value of the Registrant's outstanding common shares held by non-affiliates of the Registrant, based on the closing price of the common shares on the NASDAQ Global Select Market on the last business day of the Registrant's most recently completed second fiscal quarter (June 28, 2013) was $216,692,467. For purposes of this disclosure, common shares held by officers and directors of the Registrant and by persons who hold more than 5% of the Registrant's outstanding common shares have been excluded because such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily conclusive.

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☑ No ☐

As of February 28, 2014, there were 34,017,790 of the Registrant's common shares, no par value, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement for the Registrant's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 to be filed with the Securities and Exchange Commission are incorporated by reference in answer to Part III of this Annual Report on Form 10-K.

GSI GROUP INC.
FORM 10-K
YEAR ENDED DECEMBER 31, 2013
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As used in this report, the terms "we," "us," "our," "GSI Group," "GSI," "GSIG" and the "Company" mean GSI Group Inc. and its subsidiaries, unless the context indicates another meaning.

Unless otherwise noted, all dollar amounts in this report are expressed in United States dollars.

The following brand and trade names of GSI Group are used in this report: MicroE Systems, Westwind, Synrad, JK Lasers, Continuum, Cambridge Technology, ExoTec Precision, General Scanning, Photo Research, NDS, Dome and NDSsi.

PART I

Cautionary Note Regarding Forward-Looking Statements

Except for historical information, the matters discussed in this Annual Report on Form 10-K are forward looking statements that involve risks, uncertainties and assumptions that, if they never materialize or if they prove incorrect, could cause our consolidated results to differ materially from those expressed or implied by such forward-looking statements. The Company makes such forward-looking statements under the provision of the "Safe Harbor" section of the Private Securities Litigation Reform Act of 1995. Actual future results may vary materially from those projected, anticipated, or indicated in any forward-looking statements as a result of various factors, including those set forth in Item 1A of this Annual Report on Form 10-K under the heading "Risk Factors." Readers should also carefully review the risk factors described in the other documents that we file from time to time with the SEC. In this Annual Report on Form 10-K, the words "anticipates," "believes," "expects," "intends," "future," "could," "estimates," "plans," "would," "should," "potential," "continues" and similar words or expressions (as well as other words or expressions referencing future events, conditions or circumstances) identify forward-looking statements. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. The forward-looking statements contained in this Annual Report include, but are not limited to, statements related to: anticipated financial performance; expected liquidity and capitalization; drivers of revenue growth; management's plans and objectives for future operations, expenditures and product development, and investments in research and development; business prospects; potential of future product releases; anticipated sales performance; industry trends; market conditions; changes in accounting principles; changes in actual or assumed tax liabilities; expectations regarding tax exposures; anticipated reinvestment of future earnings; anticipated expenditures in regard to the Company's benefit plans; future acquisitions and dispositions and anticipated benefits from such acquisitions; anticipated outcomes of the legal proceedings and litigation matters; anticipated use of currency hedges; timing, scope and expected savings and charges related to realignment and restructuring initiatives; ability to repay our indebtedness; our intentions regarding the use of cash; expectations regarding the Company's ability to leverage its medical original equipment manufacturer ("OEM") sales channels; expected closing of the JADAK acquisition; expected benefits as a result of the JADAK acquisition; and other statements that are not historical facts. All forward-looking statements included in this document are based on information available to us on the date hereof. We will not undertake and specifically decline any obligation to update any forward looking statements.

Item 1. *Business*

OVERVIEW

GSI Group Inc. and its subsidiaries (collectively referred to as the "Company", "we", "us", "ours") design, develop, manufacture and sell precision photonic and motion control components and subsystems to original equipment manufacturers ("OEM's") in the medical, industrial, electronics and scientific markets. Our highly engineered enabling technologies include laser sources, scanning and beam delivery products, medical visualization and informatics solutions, and precision motion control products. We specialize in collaborating with OEM customers to adapt our component and subsystem technologies to deliver highly differentiated performance in their applications.

GSI Group Inc. was founded and initially incorporated in Massachusetts in 1968 as General Scanning, Inc. ("General Scanning"). General Scanning developed, manufactured and sold components and subsystems used for high-speed micro positioning of laser beams. In 1999, General Scanning merged with Lumonics Inc., a Canadian company that developed, manufactured and sold laser-based, advanced manufacturing systems for electronics, semiconductor, and general industrial applications. The post-merger entity, GSI Lumonics Inc., continued under the laws of the Province of New Brunswick, Canada. In 2005, we changed our name to GSI Group Inc.

Strategy

Our strategy is to drive sustainable, profitable growth through short-term and long-term initiatives, including:

- broadening our product and service offerings through the acquisition of innovative and complementary technologies and solutions;
- driving sustainable and predictable profitable growth by improving our business mix to increase medical sales, maintain industrial sales and reduce microelectronics sales as a percentage of total revenue;
- upgrading our existing operations to drive profitable growth through our continuous improvement productivity and customer satisfaction programs, and through strategic divestitures and expanding our business through strategic acquisitions;
- strengthening our strategic position in medical technologies, lasers, and precision motion technology platforms, through continual investment in differentiated new products and solutions;
- leveraging our breath of product offerings with numerous shared customers to strengthen key customer relationships, increase our penetration of key customers, and drive increased sales; and
- attracting, retaining, and developing talented and motivated employees.

Acquisitions

In August 2008, GSI acquired Excel Technology, Inc. (“Excel”), a designer, manufacturer and marketer of photonics-based solutions consisting of lasers, laser-based systems, precision motion devices, and electro-optical components primarily used in industrial and scientific applications.

In January 2013, GSI acquired NDS Surgical Imaging (“NDS”) for $80.8 million in cash, net of closing working capital adjustments. NDS is a San Jose, California-based company that designs, manufactures, and markets high definition visualization solutions and imaging informatics products for the surgical, radiology and patient monitoring end markets.

On February 18, 2014, we reached an agreement to acquire JADAK LLC, JADAK Technologies Inc. and Advance Data Capture Corporation (together, “JADAK”), a North Syracuse, New York-based provider of optical data collection and machine vision technologies to OEM medical device manufacturers, for $93.5 million in cash. The transaction, which is subject to customary closing conditions, is expected to close in March 2014. The JADAK business line is expected to be reported as part of the Medical Technologies segment.

JADAK’s technology consists of barcode components and scanners, machine vision cameras, RFID technology, magnetic stripe readers, portable platforms and associated software. JADAK’s products are highly engineered, application-specific components that are developed and manufactured to meet the extremely high performance and quality requirements of major medical OEMs. JADAK’s products are used in medical equipment to increase safety and reduce medical errors by verifying patient identity, validating the specified therapy or function and enhancing the accuracy of the medical procedure.

Divestitures and Restructuring

Beginning in 2011, we initiated a strategic review of the Company to focus our priorities and our investments, while simplifying and streamlining our business model. In June 2012, we committed to a plan for the sale of the Semiconductor Systems operating segment, sold under the GSI brand name, and the Laser Systems product lines, sold under the Control Laser and Baublys brand names. We began accounting for these businesses as discontinued operations in the second quarter of 2012. In October 2012, we sold the Lasers Systems business for $6.6 million, net of final working capital adjustments of $0.4 million paid in September 2013. In May 2013, we sold the Semiconductor Systems business for $9.7 million, including final working capital adjustment of $1.7 million received in September 2013.

Since 2011, our strategic initiatives resulted in the elimination of eleven facilities, including five facilities exited as part of the sale of the Semiconductor and Laser System product lines. These eliminations resulted in the consolidation of our scientific lasers and optics products facilities, consolidation of our German operations into one facility, and consolidation of our laser scanners business into our Bedford, Massachusetts facility.

On January 31, 2014, we signed a letter of intent to sell certain assets and liabilities of our scientific lasers business, sold under the Continuum brand name, for $7.5 million in cash, subject to successful completion of due diligence by the potential acquirer, entry into a definitive agreement, and customary closing conditions. In addition, the agreement includes contingent consideration of up to $3.0 million based on the achievement of certain 2014 revenue targets. In accordance with ASC 360-10-45-9, "Property, Plant and Equipment – Overall – Other Presentation Matters – Long-Lived Assets Held for Sale," we expect that the scientific lasers business will qualify as "Held for Sale" and will also be reported as a discontinued operation in the first quarter of 2014. During the years ended December 31, 2013, 2012, and 2011, the scientific lasers business generated revenues of approximately $25 million, $28 million, and $35 million, respectively. The loss on the sale of the business before taxes is expected to be approximately $1.5 million to $2.5 million. As of December 31, 2013, total assets and liabilities of the scientific lasers business were approximately $14 million and $4 million, respectively.

Segments

As a result of restructuring activities, the Company's divestitures, the acquisition of NDS, change in organizational structure, and a change in the allocation of resources, the Company realigned its reportable segments during the fourth quarter of 2013 into three segments: Laser Products, Medical Technologies and Precision Motion. The Laser Products segment includes Laser Scanners, Sealed CO_2 Lasers, Fiber Lasers and Scientific Lasers product lines. The Medical Technologies segment consists of four product lines: Medical Grade Visualization Solutions, Imaging Informatics, Thermal Printers, and Light and Color Measurement instrumentation. The Precision Motion segment consists of two product lines: Optical Encoders and Air Bearing Spindles.

The following table shows the external revenues and gross profit margin, as restated, for each of the segments for the year ended December 31, 2013 (dollars in thousands):

	Sales	Gross Profit Margin
Laser Products	$ 191,300	39.7%
Medical Technologies	90,276	39.7%
Precision Motion	60,036	46.3%
Total	$341,612	40.8%

See Note 17 to Consolidated Financial Statements for additional financial information about our reportable segments.

Laser Products

The Laser Products segment designs, manufactures and markets photonics-based solutions to customers worldwide. The segment serves highly demanding photonics-based applications such as industrial material processing, and medical and life science imaging and laser treatments. The vast majority of the segment's product offerings are sold to Original Equipment Manufacturer ("OEM") customers. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

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The Laser Products segment is comprised of four major product lines:

Product Line	Key End Market	Brand Names	Description
Laser Scanners	Industrial, Medical and Electronics	Cambridge Technology, Synrad, JK Lasers, & ExoTec Precision	Galvanometer scanners and scanning solutions, such as laser scanhead. These products provide rapid, precise control and delivery of laser beams through motorized manipulation of mirrors and optical elements in three dimensions. Applications include material processing (such as laser marking, laser machining, laser drilling), scanning microscopy, laser-based vision correction, optical coherence tomography imaging, high resolution printing, holographic imaging and storage, metrology, and 2D or 3D imaging.
Sealed CO_2 Lasers	Industrial and Medical	Synrad	Applications include coding, marking, engraving, and cutting of non-metals, laser sintering, laser converting, and laser aesthetics.
Fiber Lasers	Industrial, Medical and Electronics	JK Lasers	Applications include material processing (such as laser cutting, machining, welding and drilling), laser sintering, laser converting, additive manufacturing and micromachining.
Scientific Lasers	Scientific and Electronics	Continuum	Applications include scientific research and microelectronics material processing.

Medical Technologies

The Medical Technologies segment designs, manufactures and markets a range of medical grade technologies, including visualization solutions, imaging informatics products, thermal printers, and light and color measurement instrumentation to customers worldwide. The vast majority of the segment's product offerings are sold to Original Equipment Manufacturer ("OEM") customers. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

The Medical Technologies segment has four major product lines:

Product Line	Key End Market	Brand Names	Description
Visualization Solutions	Medical	NDS, NDSsi, Dome	High definition visualization solutions for the surgical, patient monitoring, and radiology end-markets with a focus in surgery, radiology, neurosurgery, and other medical imaging disciplines.
Imaging Informatics	Medical	NDS, NDSsi	Informatics and imaging management for visual information, including real-time distribution, documentation, control, and streaming for multiple imaging modalities.
Thermal Printers	Medical	General Scanning, NDSsi	Rugged thermal paper printers for patient monitoring, defibrillator equipment, blood gas analyzers, and pulse oximeters.
Light and Color Measurement	Industrial and Medical	Photo Research	Light and color measurement metrology devices, including spectroradiometers, photometers, video photometers, and color characterization software used in the visualization solutions market, research and development, quality control, and other testing markets.

Precision Motion

The Precision Motion segment designs, manufactures and markets optical encoders and air bearing spindles to customers worldwide. The vast majority of the segment's product offerings are sold to Original Equipment Manufacturer ("OEM") customers. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

The Precision Motion segment includes two major product lines:

Product Line	Key End Market	Brand Names	Description
Air Bearing Spindles	Electronics and Industrial	Westwind	High-speed and precision air bearing spindles used in the PCB manufacturing, automotive coating, semiconductor manufacturing equipment, and power generation markets.

Product Line	Key End Market	Brand Names	Description
Optical Encoders	Electronics, Industrial and Medical	MicroE Systems	Linear and rotary electro-optical positioning devices that measure movement with sub-micron accuracy. Applications include motion control of semiconductor and electronic manufacturing equipment, confocal microscopes, coordinate measuring systems, drug dispensing, and robotic equipment, including medical equipment.

Customers

We have a diverse group of customers that include companies that are global leaders in their industries. Many of our customers participate in several market segments. There were no customers of our continuing operations with greater than 10% of our sales in 2013, 2012 or 2011.

Customers of our Laser Products, Medical Technologies, and Precision Motion segments include a large number of original equipment manufacturers (“OEMs”) who integrate our products into their systems for sale to end users. We also sell directly to end users. Our customers include leaders in the medical, industrial, electronics and scientific markets. A typical OEM customer will usually evaluate a product and our ability to provide application support and customization before deciding to incorporate our product into their product or system. Customers generally choose suppliers based on a number of factors, including product performance, reliability, application support, price, breadth of the supplier’s product offering, the financial condition of the supplier and the geographical coverage offered by the supplier. Once certain of our products have been designed into a given OEM customer’s product or system, there are generally significant barriers to subsequent supplier changes especially in the medical market.

Seasonality

While our sales are not highly seasonal on a consolidated basis, the sales of some of our individual product lines can be impacted by seasonality. Our scientific laser business seasonality is attributable to orders received from governmental entities or research institutions whose budgeting and funding cycles may be different from those of our commercial and industrial customers. Our visualization solutions, imaging informatics, and thermal printer products are also impacted by seasonality due to hospital budgeting cycles.

Backlog

As of December 31, 2013 and 2012, our consolidated backlog was approximately $85.6 million and $70.7 million, respectively. The majority of orders included in backlog represent open orders for products and services that, based on management’s projections, have a reasonable probability of being delivered over the subsequent twelve month period. Orders included in backlog may be canceled or rescheduled by customers without significant penalty. Management believes that backlog is not a meaningful indicator of future business prospects for any of our business segments due to the wide range of lead times required by our various types of customers and the ability of our customers to reschedule or cancel orders. Therefore, backlog as of any particular date should not be relied upon as indicative of our revenues for any future period.

Manufacturing

Manufacturing functions are performed internally when management chooses to maintain control over critical portions of the production process or for cost related reasons. To the extent it makes financial sense, we will consider outsourcing additional portions of the production process.

Products offered by our Laser Products segment are manufactured at facilities in Bedford, Massachusetts; Mukilteo, Washington; Rugby and Taunton, United Kingdom; Santa Clara, California; and Suzhou, China. Products offered by our Medical Technologies segment are manufactured at facilities in Bedford, Massachusetts; San Jose and Chatsworth, California, and Suzhou, China. Products offered by our Precision Motion segment are primarily manufactured at facilities in Bedford, Massachusetts; Poole, United Kingdom; and Suzhou, China.

Many of our products are manufactured under ISO 9001 certification and our visualization solutions, imaging informatics, thermal printers, and optical encoders products are manufactured under ISO13485 certification. Certain visualization solutions and imaging informatics products are manufactured under current good manufacturing practices (CGMP's), which is a requirement of their medical device classification by the Federal Food, Drug, and Cosmetic Act.

Research and Development and Engineering

We incur research and development and engineering expenses as part of our ongoing operations. The following table shows total research and development and engineering expenses and expenses as a percent of total sales for the years ended December 31, 2013, 2012 and 2011 (dollars in thousands):

	2013	2012	2011
Research and development and engineering expenses	$26,352	$22,393	$23,454
As a percentage of sales	7.7%	8.2%	7.7%

We are strongly committed to research and development for core technology programs directed at creating new products, product enhancements and new applications for existing products. We are also committed to funding research into future market opportunities. Our markets have experienced rapid technological changes and product innovations. We believe that continued timely development of new products and product enhancements to serve existing and new markets is necessary for us to remain competitive.

Marketing, Sales and Distribution

We sell our products worldwide through our direct sales force and through distributors, including manufacturers' representatives. Our local sales, applications and service teams and our distributors work closely with our customers to ensure customer satisfaction with our products. We have sales and service centers located in North America, Europe, Asia Pacific, and Japan.

Competition

The markets in which we compete are dynamic and highly competitive. Due to the wide range of our products, we face many different types of competition and competitors. This affects our ability to sell our products and the prices at which these products are sold. Our competitors range from large foreign and domestic organizations, which produce a comprehensive array of goods and services and may have greater financial and other resources than we do, to small firms producing a limited number of goods or services for specialized market segments.

Competitive factors in our Laser Products, Medical Technologies, and Precision Motion segments include product performance, price, quality and reliability, features, flexibility, compatibility of products with existing systems, technical support, product breadth, market presence, on-time delivery and our overall reputation. We believe that our products offer a number of competitive advantages; however, some of our competitors are substantially larger and have greater financial and other resources.

Raw Materials, Components and Supplies

Each of our businesses uses a wide variety of raw materials, key components and parts that are generally available from alternative sources of supply and in adequate quantities from domestic and foreign sources. In some instances, we design and/or re-engineer the parts and components used in our products. For certain critical raw materials, key components and parts used in the production of some of our principal products, we have identified only a limited number of suppliers or, in some instances, a single source of supply. We also rely on a limited number of independent contractors to manufacture subassemblies for some of our products.

For a further discussion of the importance and risks associated with our supply chain, see applicable risk factors under Item 1A of this Annual Report on Form 10-K.

Patents and Intellectual Property

We rely upon a combination of copyrights, patents, trademarks, trade secret laws and restrictions on disclosure to protect our intellectual property rights. We hold a number of registered and pending patents in the United States and other countries. The issued patents cover various products in many of our key product categories, particularly laser scanning products, optical encoders, air bearing spindles, visualization solutions and lasers. In addition, we also have trademarks registered in the United States and foreign countries. We will continue to actively pursue applications for new patents and trademarks as we deem appropriate. However, there can be no assurance that any other patents will be issued to us or that such patents, if and when issued, will provide any protection or benefit to us.

Although we believe that our patents and pending patent applications are important, we rely upon several additional factors that are essential to our business success, including: market position, technological innovation, know-how, application knowledge and product performance. There can be no assurance that we will be able to sustain these advantages.

We also protect our proprietary rights by controlling access to our proprietary information and by maintaining confidentiality agreements with our employees, consultants, and certain customers and suppliers. For a further discussion of the importance of risks associated with our intellectual property rights, see applicable risk factors under Item 1A of this Annual Report on Form 10-K.

Human Resources

As of December 31, 2013 and 2012, we employed 1,287 and 1,264 employees, respectively. As of December 31, 2013, there were no employees of our discontinued businesses whereas, as of December 31, 2012, there were 86 employees of our discontinued businesses.

Geographic Information

We are a multinational company with approximately 66% of our 2013 sales outside the United States and approximately 27% of our property, plant and equipment, net, outside the United States at December 31, 2013. Geographic information is discussed in Note 17 to Consolidated Financial Statements. For a further discussion of the risks associated with our foreign operations, see applicable risk factors under Item 1A of this Annual Report on Form 10-K.

Government Regulation

Our current and contemplated activities and the products and processes that will result from such activities are subject to substantial government regulation, both in the United States and internationally.

Radiation Control for Health and Safety Act

We are subject to the laser radiation safety regulations of the Radiation Control for Health and Safety Act administered by the National Center for Devices and Radiological Health, a branch of the United States Food and Drug Administration. Among other things, those regulations require laser manufacturers to file new product and annual reports, to maintain quality control and sales records, to perform product testing, to distribute appropriate operating manuals, to incorporate design and operating features in lasers sold to end-users and to certify and label each laser sold to end-users as one of four classes (based on the level of radiation from the laser that is accessible to users). Various warning labels must be affixed and certain protective devices installed depending on the class of product. The National Center for Devices and Radiological Health is empowered to seek fines and other remedies for violations of the regulatory requirements. We are also subject to certain safety regulations in the United Kingdom related to the manufacturing of beryllium structures. The Control of Substances Hazardous to Health ("COSHH") regulations are administered by the Health and Safety Executive and require us to monitor beryllium levels, provide health safety information to our employees and limit exposure to beryllium. Non-compliance with these regulations could result in warnings, penalties or fines. We believe that we are currently in compliance with these regulations. We are subject to similar regulatory oversight, including comparable enforcement remedies, in the European markets we serve.

United States Food and Drug Administration

Certain products manufactured by us are integrated into systems by our customers that are subject to certain regulations administered by the United States Food and Drug Administration. We must comply with certain quality control measurements in order for our products to be effectively used in our customers' end products. Non-compliance with quality control measurements could result in loss of business with our customers, fines and penalties.

We are subject to certain medical device regulations. Medical devices are subject to extensive and rigorous regulation by the Food and Drug Administration and by other federal, state and local authorities. The Federal Food, Drug and Cosmetic Act and related regulations govern the conditions of safety, efficacy, clearance, approval, manufacturing, quality system requirements, labeling, packaging, distribution, storage, record keeping, reporting, marketing, advertising, and promotion of products. Non-compliance with applicable requirements can result in, among other things, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal by the government to grant premarket clearance or approval of products, withdrawal of clearances and approvals, and criminal prosecution.

CE Marking

We are subject to certain regulations in Europe as administered by the European Commission. CE Marking is required for products marketed within the European Economic Area ("EEA") and confirms that the manufacturer meets certain safety, health and environmental protection requirements administered by the European Union. Non-compliance with these regulations could result in warnings, penalties or fines. We believe that we are currently in compliance with these regulations.

Other Information

We maintain a website with the address www.gsig.com. We are not including the information contained in our website as part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available, free of charge through our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to these reports as soon as reasonably practicable after we electronically file these materials with, or otherwise furnish them to, the Securities and Exchange Commission ("SEC"). In addition, our reports and other information are filed with securities commissions or other similar authorities in Canada, and are available over the Internet at www.sedar.com.

Item 1A. *Risk Factors*

The following risk factors could have a material adverse effect on our business, financial position, results of operations and cash flows and could cause the market value of our common shares to fluctuate or decline. These risk factors may not include all of the important factors that could affect our business or that could cause our future financial results to differ materially from historic or expected results or cause the market price of our common shares to fluctuate or decline.

Risks Relating to our Business

Our results of operations could be adversely affected by economic and political conditions and the effects of these conditions on our customers' businesses and levels of business activities.

A large portion of our product sales are dependent on the need for increased capacity or replacement of inefficient manufacturing processes. These sales tend to lag behind other businesses in an economic recovery. Weaknesses in our end markets could negatively impact our revenue, gross margin and operating expenses and consequently have a material adverse effect on our business, financial condition and results of operations. While business conditions improved during the second half of 2009 and throughout 2010, economic conditions softened again since the third quarter of 2011 and did not significantly improve during 2013, particularly in the electronics and scientific markets. If such weak economic conditions continue or worsen, we may not be able to meet anticipated revenue levels on a quarterly or annual basis. A severe and/or prolonged economic downturn or a negative or uncertain political climate could adversely affect our customers' financial condition and the timing or levels of business activity of our customers and the industries we serve. In particular, the uncertain European financial situation could have an impact on our customers' financial condition and ability to maintain product orders in the future. This may reduce the demand for our products or depress pricing for our products and have a material adverse effect on our results of operations. Changes in global economic conditions could also shift demand to products or services for which we do not have competitive advantages, and this could negatively affect the amount of business that we are able to obtain. In addition, if we are unable to successfully anticipate changing economic and political conditions, we may be unable to effectively plan for and respond to those changes, and our business could be negatively affected.

Our business depends significantly upon our customers' capital expenditures, which are subject to cyclical market fluctuations.

The electronics materials processing industries are cyclical and have historically experienced periods of oversupply, resulting in downturns in demand for capital equipment, in which many of our products are used. The timing, length and severity of these cycles, and their impact on our business, are difficult to predict. Further, our order levels or results of operations for a given period may not be indicative of order levels or results of operations for subsequent periods. For the foreseeable future, our operations will continue to depend upon industries that are subject to market cycles which, in turn, could adversely affect the market for our products.

Cyclical variations have historically had the most pronounced effect on our air bearing spindles product line, which resides in our Precision Motion segment and concentrates in the electronics industry. In past economic slowdowns, we experienced significant cyclical fluctuations. We cannot assure you that such slowdowns will not recur or that the impact of such slowdowns will be more or less significant compared to historical fluctuations.

Our business success depends upon our ability to respond to fluctuations in product demand, but doing so may require us to incur costs despite limited visibility toward future business declines.

In periods of weak demand, we may be required to reduce costs while maintaining the ability to motivate and retain key employees at the same time. Additionally, to remain competitive, we must also continually invest in research and development, which may inhibit our ability to reduce costs in a down cycle. Long product lead-times create a risk that we may purchase or manufacture inventories of products that we are unable to sell.

During a period of increasing demand and rapid growth, we must be able to increase manufacturing capacity quickly. Our inability to quickly increase production in response to a surge in demand could prompt customers to look for alternative sources of supply or leave our customers without a supply, both of which events could harm our reputation and make it difficult for us to retain our existing customers or to obtain new customers.

The success of our business requires that we continually innovate.

Technology requirements in our markets are constantly advancing. We must continually introduce new products that meet evolving customer needs. Our ability to grow depends on the successful development, introduction and market acceptance of new or enhanced products that address our customer's requirements. Developing new technology is a complex and uncertain process requiring us to accurately anticipate technological and market trends and meet those trends with responsive products. Additionally, this requires that we manage the transition from older products to minimize disruption in customer ordering patterns, avoid excess inventory and ensure adequate supplies of new products. Failure to develop new products, failed market acceptance of new products or problems associated with new product transitions could harm our business.

If we fail to introduce new products in a timely manner, we may lose market share and be unable to achieve revenue growth targets.

Our research and development efforts may not lead to the successful introduction of products within the time period our customers demand. Our competitors may introduce new or improved products, processes or technologies that make our current or proposed products obsolete or less competitive. We may encounter delays or problems in connection with our research and development efforts. Product development delays may result from numerous factors, including:

- changing product specifications and customer requirements;
- inability to manufacture products cost effectively;
- difficulties in reallocating engineering resources and overcoming resource limitations;
- changing market or competitive product requirements; and
- unanticipated engineering complexities.

New products often take longer to develop, may have fewer features than originally considered desirable and have higher costs than initially estimated. There may be delays in starting volume production of new products and/or new products may not be commercially successful. There may also be difficulty in sourcing components for new products. Any of these developments could harm our business, including our results of operations.

Customer order timing and other factors beyond our control may cause our operating results to fluctuate from period to period.

Changes in customer order timing and the existence of certain other factors beyond our control may cause our operating results to fluctuate from period to period. Such factors include:

- fluctuations in our customers' businesses;
- timing and recognition of revenues from customer orders;
- timing and market acceptance of new products or enhancements introduced by us or our competitors;
- availability of parts from our suppliers and the manufacturing capacity of our subcontractors;
- changes in the prices of our products or of our competitors' products; and
- fluctuations in exchange rates of foreign currencies.

Certain of our sales come from products with high selling prices and significant lead times. We may receive several large orders in one quarter from a customer and then receive no orders from that customer in the next quarter. As a result, the timing and recognition of sales from customer orders can cause significant fluctuations in our operating results from quarter to quarter.

A delay in a shipment or failure to meet our revenue recognition criteria near the end of a reporting period due, for example, to rescheduling or cancellations by customers or to unexpected difficulties experienced by us, may cause sales in the period to decline significantly and may have a material adverse effect on our operations for that period.

As a result of these factors, our results of operations for any quarter are not necessarily indicative of results to be expected in future periods. We believe that fluctuations in quarterly results may cause the market prices of our common shares to fluctuate, perhaps substantially.

If we experience a significant disruption in, or breach in security of, our information technology systems, our business may be adversely affected.

We rely on information technology systems throughout our company to manage orders, process shipments to customers, manage inventory levels and maintain financial information. Events could result in the disruption of our systems, including power outages, computer attacks by hackers, viruses, catastrophes, hardware and software failures and other unforeseen events. If we were to experience a significant period of system disruption in information technology systems that involve our interactions with customers or suppliers, it could result in the loss of sales and customers and significant incremental costs, which could adversely affect our business. In addition, security breaches of our information technology systems could result in the misappropriation or unauthorized disclosure of confidential information belonging to us or to our employees, partners, customers or suppliers, which could result in significant financial or reputational damage to us.

As we transact a significant portion of our sales, and maintain significant cash balances, in foreign currencies, changes in interest rates, credit ratings or foreign currency rates could have a material adverse effect on our operations, financial position, results of operations, and cash flows.

A significant portion of our sales are derived from our European and Asian operations and transacted primarily in Euros and Japanese yen, respectively, while our products are mainly manufactured in the United States and United Kingdom. In the event of a decline in the value of the Euro or yen, we would typically experience a decline in our revenues and profit margins. If we increase the sale prices on our products sold in Europe and Japan in order to maintain profit margins and recover costs, we may lose customer sales to lower cost competitors.

Additionally, balances we maintain in foreign currencies create additional financial exposure to changing currency rates. We have in the past, and may in the future, attempt to mitigate these risks by purchasing foreign currency exchange contracts, and by investing in United States government issued treasury bills. However, if foreign currency rates were to change rapidly, we could incur material losses.

Our reliance on international operations in foreign countries subjects us to risks not typically faced by companies operating exclusively in the United States.

During the year ended December 31, 2013, 66% of our revenues from continuing operations were derived from operations outside of the United States. The scope of our international operations subjects us to risks which could materially impact our results of operations, including:

- foreign exchange rate fluctuations;
- increases in shipping costs or increases in fuel costs;
- longer customer payment cycles;

- greater difficulty in collecting accounts receivable;
- use of incompatible systems and equipment;
- problems with staffing and managing foreign operations in diverse cultures;
- protective tariffs;
- trade barriers and export/import controls;
- transportation delays and interruptions;
- increased vulnerability to the theft of, and reduced protection for, intellectual property rights;
- government currency control and restrictions, delays, penalties or required withholdings on repatriation of earnings;
- the impact of recessionary foreign economies; and
- acts of terrorism.

We cannot predict whether the United States or any other country will impose new quotas, tariffs, taxes or other trade barriers upon the importation or exportation of our products or supplies or gauge the effect that new barriers would have on our financial position or results of operations.

We also are subject to risks that our operations outside the United States could be conducted by our employees, contractors, service providers, representatives or agents in ways that violate the Foreign Corrupt Practices Act or other similar anti-bribery laws. Any such violations could have a negative impact on our business and could result in government investigations and/or injunctive, monetary or other penalties. Moreover, we face additional risks that our anti-bribery policy and procedures may be violated by third-party sales representatives or other agents that help sell our products or provide other services, because such representatives or agents are not our employees and it may be more difficult to oversee their conduct.

Increased outsourcing of components manufacturing to manufacturers outside the United States leads to additional risks which could negatively impact our business.

We are increasingly outsourcing the manufacture of subassemblies to suppliers based in China and elsewhere overseas in order to reduce our manufacturing cost. However, economic, political or trade problems with foreign countries could substantially impact our ability to obtain critical parts needed in the timely manufacture of our products. Additionally, this practice increases our vulnerability to the theft of, and reduced protection for, our intellectual property.

Our global operations are subject to extensive and complex import and export rules that vary among the legal jurisdictions in which we operate. Failure to comply with these rules could result in substantial penalties.

Due to the international scope of our operations, we are subject to a complex system of import and export related laws and regulations, including U.S. export control and customs regulations and customs regulations of other countries. These regulations are complex and vary among the legal jurisdictions in which we operate. Any alleged or actual failure to comply with such regulations may subject us to government scrutiny, investigation and civil and criminal penalties, and may limit our ability to import or export our products or to provide services outside the United States. Any of these penalties could have a material impact on our financial position, results of operations and cash flows.

We are exposed to the credit risk of some of our customers and to credit exposures in weakened markets, which could adversely affect our results of operations.

Customers with liquidity issues may lead to additional bad debt expense. There can be no assurance that our open credit customers will pay the amounts they owe to us or that the reserves we maintain will be adequate to cover such credit exposure. In addition, to the extent that turmoil in the credit markets makes it more difficult for some customers to obtain financing, those customers' ability to pay may be adversely impacted. Our customers' failure to pay and/or our failure to maintain sufficient reserves could have a material adverse effect on our operating results and financial condition.

Our reliance upon third party distribution channels subjects us to credit, inventory, business concentration, and business failure risks beyond our control.

We sell many of our products through resellers, distributors, and system integrators. As these third parties tend to have more limited financial resources than OEMs and end-user customers, they generally represent sources of increased credit risk. Any downturn in the business of our resellers, distributors, and systems integrators would in turn harm our results of operations or financial condition.

Our sales also depend upon the ability of our OEM customers to develop and sell systems that incorporate our products. Adverse economic conditions, large inventory positions, limited marketing resources and other factors influencing these OEM customers could have a substantial adverse effect on our financial results. We cannot assure investors that our OEM customers will not experience financial or other difficulties that could adversely affect their operations and, in turn, our financial condition or results of operations.

Others may violate our intellectual property rights and cause us to incur significant costs to protect our rights.

Our future success depends in part upon our intellectual property rights, including trade secrets, know-how and continuing technological innovation. We do not have personnel dedicated to the oversight, organization and management of our intellectual property. There can be no assurance that the steps we take to protect our intellectual property rights will be adequate to prevent misappropriation or disclosure, or that others will not develop competitive technologies or products outside of our patented intellectual property. It is possible that, despite our efforts, other parties may use, obtain or try to copy our technology and products. There can be no assurance that other companies are not investigating or developing other technologies that are similar to ours, that any patents will be issued from any application filed by us or that, if patents are issued, the claims allowed will be sufficient to deter or prohibit others from marketing similar products. In addition, our patents may be challenged, invalidated or circumvented in a legal or administrative proceeding. Our patents and know-how may not provide a competitive advantage to us. Policing unauthorized use of our intellectual property rights is difficult and time consuming and may involve initiating claims or litigation against third parties for infringement of our proprietary rights, which could be costly.

Our success depends upon our ability to protect our intellectual property and to successfully defend against claims of infringement by third parties.

We have received in the past, and could receive in the future, notices from third parties alleging that our products infringe patent or other proprietary rights. We believe that our products are non-infringing or that we have the patents and/or licenses to allow us to lawfully sell our products throughout the world. However, we may be sued for infringement. In the event any third party makes a valid claim against us or our customers for which a license was not available to us on commercially reasonable terms, our operating results would be adversely affected. Adverse consequences may also apply to our failure to avoid litigation for infringement or misappropriation of proprietary rights of third parties.

Our efforts to protect our intellectual property rights against infringement may not be effective in some foreign countries where we operate or sell our products. If we fail to adequately protect our intellectual property in these countries, we may lose significant business to our competitors.

We operate in highly competitive industries and, if we lose competitive advantages, our business would suffer adverse consequences.

Some of our competition comes from established competitors that have greater financial, engineering, manufacturing and marketing resources than we do. Our competitors will continue to improve the design and performance of their products and introduce new products. It is possible that we may not successfully differentiate our current and proposed products from the products of our competitors, or that the marketplace will not consider our products to be superior to competing products. To remain competitive, we will be required to invest heavily in research and development, marketing and customer service and support. However, we may not be able to make the necessary technological advances to maintain our competitive position and our products may not receive market acceptance. These factors would cause us not to be able to compete successfully in the future. Increased competition may also result in price reductions, reduced profit margins, loss of market share and an inability to generate cash flows that are sufficient to maintain or expand our development of new products.

We have made, and expect to continue to make, acquisitions and we may fail to successfully integrate future acquisitions into our business.

As part of our business strategy, we expect to broaden our product and service offerings by acquiring businesses, technologies, assets and product lines that we believe complement or expand our existing businesses. In January 2013, we acquired NDS, which designs, manufactures, and markets high definition visualization solutions and imaging informatics products for the surgical and radiology end-markets. On February 18, 2014, we reached an agreement to acquire JADAK, a provider of optical data collection and machine vision technologies to OEM medical device manufacturers. The transaction, which is subject to customary closing conditions, is expected to close in March 2014. It is likely that we will continue to make acquisitions in the future. We may fail to successfully integrate acquisitions into our business and, as a result, may fail to realize the synergies, cost savings and other benefits expected from acquisitions. If we are not able to successfully achieve these objectives, the anticipated benefits of such acquisitions may not be realized fully or at all, and our results of operations could be adversely affected.

Further, our ability to maintain and increase profitability of an acquired business will depend on our ability to manage and control operating expenses and to generate and sustain increased levels of revenue. Our expectations to achieve more consistent and predictable levels of revenue and to increase profitability as a result of any acquisitions may not be realized. Such revenues and profitability may even decline as we integrate operations into our business. If revenues of acquired businesses grow more slowly than we anticipate, or if their operating expenses are higher than we expect, we may not be able to sustain or increase their profitability, in which case our financial condition will suffer and our stock price could decline. Moreover, our acquisition activities may divert management's attention from our regular operations and managing a larger and more geographically dispersed operation and product portfolio could pose challenges for our management.

Our business strategy may include making strategic divestitures. There can be no assurance that any divestitures will provide business benefit.

Our business strategy includes divesting certain non-core businesses. We sold certain assets and liabilities of our Laser Systems businesses in October 2012 and sold our Semiconductor Systems business during the second quarter of 2013. There may be additional sales of other non-core businesses in the future including the expected sale of certain assets and liabilities of our Scientific Lasers business. The divestiture of an existing business could reduce our future profits and operating cash flows and make our financial results more volatile. A divestiture could also cause a decline in the price of our common shares and increased reliance on other elements of our core business operations. If we do not successfully manage the risks associated with a divestiture, our business, financial condition, and results of operations could be adversely affected. In addition, there could be other negative unforeseen effects from a divestiture. We also may not find suitable purchasers for our non-core businesses and may continue to pay operating costs associated with these businesses.

If we do not attract and retain our key personnel, our ability to execute our business strategy will be limited.

Our success depends, to a significant extent, upon the continued service of our executive officers and key management and technical personnel, particularly our experienced engineers, and upon our ability to continue to attract, retain, and motivate qualified personnel. The competition for these employees is intense. The loss of the services of one or more of our key personnel could have a material adverse effect on our operating results. In addition, there could be a material adverse effect on us should the turnover rates for engineers and other key personnel increase significantly or if we are unable to continue to attract qualified personnel.

Our success also depends on our ability to execute leadership succession plans. The inability to successfully transition key management roles could have a material adverse effect on our operating results.

We have undertaken restructuring and realignment activities in the past, and we will continue to assess our operating structure in the future. These actions may not improve our financial position, and may ultimately prove detrimental to our operations and sales.

Our ability to reduce operating expenses is dependent upon the nature of the actions we take to reduce expenses and our subsequent ability to implement those actions and realize expected cost savings. If global conditions deteriorate and unfavorably impact our business, we may need to take additional restructuring actions. There can be no assurance that these actions will improve our financial position, results of operations or cash flows. Further, there is a risk that these actions may ultimately prove detrimental to our operations and sales, or to our intellectual property protections.

Product defects or problems with integrating our products with other vendors' products may seriously harm our business and reputation.

We produce complex products that can contain latent errors or performance problems. This could happen to both existing and new products. Such defects or performance problems could be detrimental to our business and reputation.

In addition, customers frequently integrate our products with other vendors' products. When problems occur in a combined environment, it may be difficult to identify the source of the problem. These problems may cause us to incur significant warranty and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer relationship issues. These issues may also complicate our determination of the timing and amount of revenue recognition and could have a material negative impact on our business.

Disruptions in the supply of certain key components and other goods from our suppliers, including limited or single source suppliers, could have an adverse effect on the results of our business operations, and could damage our relationships with customers.

The production of our products requires a wide variety of raw materials, key components and other goods that are generally available from alternate sources of supply. However, certain critical raw materials, key components and other goods required for the production and sale of some of our principal products are available from limited or single sources of supply. If the receipt of certain limited sources of single source materials is delayed, our relationship with customers may be harmed if such delays cause us to miss our scheduled shipment deadlines. Certain of our businesses buy components, including limited or sole source items, from competitors of our other businesses, and certain of our businesses sell products to customers that compete with certain other segments of our business. This dynamic may adversely impact our relationship with these suppliers and customers. For example, these suppliers could increase the price of those components or reduce their supply of those components to us. Similarly, these customers could elect to manufacture products to meet their own requirements rather than purchasing products from us. Our businesses may be adversely affected by our other business relationships with customers and suppliers. Our current or alternative sources may not be able to continue to meet all of our demands on a timely basis. If suppliers or subcontractors experience difficulties or fail to meet any of our manufacturing requirements, our business would be harmed until we are able to secure alternative sources, if any, on commercially reasonable terms. A prolonged inability to obtain certain raw materials, key components or other goods is possible and could have an adverse effect on our business operations, and could damage our relationships with customers.

Production difficulties and product delivery delays or disruptions could have a material adverse effect on our business.

We assemble our products at our facilities in the United States, the United Kingdom and China. Each of our products is typically manufactured in a single manufacturing location. If production activities at any of our manufacturing facilities were interrupted by a natural disaster or otherwise, our operations would be negatively impacted until we could establish alternative production and service operations. Significant production difficulties could be the result of:

- mistakes made while transferring manufacturing processes between locations;
- changing process technologies;
- ramping production;
- installing new equipment at our manufacturing facilities;
- shortage of key components; and
- loss of electricity or employees' access to the manufacturing facilities due to natural disasters.

In addition, we may experience product delivery delays in the future. We ship a significant portion of our products to our customers through independent package delivery and import/export companies. We also ship our products through national trucking firms, overnight carrier services and local delivery practices. If one or more of the package delivery or import/export providers experiences a significant disruption in services or institutes a significant price increase, the delivery of our products could be prevented or delayed. Such events could cause us to incur increased shipping costs that could not be passed on to our customers, negatively impacting our profitability and our relationships with certain customers.

We are subject to regulation by various federal, state and foreign agencies that require us to comply with a wide variety of regulations, including those regarding the manufacture of products and the shipping of our products.

Certain medical devices that we manufacture are subject to regulations by the U.S. Food and Drug Administration and similar international agencies. These regulations govern a wide variety of product activities, from design and development to labeling, manufacturing, promotion, sales and distribution. If we fail to comply with the U.S. Food and Drug Administration's regulations or those of similar international agencies, we may have to recall products and cease their manufacture and distribution, which would increase our costs and reduce our revenues.

In recent years, the medical industry has undergone significant changes in order to reduce healthcare costs. This includes cuts in Medicare, consolidation of healthcare distribution companies and collective purchasing arrangements by office-based healthcare practitioners. Foreign and domestic governments have also undertaken efforts to control healthcare costs through legislation and regulation. In March 2010, President Obama signed into law health care reform legislation in the form of the U.S. Patient Protection and Affordable Care Act (the "PPACA"). One of the components of the PPACA is a 2.3% excise tax on the sales of most medical devices, which started in 2013 and has increased our cost of compliance and negatively affected our profit margin. Many of the impacts of the PPACA will not be known until those regulations are enacted over the next several years. The implementation of health care reform and medical cost containment measures in the U.S. and in foreign countries in which we operate could:

- decrease the price that we might establish for our products, which would result in lower product revenues to us;
- require additional safety monitoring, labeling changes, restrictions on product distribution or use, or other measures after the introduction of our products to market, which could increase our costs of doing business, or otherwise adversely affect the market for our products; and
- create new laws, regulations and judicial decisions affecting pricing or marketing practices.

Changes in governmental regulation of our business or our products could reduce demand for our products or increase our expenses.

We are subject to many governmental regulations, including but not limited to the laser radiation safety regulations of the Radiation Control for Health and Safety Act administered by the National Center for Devices and Radiological Health, a branch of the U.S. Food and Drug Administration, and certain health regulations related to the manufacture of products using beryllium, an element used in some of our products. Among other things, these regulations require us to file annual reports, to maintain quality control and sales records, to perform product testing, to distribute appropriate operating manuals, to conduct safety reviews, to incorporate design and operating features in products sold to end-users and to certify and label our products. Depending on the class of the product, various warning labels must be affixed and certain protective devices must be installed.

We are also subject to regulatory oversight, including comparable enforcement remedies, in the markets we serve. We compete in many markets in which we and our customers must comply with federal, state, local and international regulations, such as environmental, health and safety and food and drug regulations. We develop, configure and market our products to meet customer needs created by those regulations. Any significant change in these regulations could reduce demand for our products or increase our expenses, which in turn could adversely affect our business, financial condition, results of operations and cash flows.

New regulations related to "conflict minerals" may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products.

On August 22, 2012, the SEC adopted a new rule requiring disclosures by public companies of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured. The new rule, which is effective for 2013 and requires a disclosure report to be filed by May 31, 2014, will require companies to perform due diligence, disclose and report whether or not such minerals originate from the Democratic Republic of Congo or an adjoining country. There may be material costs associated with complying with the disclosure requirements, such as costs related to determining the source of certain minerals used in our products, as well as costs of possible changes to processes, or sources of supply as a consequence of such verification activities. As our supply chain is complex, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. In addition, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict-free, which could place us at a competitive disadvantage if we are unable to do so.

Compliance or the failure to comply with current and future environmental regulations could cause us significant expense.

Our operations are subject to a variety of federal, state, local and international environmental regulations relating to the use, storage, discharge and disposal of hazardous chemicals used during our manufacturing process or requiring design changes or recycling of products we manufacture. We are subject to the federal regulation of the Environmental Protection Agency in the United States and comparable authorities in other countries. If we fail to comply with any present or future regulations, we could be subject to regulatory fines.

Future developments, administrative actions or liabilities relating to environmental matters could have a material adverse effect on our business, results of operations or financial condition. It is difficult to anticipate how such regulations will be implemented and enforced. We continue to evaluate the necessary steps for compliance with regulations as they are enacted. Certain regulations may require us to re-design our products to ensure compliance with the applicable standards. These redesigns may adversely affect the performance of our products, add greater testing lead-times for product introductions and reduce our profitability.

If we fail to implement new information technology systems successfully, our business could be adversely affected.

We rely on various centralized information systems throughout our company to keep financial records, process orders, manage inventory, process shipments to customers, and operate other critical functions. Some of our existing systems are no longer supported by the software system providers and need to be upgraded or replaced. If we are unable to successfully implement new systems or upgrade the existing systems, particularly those that record, process or manage financial information, we may experience disruption in our operations and may be unable to recognize the expected benefits associated with new systems.

Our results of operations will be adversely affected if we fail to realize the full value of our intangible assets.

As of December 31, 2013, our total assets included $136.4 million of net intangible assets, including goodwill. Net intangible assets consist principally of goodwill, customer relationships, patents, trademarks, core technology and technology licenses. Goodwill and indefinite-lived intangible assets are tested for impairment at least on an annual basis. All other intangible assets are evaluated for impairment should discrete events occur that call into question the recoverability of the intangible assets.

Adverse changes in our business, adverse changes in the assumptions used to determine the fair value of our reporting units, or the failure to grow our segments may result in impairment of our intangible assets, which could adversely affect our results of operations.

Risks Relating to Taxes

Our ability to utilize our net operating loss carryforwards and other tax attributes is dependent on our ability to generate sufficient future taxable income.

Our ability to use future tax deductions is dependent on our ability to generate sufficient future taxable income in tax jurisdictions in which we operate. In determining our provision for income taxes, our tax attributes and liabilities and any valuation allowance recorded against our net tax attributes requires judgment and analysis. We consistently evaluate our tax attributes based on taxes recoverable in the carryback period, existing deferred tax liabilities, tax planning strategies and projected future taxable income. Our ability to recover all of our tax attributes in certain jurisdictions depends upon our ability to continue to generate future profits. If actual results differ from our plans or we do not achieve the desired level of profitability in a given jurisdiction, we may be required to increase or record a valuation allowance on our tax attributes by taking a charge in the statement of operations.

Changes in tax laws could adversely affect future results.

We are subject to regular examination of our income tax returns by the Internal Revenue Service (“IRS”) and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different than the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition. From time to time, the United States, foreign and state governments make substantive changes to tax rules where significant judgment is required to determine the impact of such changes on our provision for income taxes.

Our effective tax rate is subject to fluctuation, which could impact our financial position.

Our effective tax rate is subject to fluctuation as the effective income tax rate for each year is a function of (a) taxable income levels in numerous tax jurisdictions, (b) our ability to utilize recorded deferred tax assets, (c) taxes, interest, or penalties resulting from tax audits and (d) credits and deductions as a percentage of total taxable income. Further, tax law changes may cause our effective tax rate to fluctuate between periods.

We may be subject to U.S. federal income taxation even though GSIG is a non-U.S. corporation.

Our holding company, GSI Group, Inc., is a non-U.S. corporation organized in Canada and is subject to Canadian tax laws. However, our operating company, GSI Group Corporation, is subject to U.S. tax rules and files U.S. federal income tax returns. In addition, distributions or payments from entities in one jurisdiction to entities in another jurisdiction may be subject to withholding taxes. Our holding company does not intend to operate in a manner that will cause it to be treated as engaged in a U.S. trade or business or otherwise be subject to U.S. federal income taxes on its income, but it generally will be subject to U.S. federal withholding tax on certain U.S.-sourced passive income items, such as dividends and certain types of interest.

Risks Relating to Our Common Shares and Our Capital Structure

We may require additional capital to adequately respond to business challenges or opportunities and repay or refinance our existing indebtedness, and this capital may not be available on acceptable terms or at all.

We may require additional capital to adequately respond to future business challenges or opportunities, including, but not limited to, the need to develop new products or enhance our existing products, maintaining or expanding research and development projects, the need to build inventory or to invest other cash to support business growth, and opportunities to acquire complementary businesses and technologies.

The terms of our amended and restated senior secured credit agreement (the “Amended and Restated Credit Agreement”) provides for a $41.0 million term loan and a $175.0 million revolving credit facility (collectively, the “Senior Credit Facilities”). If we are unable to satisfy those conditions or our needs exceed the amounts available under the facilities, we may need to engage in equity or debt financings to obtain additional funds. If we raise additional funds through further issuances of equity or convertible debt securities, our existing shareholders could suffer significant dilution. Any new equity securities we issue could have rights, preferences and privileges superior to those of the holders of our common shares. Further, our Amended and Restated Credit Agreement restricts our ability to obtain additional debt financing from other sources. If we are unable to obtain adequate financing or obtain financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly limited. In addition, the terms of any additional equity or debt issuances may adversely affect the value and price of our common shares.

Global credit conditions have varied widely over the last several years and could continue to vary significantly in the future. Although these conditions have not affected our current plans, adverse credit conditions in the future could have a negative impact on our ability to execute on future strategic activities.

The market price for our common shares may be volatile.

The market price of our common shares could be subject to wide fluctuations. These fluctuations could be caused by:

- quarterly variations in our results of operations;
- changes in earnings estimates by analysts;
- conditions in the markets we serve; or
- general market or economic conditions.

In addition, in recent years the stock market has experienced extreme price and volume fluctuations. These fluctuations have had a substantial effect on the market prices of many companies, often unrelated to the operating performance of the specific companies. These market fluctuations could adversely affect the price of our common shares.

We may not have access to the cash flow and other assets of our subsidiaries that may be needed to service our indebtedness and fund our operations.

Although much of our business is conducted through our subsidiaries, none of our subsidiaries are obligated to make funds available to us. Accordingly, our ability to make payments on our indebtedness and fund our operations may be dependent on the earnings and the distribution of funds from our subsidiaries. Local laws and regulations and/or the terms of our indebtedness may restrict certain of our subsidiaries from paying dividends and otherwise transferring assets to us. We cannot assure you that applicable laws and regulations and/or the terms of our indebtedness will permit our subsidiaries to provide us with sufficient dividends, distributions or loans when necessary.

Certain significant shareholders could have substantial influence over our Board of Directors and our outstanding common shares, which could limit our other shareholders' ability to influence the outcome of key transactions.

Our largest shareholders and their respective affiliates, in the aggregate, beneficially own a substantial amount of our outstanding common shares. As a result, these shareholders may be able to influence matters requiring approval by our shareholders, including the election of directors and the approval of mergers, or other extraordinary transactions. One of these shareholders also serves on our Board of Directors and therefore could have a substantial influence over our Board of Directors. These significant shareholders may have interests that differ from other shareholders and may vote in a way that may be adverse to the interests of other shareholders.

Certain provisions of our articles of incorporation may delay or prevent a change in control of our company.

Our corporate documents and our existence as a corporation under the laws of New Brunswick subject us to provisions of Canadian law that may enable our Board of Directors to resist a change in control of our company. These provisions include:

- limitations on persons authorized to call a special meeting of shareholders;
- the ability to issue an unlimited number of common shares; and
- advance notice procedures required for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of shareholders.

These anti-takeover defenses could discourage, delay or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for shareholders to elect directors of their choosing and cause us to take other corporate actions that shareholders desire. In addition, New Brunswick law provides that cumulative voting is mandatory in director elections which can result in stockholders holding less than a majority of shares being able to elect persons to the Board of Directors and prevent a majority stockholder from controlling the election of all of the directors.

Our existing indebtedness could adversely affect our future business, financial condition and results of operations.

As of December 31, 2013, we had $71.5 million of outstanding debt. In order to fund the expected JADAK acquisition, we anticipate borrowing an additional $68.0 million under our Senior Credit Facilities in March 2014. This level of debt could have significant consequences on our future operations, including:

- reducing the availability of our cash flow to fund working capital, capital expenditures, research and development efforts, acquisitions and other general corporate purposes, and limiting our ability to obtain additional financing for these purposes;
- limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, market changes in the industries in which we operate and the general economy; and
- placing us at a competitive disadvantage compared to our competitors that have less debt or are less leveraged.

Any of the above-listed factors could have an adverse effect on our business, financial condition and results of operations.

In addition, our Amended and Restated Credit Agreement contains covenants that will limit our ability to engage in activities that may be in our long-term best interests. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all of our borrowings thereunder.

Risks Relating to Our Internal Controls

If we fail to maintain appropriate internal controls in the future, we may not be able to report our financial results accurately, which may adversely affect our stock price and our business.

While our management and our independent registered public accounting firm concluded that our internal control over financial reporting was effective as of December 31, 2013, it is possible that material weaknesses may be identified in the future.

If we are unable to maintain effective internal controls, we may not have adequate, accurate or timely financial information, and we may be unable to meet our reporting obligations as a publicly traded company or comply with the requirements of the SEC or the Sarbanes-Oxley Act of 2002. This could result in a restatement of our financial statements, the imposition of sanctions, including the inability of registered broker dealers to make a market in our common shares, or investigation by regulatory authorities. Any such action or other negative results caused by our inability to meet our reporting requirements or comply with legal and regulatory requirements or by disclosure of an accounting, reporting or control issue could adversely affect the trading price of our securities and our business. Material weaknesses in our internal control over financial reporting could also reduce our ability to obtain financing or could increase the cost of any financing we obtain.

As part of our growth strategy, we may make additional strategic acquisitions of privately held businesses. Prior to becoming part of our consolidated company, the acquired business would not be required to implement or maintain the disclosure controls and procedures or internal control over financial reporting that are required of public companies. We are required to integrate the acquired businesses into our consolidated company's system of disclosure controls and procedures and internal control over financial reporting, but we cannot provide assurance as to how long the integration process may take for our recently acquired business or any business that we may acquire. Additionally, we may need to improve our internal control or those of any business we acquire and may be required to design enhanced processes and controls in order to make such improvements. This could result in significant delays and costs to us and could require us to divert substantial resources, including management time, from other activities.

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Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

The principal owned and leased properties of the Company and its subsidiaries related to our continuing operations as of December 31, 2013 are listed in the table below.

Location	Principal Use	Current Segment (a)	Approximate Square Feet	Owned/Leased
Bedford, Massachusetts, USA	Manufacturing, R&D, Marketing, Sales and Administration	1,2,3,4	147,000	Leased; expires in 2019
Rugby, United Kingdom	Manufacturing, R&D, Marketing, Sales and Administration	1	43,000	Leased; expires in 2019
Poole, United Kingdom	Manufacturing, R&D, Marketing, Sales and Administration	3	51,000	Building owned; land leased through 2078
Mukilteo, Washington, USA	Manufacturing, R&D, Marketing, Sales and Administration	1	63,000	Owned
Suzhou, People’s Republic of China	Manufacturing, R&D, Marketing, Sales and Administration	1,2,3	55,000	Leased; expires in 2015
Santa Clara, California, USA	Manufacturing, R&D, Marketing, Sales and Administration	1	44,000	Leased; expired in February 2014*
Chatsworth, California, USA	Manufacturing, R&D, Marketing, Sales and Administration	2	22,000	Owned
San Jose, California, USA	Manufacturing, R&D, Marketing, Sales and Administration	2	73,000	Leased; expires in 2019
Taunton, United Kingdom	Manufacturing, R&D, Marketing and Sales	1	19,000	Leased; expires in 2017

a) The facilities house product lines that belong to the following segments:

1 — Laser Products Segment
2 — Medical Technologies Segment
3 — Precision Motion Segment
4 — Corporate
* — A new 5 year lease agreement was signed for our scientific lasers business in December 2013. Our scientific lasers business moved into this new 52,000 square foot facility in February 2014.

In connection with our senior credit facility, we entered into open ended deeds of trust for our Orlando, Florida, Chatsworth, California and Mukilteo, Washington properties.

Additional research and development, sales, service and logistics sites are located in Colorado, Oregon, Germany, France, Italy, Netherlands, Japan, China, and Sri Lanka. These additional offices are leased facilities occupying approximately 42,000 square feet in the aggregate, and are related to our Laser Products, Medical Technologies and Precision Motion segments.

Our owned facility in Orlando, Florida and leased facilities in Lexington and Waltham, Massachusetts, Oxnard, California and Darmstadt, Germany, were restructured and are not in use by the Company. These owned and leased facilities constitute approximately 80,000 and 66,000 square feet, respectively. In 2012, we entered into a triple net lease for our Orlando facility as part of the sale of our Laser Systems business and will receive $0.5 million of annual rental income through the lease expiration date of October 2014. In May 2013, we entered into a sublease agreement for our Lexington facility through December 2016. In September 2013, we entered into a sublease agreement for our Oxnard facility through July 2014. In addition, we sold our previously exited facility in East Setauket, New York in June 2013.

Our 50% owned joint venture, Excel Laser Technology Private Limited ("Excel SouthAsia JV"), owns a sales, service and administration facility located in Mumbai, India. The total square footage of this facility is approximately 18,000 square feet.

Item 3. *Legal Proceedings*

During the third quarter of 2005, the Company's French subsidiary, GSI Lumonics SARL ("GSI France"), filed for bankruptcy protection, which was granted on July 7, 2005. On April 18, 2006, the commercial court of Le Creusot (France) ordered GSI France to pay approximately 0.7 million Euros to SCGI in the context of a claim filed by SCGI that a Laserdyne 890 system delivered in 1999 had unresolved technical problems. No appeal was lodged. On May 6, 2011, GSI Group Ltd. was served with summons from the official receiver of GSI France demanding that GSI Group Ltd. and the Company's German subsidiary, GSI Group GmbH, appear before the Paris commercial court. GSI Group GmbH was subsequently served with a separate summons from the official receiver. The cases against GSI Group Ltd. and GSI Group GmbH were subsequently combined into a single case (docket number 2011/088718). The receiver claimed (i) that the bankruptcy proceedings initiated against GSI France in 2005 should be extended to GSI Group Ltd. and GSI Group GmbH on the ground that GSI France's decisions were actually made by GSI Group Ltd. and that GSI Group GmbH made financial advances for no consideration, which would reveal in both cases confusion of personhood, or (ii) alternatively, that GSI Group Ltd. be ordered to pay approximately 3.1 million Euros (i.e. the aggregate of GSI France's liabilities, consisting primarily of approximately 0.7 million Euros to SCGI and approximately 2.4 million Euros to GSI Group GmbH) on the ground that GSI Group Ltd. is liable in tort for having disposed of GSI France's assets freely and for having paid all of GSI France's debts except for the liability to SCGI. On June 19, 2012, the receiver withdrew its claim with respect to extending the bankruptcy proceedings to GSI Group Ltd. and GSI Group GmbH. On September 4, 2013, the Paris commercial court dismissed the receiver's tort claims in whole on the ground that the action was time-barred. On October 9, 2013, the receiver lodged an appeal before the court of appeals of Paris, and on March 4, 2014, the court of appeals affirmed the Paris commercial court's ruling.

The Company is also subject to various legal proceedings and claims that arise in the ordinary course of business. The Company does not believe that the outcome of these claims will have a material adverse effect upon its financial condition or results of operations but there can be no assurance that any such claims, or any similar claims, would not have a material adverse effect upon its financial condition or results of operations.

IRS Claim

On April 5, 2010, the IRS filed amended proofs of claim aggregating approximately $7.7 million with the United States Bankruptcy Court for Delaware (the "Bankruptcy Court") as part of the Company's proceedings under Chapter 11 of the Bankruptcy Code. On July 13, 2010, the Company filed a complaint, *GSI Group Corporation v. United States of America*, in the Bankruptcy Court in an attempt to recover refunds totaling approximately $18.8 million in federal income taxes that the Company asserts it overpaid to the IRS relating to tax years 2000 through 2008, together with applicable interest. The complaint included an objection to the IRS proofs of claim which the Company believed were not allowable claims and should be expunged in their entirety.

During the fourth quarter of 2012, the Company reached a settlement agreement with the IRS and Department of Justice regarding the IRS audit for the 2000 through 2008 tax years. This settlement was accepted by the Congressional Joint Committee on Taxation during the second quarter of 2013. During 2013, the Company received cash refunds from the IRS of $12.5 million. As a result of the settlement acceptance by the Congressional Joint Committee on Taxation, the Company requested the Department of Justice to dismiss the matter without prejudice against the Company. On November 27, 2013, the case was dismissed by the court.

The Company continues to record an income tax receivable of $0.3 million as of December 31, 2013. In addition, the Company expects to realize the benefit relating to the carryback and carryforward of certain net operating losses in 2014, which will result in the refund of tax payments made in the carryback periods and lower income tax payments in the carryforward periods.

Item 4. *Mine Safety Disclosures*

Not applicable.

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PART II

Item 5. *Market for Registrant's Common Shares, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Market Information

From December 29, 2010 to January 27, 2011, the Company's common shares were quoted on the OTC Markets Group, Inc. under the trading symbol "LASRD.PK". Thereafter, until February 14, 2011, the Company's trading symbol reverted to "LASR.PK". Since February 14, 2011, the Company's common shares, no par value, have traded on the NASDAQ Global Select Market under the trading symbol "GSIG". The following table sets forth the high and low prices of the Company's common shares during the periods indicated.

	2013		2012	
	High	Low	High	Low
First Quarter	$ 10.00	$ 8.40	$ 12.24	$10.79
Second Quarter	$ 8.88	$7.98	$ 12.44	$11.09
Third Quarter	$ 9.64	$8.18	$11.61	$ 8.69
Fourth Quarter	$11.24	$9.47	$ 8.99	$ 7.24

Holders

As of the close of business on February 28, 2014, there were approximately 35 holders of record of the Company's common shares. Since many of the common shares are registered in "nominee" or "street" names, the Company believes that the total number of beneficial owners is considerably higher.

Dividend Policy

The Company has never declared or paid cash dividends on its common shares. The Company currently intends to retain any current and future earnings to finance the growth and development of its business and, therefore, does not anticipate paying any cash dividends in the foreseeable future.

Purchases of Equity Securities by the Issuer and Affiliated Purchaser

During 2013, the Board of Directors authorized the repurchase of up to $10 million of the Company's common stock. During the fourth quarter of 2013, the Company repurchased 50 thousand shares in the open market for an aggregate purchase price of $0.5 million at an average price of $10.49 per share.

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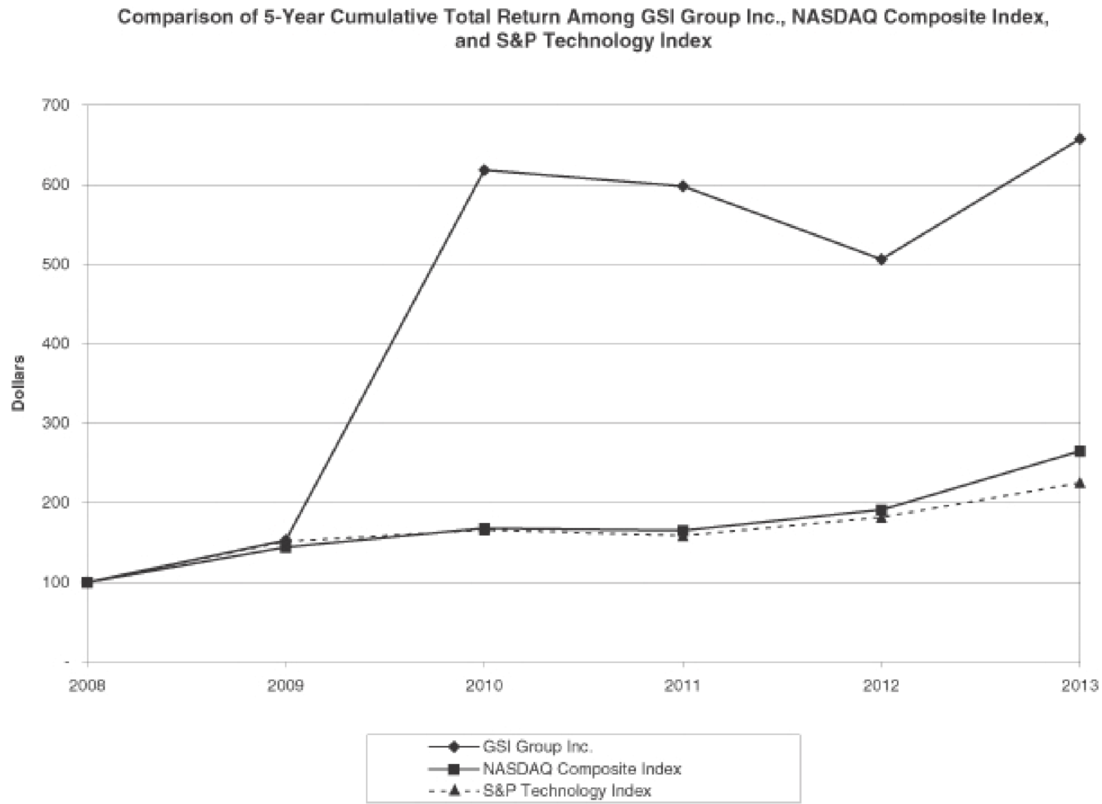
Performance Graph

The following graph compares the cumulative total return to stockholders for the Company's common shares for the period from December 31, 2008 through December 31, 2013 with the NASDAQ Composite Index and the S&P Technology Index. The comparison assumes an investment of $100 is made on December 31, 2008 in the Company's common shares and in each of the indices and in the case of the indices it also assumes reinvestment of all dividends. The performance shown is not necessarily indicative of future performance.



	December 31, 2008	December 31, 2009	December 31, 2010	December 31, 2011	December 31, 2012	December 31, 2013
GSI Group Inc.	$ 100.00	$ 152.63	$ 618.71	$ 598.25	$ 506.43	$ 657.31
NASDAQ Composite Index	$ 100.00	$ 143.89	$ 168.22	$ 165.19	$ 191.47	$ 264.84
S&P Technology(1)	$ 100.00	$ 151.38	$ 166.00	$ 158.68	$ 181.92	$ 225.11

(1) The S&P 500® index is proprietary to and is calculated, distributed and marketed by S&P Opco, LLC (a subsidiary of S&P Dow Jones Indices LLC), its affiliates and/or its licensors and has been licensed for use. S&P ® and S&P 500® are registered trademarks of Standard & Poor's Financial Services LLC, and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC.

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Item 6. ***Selected Financial Data***

The information set forth below is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes thereto included in Item 8 of this Annual Report on Form 10-K to fully understand factors that may affect the comparability of the information presented below. The selected consolidated financial data in this section is not intended to replace the consolidated financial statements.

The consolidated statements of operations data for the years ended December 31, 2013, 2012 and 2011 and the consolidated balance sheet data as of December 31, 2013 and 2012 are derived from our audited financial statements in this Annual Report on Form 10-K. The consolidated statements of operations data for the year ended December 31, 2010 and 2009 and the consolidated balance sheet data as of December 31, 2011, 2010 and 2009 are derived from our audited consolidated financial statements that are not included in this Annual Report on Form 10-K. The prior period information stated herein has been revised to conform to the new presentation as a result of classifying certain of our businesses as discontinued operations.

	Year Ended December 31,				
	2013	2012	2011	2010	2009
	(In thousands, except per share data)				
Condensed Consolidated Statements of Operations:					
Sales	$ 341,612	$ 271,498	$ 304,296	$ 285,892	$ 192,362
Gross profit	139,449	114,476	133,100	130,614	77,720
Operating expenses	121,758	99,469	97,252	94,587	101,878
Income (loss) from operations	17,691	15,007	35,848	36,027	(24,158)
Reorganization items(1)	—	—	—	(26,156)	(23,606)
Income (loss) from continuing operations before income taxes	14,530	11,534	24,220	(7,973)	(75,720)
Income tax provision (benefit)(2)	5,680	(10,940)	2,544	11,952	(920)
Income (loss) from continuing operations	8,850	22,474	21,676	(19,925)	(74,800)
Income (loss) from discontinued operations, net of tax	(927)	(5,151)	7,325	19,286	3,531
Gain (loss) on disposal of discontinued operations, net of tax(3)	(592)	2,255	—	—	—
Consolidated net income (loss)	7,331	19,578	29,001	(639)	(71,269)
Less: Net income attributable to noncontrolling interest	(22)	(40)	(28)	(48)	(61)
Net income (loss) attributable to GSI Group, Inc.	$ 7,309	$ 19,538	$ 28,973	$ (687)	$ (71,330)
Income (loss) from continuing operations attributable to GSI Group Inc. per common share:					
Basic	$ 0.26	$ 0.66	$ 0.65	$ (0.84)	$ (4.70)
Diluted	$ 0.26	$ 0.66	$ 0.64	$ (0.84)	$ (4.70)
Income (loss) from discontinued operations attributable to GSI Group, Inc. per common share:					
Basic	$ (0.05)	$ (0.08)	$ 0.22	$ 0.81	$ 0.22
Diluted	$ (0.05)	$ (0.08)	$ 0.22	$ 0.81	$ 0.22
Net income (loss) attributable to GSI Group, Inc. per common share					
Basic	$ 0.21	$ 0.58	$ 0.87	$ (0.03)	$ (4.48)
Diluted	$ 0.21	$ 0.58	$ 0.86	$ (0.03)	$ (4.48)
Weighted average common shares outstanding—basic	34,073	33,775	33,481	23,703	15,916
Weighted average common shares outstanding—diluted	34,396	33,936	33,589	23,703	15,916

(1) The Company recorded $26.2 million and $23.6 million in 2010 and 2009, respectively, related to our bankruptcy proceedings. Refer to Note 2 in the accompanying consolidated financial statements.

(2) The Company released $15.3 million of valuation allowance on deferred tax assets in 2012 based on the conclusion that it is more likely than not that its deferred tax assets in the U.S. and U.K. will be realized in the future. In 2010, the Company recorded $9.6 million unfavorable permanent differences in its income tax provisions primarily related to non-deductible bankruptcy costs. In 2009, the Company recorded $22.5 million valuation allowance on deferred tax assets as a result of material losses from its operations.

(3) The Company sold its Semiconductor Systems business in 2013 and Laser Systems business in 2012 and recorded a (loss) gain on disposal, net of tax, of ($0.6) million and $2.3 million, respectively.

	December 31,				
	2013	2012	2011	2010	2009
			(in thousands)		
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 60,980	$ 65,788	$ 54,835	$ 56,781	$ 63,328
Total assets	378,807	337,460	348,503	367,167	414,670
Debt, current	7,500	7,500	10,000	—	—
Debt, long-term	64,000	42,500	58,000	107,575	—
Liabilities subject to compromise(1)	—	—	—	—	220,560
Long-term liabilities, excluding deferred revenue and debt	11,586	11,828	22,783	21,250	20,739
Total stockholders' equity	241,984	227,809	209,003	178,678	84,311

(1) Includes $210.0 million related to obligations due under the 2008 Senior Notes while in bankruptcy.

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

Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) should be read in conjunction with the Consolidated Financial Statements and Notes included in Item 8 of this Annual Report on Form 10-K. The MD&A contains certain forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. These forward-looking statements include, but are not limited to, anticipated financial performance; expected liquidity and capitalization; expectations regarding our restructuring plans; drivers of revenue growth; management’s plans and objectives for future operations, expenditures and product development and investments in research and development; business prospects; potential of future product releases; expected cost reductions in our fiber lasers; anticipated sales performance; industry trends; market conditions; changes in accounting principles and changes in actual or assumed tax liabilities; expectations regarding tax exposure; anticipated reinvestment of future earnings; anticipated expenditures in regard to the Company’s benefit plans; future acquisitions and dispositions and anticipated benefits from prior acquisitions; anticipated outcomes of legal proceedings and litigation matters; and anticipated use of currency hedges. These forward-looking statements are neither promises nor guarantees, but involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in Item 1A of this Annual Report on Form 10-K under the heading “Risk Factors.” The words “anticipates,” “believes,” “expects,” “intends,” “future,” “could,” “estimates,” “plans,” “would,” “should,” “potential,” “continues,” and similar words or expressions (as well as other words or expressions referencing future events, conditions or circumstances) identify forward-looking statements. Readers should not place undue reliance on any such forward-looking statements, which speak only as of the date they are made. Management and the Company disclaim any obligation to publicly update or revise any such statement to reflect any change in its expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those contained in the forward-looking statements.

Business Overview

GSI Group Inc. and its subsidiaries (collectively referred to as the “Company”, “we”, “us”, “ours”) design, develop, manufacture and sell precision photonic and motion control components and subsystems to original equipment manufacturers (“OEM’s”) in the medical, industrial, electronics and scientific markets. Our highly engineered enabling technologies include laser sources, scanning and beam delivery products, medical visualization and informatics solutions, and precision motion control products. We specialize in collaborating with OEM customers to adapt our component and subsystem technologies to deliver highly differentiated performance in their applications.

Our strategy is to drive sustainable, profitable growth through short-term and long-term initiatives, including:

- broadening our product and service offerings through the acquisition of innovative and complementary technologies and solutions;
- driving sustainable and predictable profitable growth by improving our business mix to increase medical sales, maintain industrial sales and reduce microelectronics sales as a percentage of total revenue;
- upgrading our existing operations to drive profitable growth through our continuous improvement productivity and customer satisfaction programs, and through strategic divestitures and expanding our business through strategic acquisitions;

- strengthening our strategic position in medical technologies, lasers, and precision motion technology platforms, through continual investment in differentiated new products and solutions;
- leveraging our breath of product offerings with numerous shared customers to strengthen key customer relationships, increase our penetration of key customers, and drive increased sales; and
- attracting, retaining, and developing talented and motivated employees.

Significant Events and Updates

Agreement to Acquire JADAK

On February 18, 2014, we reached an agreement to acquire JADAK LLC, JADAK Technologies Inc. and Advance Data Capture Corporation (together, “JADAK”), a North Syracuse, New York-based provider of optical data collection and machine vision technologies to OEM medical device manufacturers, for $93.5 million in cash. The transaction, which is subject to customary closing conditions, is expected to close in March 2014.

JADAK’s technology consists of barcode components and scanners, machine vision cameras, RFID technology, magnetic stripe readers, portable platforms and associated software. JADAK’s products are highly engineered, application-specific components that are developed and manufactured to meet the extremely high performance and quality requirements of major medical OEMs. JADAK’s products are used in medical equipment to increase safety and reduce medical errors by verifying patient identity, validating the specified therapy or function and enhancing the accuracy of the medical procedure.

Letter of Intent to Divest our Scientific Lasers Business

On January 31, 2014, we signed a letter of intent to sell certain assets and liabilities of our scientific lasers business, sold under the Continuum brand name, for $7.5 million in cash, subject to successful completion of due diligence by the potential acquirer, entry into a definitive agreement, and customary closing conditions. In addition, the agreement includes contingent consideration of up to $3.0 million based on the achievement of certain 2014 revenue targets. In accordance with ASC 360-10-45-9, “Property, Plant and Equipment – Overall – Other Presentation Matters – Long-Lived Assets Held for Sale,” we expect that the scientific laser business will qualify as “Held for Sale” and will be reported as a discontinued operation in the first quarter of 2014. During the years ended December 31, 2013, 2012, and 2011, the scientific lasers business generated revenues of approximately $25 million, $28 million, and $35 million, respectively. The loss on the sale of the business before taxes is expected to be approximately $1.5 million to $2.5 million. As of December 31, 2013, total assets and liabilities of the scientific lasers business were approximately $14 million and $4 million, respectively.

Acquisition of NDS Surgical Imaging

On January 15, 2013, we completed the acquisition of NDS Surgical Imaging LLC, a San Jose, California-based company that designs, manufactures, and markets high definition visualization solutions and imaging informatics products for the surgical, patient monitoring and radiology end-markets, for $82.7 million in cash, subject to customary closing working capital adjustments. In October 2013, we finalized the closing working capital adjustments with the seller for $1.9 million in favor of the Company, resulting in an adjusted purchase price of $80.8 million. The working capital adjustments were paid out of the seller’s funds and the escrow account in accordance with the purchase and sale agreement. In addition, a total of $5.4 million held in escrow after the payment of closing working capital adjustments can be utilized as indemnification of certain representations and warranties claims against the seller until the expiration of the escrow arrangement in July 2014. The addition of NDS will help us leverage our existing medical OEM sales channels and our expertise in color measurement technology. In addition, the medical applications that NDS serves with its products are adjacent to several of our existing medical applications. There are also a number of common customers with some of our existing businesses, which we expect will strengthen our key OEM customer relationships.

Discontinued Operations Update

Beginning in 2011, we initiated a strategic review of the Company to focus our priorities and our investments while simplifying and streamlining our business model. In June 2012, we committed to a plan for the sale of the Semiconductor Systems operating segment, sold under the GSI brand name, and the Laser Systems product lines, sold under the Control Laser and Baublys brand names.

In October 2012, we sold certain assets and liabilities of the Laser Systems business to Hans Laser for $7.0 million, subject to working capital adjustments, and recorded a $2.3 million gain, net of tax, in the consolidated statement of operations. During 2013, we paid $0.4 million to Hans Laser as the final net working capital adjustment, and recorded a $0.2 million loss, net of tax, in the consolidated statement of operations.

The Laser Systems facility in Orlando, Florida, which had an estimated fair value less costs to sell of $5.7 million as of December 31, 2012, was retained by the Company. We are currently leasing the facility to Hans Laser under an operating lease agreement which was extended through October 2014. During the second quarter of 2013, it was determined that it was not probable that the facility would be sold within the next twelve months and, as a result, we reclassified the facility from assets of discontinued operations to property, plant and equipment.

In May 2013, we consummated the sale of certain assets and liabilities of our Semiconductor Systems business to Electro Scientific Industries, Inc. (“ESI”) for $8.0 million in cash, subject to closing working capital adjustments, and recognized a $0.3 million loss, net of tax, on the sale of the business in the consolidated statement of operations. In September 2013, we settled the final working capital adjustment with ESI for $1.7 million in favor of the Company and recognized an additional loss of $0.1 million, net of tax.

2011 Restructuring Plan Update

In November 2011, the Company announced a strategic initiative (“2011 restructuring”), which aimed to consolidate operations to reduce our cost structure and improve operational efficiency. As part of this initiative, we eliminated facilities through consolidation of certain manufacturing, sales and distribution facilities and exit of businesses. We completed the 2011 restructuring plan that began in the fourth quarter of 2011 with a goal of eliminating up to twelve facilities and targeting as much as $5.0 million in annualized cost savings through a combination of site consolidations and divestitures, with divestitures resulting in the elimination of up to five facilities. In January 2013, we consolidated our laser scanners business into our Bedford, Massachusetts facility. During the second quarter of 2013, we completed the sale of the Semiconductor Systems business. In June 2013, we also sold our previously exited scientific lasers facility located in East Setauket, New York for a net cash consideration of $4.3 million and recognized a loss on the sale of the facility of $0.2 million.

In total, eleven facilities have been exited as part of our 2011 restructuring plan. These eliminations resulted in the consolidation of the manufacturing facilities of our scientific lasers products and our optics products, consolidation of our German operations into one facility, and consolidation of our laser scanners business into our Bedford, MA facility. For the year ended December 31, 2013, we incurred cash charges of $1.7 million related to the 2011 restructuring plan. Cash charges primarily relate to severance and facility costs associated with the consolidation of our various facilities. Additionally, we incurred non-cash restructuring charges of $0.6 million.

2013 Restructuring Plan

During 2013, we initiated a plan following our acquisition of NDS to integrate the NDS business into our operating structure and further reduce our manufacturing and operating costs across our businesses to leverage our infrastructure and further integrate our product lines. We incurred $2.6 million of cash charges and $0.2 million of non-cash charges for the year ended December 31, 2013 as a result of the 2013 restructuring plan. Charges related to this plan were primarily employee severance and exit costs associated with a facility located in Waltham, Massachusetts, that we exited during the first quarter of 2013.

IRS Claim

During the fourth quarter of 2012, we reached a settlement agreement with the IRS and Department of Justice regarding the IRS audit for the 2000 through 2008 tax years. This settlement was accepted by the Congressional Joint Committee on Taxation during the second quarter of 2013. During the third quarter of 2013, we received cash refunds from the IRS of $12.5 million and continued to record an income tax receivable of $0.3 million as of December 31, 2013. As a result of the settlement acceptance by the Congressional Joint Committee on Taxation, the Company requested the Department of Justice to dismiss the matter without prejudice against the Company. On November 27, 2013, the case was dismissed by the court. In addition, the Company expects to realize the benefit relating to the carryback and carryforward of certain net operating losses in 2014, which will result in the refund of tax payments made in the carryback periods and lower income tax payments in the carryforward periods.

Realignment of Reportable Segments

As a result of restructuring activities, the Company's divestitures, the acquisition of NDS, changes in organizational structure and reallocation of resources, the Company realigned its reportable segments during the fourth quarter of 2013 into three segments: Laser Products, Medical Technologies and Precision Motion. The Laser Products segment is comprised of four product lines: laser scanners, sealed CO_2 lasers, fiber lasers, and scientific lasers. The Medical Technologies segment consists of four product lines: visualization solutions, imaging informatics, thermal printers and light and color measurement instrumentation. The Precision Motion segment consists of two product lines: optical encoders and air bearing spindles. The Company's reportable segments are the same as our operating segments.

The segment realignment was based on the following factors: (i) customers and sales channel overlap; (ii) adjacency of the technologies and commonality amongst customer applications; (iii) Chief Operating Decision Maker's ("CODM") allocation of resources; (iv) better alignment of the product and technology platforms around our acquisition strategy; (v) grouping together those product lines whose organizational and operating cost structures present opportunities for further integration and consolidation in the future; and (vi) the strategy to compensate the CODM. The CODM's variable compensation is based on overall company performance.

The new reportable segments and their principal activities consist of the following:

The Laser Products segment designs, manufactures and markets photonics-based solutions to customers worldwide. The segment serves highly demanding photonics-based applications such as industrial material processing, and medical and life science imaging and laser procedures. The vast majority of the segment's product offerings are sold to OEM customers. The business sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

The Medical Technologies segment designs, manufactures and markets a range of medical grade technologies, including visualization solutions, imaging informatics products, medical grade thermal printers, and light and color measurement instrumentation to customers worldwide. The vast majority of the segment's product offerings are sold to OEM customers. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

The Precision Motion segment designs, manufactures and markets optical encoders and air bearing spindles to customers worldwide. The vast majority of the segment's product offerings are sold into the electronics, industrial and to a lesser extent the medical markets. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

Overview of Financial Results

Overall sales for 2013 was $341.6 million, an increase of $70.1 million, or 25.8%, versus the prior year primarily as a result of the NDS acquisition which accounted for $68.4 million or 97.6% of the increase. In addition, foreign exchange rates adversely impacted our sales by 0.9% during the year ended December 31, 2013. Excluding the impact of the NDS acquisition and changes in foreign exchange rates, total sales for 2013 increased 1.5% versus the prior year. Our organic sales growth is summarized as follows:

	% Change 2013 vs. 2012
Reported growth	25.8%
Less: Change attributable to NDS acquisition	25.2%
Plus: Change due to foreign currency	0.9%
Organic growth	1.5%

The organic growth in our sales for the year ended December 31, 2013 compared to the prior year was primarily attributable to an increase in volume of our laser scanner products as well as increased sales volume of Sealed CO_2 lasers products. Both increases were related to an improvement in capital spending in the industrial markets. We also experienced growth in our air bearing spindles products, which saw a short-term rebound in demand from the printed circuit board industry. These increases were partially offset by decreases in sales in the following product lines: medical grade thermal printers, which was largely impacted by end of life programs with certain customer platforms; scientific lasers, which was impacted by a downturn in the scientific markets; and optical encoders products, which was driven by sales to a customer in the data storage market in 2012 that did not repeat in 2013.

From an end market standpoint, we continued to focus on our strategic growth investments, with an intent of increasing our sales attributed to advanced industrial markets and medical markets. The acquisition of NDS in January 2013 was aligned with this strategy and drove a significant increase in our sales into the medical markets. We believe this strategy will help drive more predictable and sustainable sales growth over the long term, and consequentially increase shareholder value.

Income from operations for 2013 of $17.7 million increased $2.7 million, or 17.9%, versus the prior year. This increase was primarily attributable to increased profitability amongst certain business lines and lower restructuring costs as a result of the completion of the 2011 and 2012 restructuring programs. These increases were partially offset by amortization of intangible assets of $6.7 million and fair value of inventory step up amortization of $0.7 million as a result of the NDS acquisition.

Diluted earnings per share ("EPS") from continuing operations of $0.26 in 2013 decreased $0.40 from the prior year. The decrease was largely due to an increase in our tax provision compared to 2012, which was attributable to the $15.3 million valuation allowance release during the prior year.

The specific components of our operating results for 2013, 2012 and 2011 are further discussed below. Prior year reportable segment financial information has been revised according to our new reportable segment structure.

Results of Operations

The following table sets forth our results of operations as a percentage of sales for the periods indicated:

	Year Ended December 31, 2013	2012	2011
Sales	100.0%	100.0%	100.0%
Cost of goods sold	59.2	57.8	56.3
Gross profit	40.8	42.2	43.7
Operating expenses:			
Research and development and engineering	7.7	8.2	7.7
Selling, general and administrative	23.8	24.2	22.3
Amortization of purchased intangible assets	2.1	1.0	1.1
Restructuring, restatement related costs, post-emergence fees and other.	2.0	3.3	0.8
Total operating expenses	35.6	36.7	31.9
Income from operations	5.2	5.5	11.8
Interest expense, net	(1.0)	(1.1)	(4.3)
Foreign exchange transaction gains (losses), net	(0.4)	(0.5)	0.1
Other income (expense), net	0.5	0.3	0.4
Income from continuing operations before income taxes	4.3	4.2	8.0
Income tax provision (benefit)	1.7	(4.0)	0.9
Income from continuing operations	2.6	8.2	7.1
Income (loss) from discontinued operations, net of tax	(0.3)	(1.9)	2.4
Gain (loss) on disposal of discontinued operations, net of tax	(0.2)	0.9	—
Consolidated net income	2.1	7.2	9.5
Less: Net income attributable to noncontrolling interest	—	—	—
Net income attributable to GSI Group Inc.	2.1%	7.2%	9.5%

Sales

The following table sets forth external sales by reportable segment for 2013, 2012 and 2011 (dollars in thousands):

	2013	2012	2011	% Change 2013 vs. 2012	% Change 2012 vs. 2011
Laser Products	$ 191,300	$ 186,341	$196,014	2.7%	(4.9)%
Medical Technologies	90,276	25,915	27,285	NM	(5.0)%
Precision Motion	60,036	59,242	80,997	1.3%	(26.9)%
Total	$341,612	$271,498	$ 304,296	25.8%	(10.8)%

Laser Products

2013 Compared with 2012

Laser Products segment sales in 2013 increased by $5.0 million, or 2.7%, versus the prior year. Changes in foreign currency rates adversely impacted our sales by $1.5 million, or 0.8%. Excluding the effect of foreign exchange rate movements, sales increased $6.5 million, or 3.5%, primarily due to growth in sales of our laser scanner products, driven by strong demand and greater market penetration of our laser scanning solutions products. In addition, the sealed CO_2 laser products experienced an increase in demand from customers in both marking and coding applications for the food, beverage and pharmaceutical industries. These increases were partially offset by a decrease in sales volume of our scientific laser products due to 2013 governmental budget challenges in the U.S. and Europe, impacting the scientific market.

We continue to invest in and release sealed CO_2 laser products, such as the P100 and P250, and our laser scanner products, such as our Lightening II Digital Scanning subsystems for ultra-high accuracy and speed laser material processing applications. In late 2013, we implemented a more selective investment and business strategy for our fiber laser products, focusing our go-to-market strategy and lowering our overall spending in the business.

2012 Compared with 2011

Laser Products segment sales in 2012 decreased by $9.7 million, or 4.9%, versus the prior year. Changes in foreign currency adversely impacted our sales by $3.4 million, or 1.8%, compared to the prior year. Excluding the effect of foreign exchange rate movements, sales decreased $6.2 million, or 3.1%, primarily due to a decline in sales of our scientific lasers, which was adversely impacted by delays in government spending in the scientific laser market. In addition, the year-over-year comparison is also affected by our adoption of Accounting Standards Update ("ASU") 2009-13, "Revenue Recognition (Topic 605) – Multiple-Deliverable Revenue Arrangements" ("ASU 2009-13"), which amended the revenue recognition guidance for multi-element arrangements. Following our adoption of ASU 2009-13 as of the beginning of 2011, we did not defer any revenue on new multiple-element orders received from customers during the period but delivered over multiple periods. For orders that had been deferred under multi-element arrangements entered into prior to the adoption of ASU 2009-13, we recognized approximately $2.3 million of net revenue in 2011, with no comparable amount recognized in 2012.

Medical Technologies

2013 Compared with 2012

Medical Technologies segment sales in 2013 increased by $64.4 million, of which $68.4 million was attributable to the NDS acquisition. The effect of changes in foreign currency rates was nominal in 2013. Excluding the impact of NDS, Medical Technologies sales decreased $4.0 million, or 15.5%, primarily due to a decline in volume in our medical grade thermal printer products, which was largely driven by end of life programs with certain customer product platforms and to a lesser extent lower hospital capital spending.

2012 Compared with 2011

Medical Technologies segment sales in 2012 decreased by $1.4 million, or 5.0%, primarily due to a decline in sales volume in our medical grade thermal printers products, driven by end of life programs for customer product platforms in 2011.

Precision Motion

2013 Compared with 2012

Precision Motion segment sales in 2013 increased by $0.8 million, or 1.3%, versus the prior year. Changes in foreign currency rates adversely impacted our sales by $0.8 million, or 1.5%. Excluding the effect of foreign exchange rate movements, sales increased by $1.6 million, or 2.8%, primarily due to an increase in sales of our air bearing spindles products, which experienced a short-term rebound in demand from the printed circuit board industry. This increase was offset by a decline in sales volume of our optical encoder products, which was driven by sales to a customer in the data storage market in 2012 that did not repeat in 2013.

2012 Compared with 2011

Precision Motion segment sales in 2012 decreased by $21.8 million, or 26.9%, primarily due to a significant decline in demand in the microelectronics market principally related to mechanical drilling of printed circuit boards. The decline in demand in this market resulted in a decline of approximately $18.8 million in sales of our air bearing spindles products as compared to the prior year. In addition, the decrease in our Precision Motion segment sales was also partially attributable to approximately $5.8 million of net revenue recognized in 2011, with no comparable amount recognized in 2012, for orders that had been deferred under multiple-element arrangements entered into prior to the adoption of ASU 2009-13. These decreases were offset by an increase in sales volume in our optical encoder products, which was driven by sales to a customer in the data storage market.

Gross Profit

The following table sets forth the external gross profit and external gross profit margin for each of our reportable segments for 2013, 2012 and 2011 (dollars in thousands):

	2013	2012	2011
Gross profit:			
Laser Products	$ 76,040	$ 75,456	$85,891
Medical Technologies	35,824	13,149	13,647
Precision Motion	27,779	26,796	35,552
Corporate	(194)	(925)	(1,990)
Total	$139,449	$114,476	$133,100
Gross profit margin:			
Laser Products	39.7%	40.5%	43.8%
Medical Technologies	39.7%	50.7%	50.0%
Precision Motion	46.3%	45.2%	43.9%
Total	40.8%	42.2%	43.7%

Gross profit and gross profit margin can be influenced by a number of factors, including product mix, pricing, volume, manufacturing efficiencies and utilization, costs for raw materials and outsourced manufacturing, headcount, inventory obsolescence and warranty expenses.

Laser Products

2013 Compared with 2012

Laser Products segment gross profit for 2013 increased $0.6 million, or 0.8%, primarily due to an increase in sales. Laser Products segment gross profit margin was 39.7% for 2013, compared with a gross profit margin of 40.5% for the prior year. The 0.8 percentage point decrease in gross profit margin was primarily attributable to unfavorable impact of higher sales of our fiber lasers which had a negative impact on our gross profit margin and new product launches in our sealed CO_2 laser products, which temporarily increased our production costs.

In late 2013, we initiated a strategy and development program focused on releasing cost competitive and flexible high-power architecture fiber lasers to address an increasing demand from the market and our customers. This also includes accelerating our new lower cost high power fiber laser architecture, focusing our development efforts, and reducing our overall organizational cost. In addition, we implemented a continuous improvement productivity initiative in our sealed CO_2 laser products manufacturing facility, to lower our production costs while improving our product quality and improving customer satisfaction.

2012 Compared with 2011

Laser Products segment gross profit for 2012 decreased $10.4 million, or 12.1%, primarily due to the 4.9% decline in sales. In addition, we recognized $1.2 million of net gross profit during 2011, with no comparable amount during 2012, for orders that had been deferred under multiple-element arrangements entered into prior to the adoption of ASU 2009-13. The 3.3 percentage point decrease in gross profit margin was primarily attributable to product mix, as a higher proportion of our sales were from our fiber lasers products. In addition, gross profit margin was adversely impacted by lower absorption in our manufacturing facility for scientific lasers, as a result of lower volumes caused by delays in government funding in the scientific laser market and a discontinuance of legacy ultrafast lasers.

Medical Technologies

2013 Compared with 2012

Medical Technologies segment gross profit for 2013 increased $22.7 million, or 172.4%, primarily due to the acquisition of NDS in January 2013. Excluding the impact of NDS, gross profit decreased by $2.6 million, or 19.5%, primarily attributable to lower sales of our medical grade thermal printers products. Medical Technologies segment gross profit margin was 39.7% for 2013, compared with a gross profit margin of 50.7% for the prior year. The 11.0 percentage point decrease in gross profit margin percentage was primarily driven by the acquisition of NDS, which included $2.8 million in intangibles amortization and acquisition fair value adjustments.

2012 Compared with 2011

Medical Technologies segment gross profit for 2012 decreased $0.5 million, or 3.6%, primarily due to the decline in sales of our medical grade thermal printers. Medical Technologies segment gross profit margin remained relatively flat year over year.

Precision Motion

2013 Compared with 2012

Precision Motion segment gross profit for 2013 increased $1.0 million, or 3.7%, primarily due to the 1.3% increase in sales. Precision Motion segment gross profit margin was 46.3% for 2013, compared with a gross profit margin of 45.2% for the prior year. The 1.1% increase in gross profit margin was driven by product mix and cost savings from our 2012 restructuring program.

2012 Compared with 2011

Precision Motion segment gross profit for 2012 decreased $8.8 million, or 24.6%, primarily due to the significant drop in sales of our air bearing spindles products due to a significant decline in demand in the microelectronics market; principally related to mechanical drilling of printed circuit boards. In addition, we recognized $2.3 million of net gross profit during 2011, with no comparable amount during 2012, for orders that had been deferred under multiple-element arrangements entered into prior to the adoption of ASU 2009-13. Precision Motion segment gross profit margin increased due to product mix.

Operating Expenses

The following table sets forth operating expenses for 2013, 2012 and 2011 (dollars in thousands):

				% Change	
	2013	2012	2011	2013 vs. 2012	2012 vs. 2011
Research and development and engineering	$ 26,352	$ 22,393	$ 23,454	17.7%	(4.5)%
Selling, general and administrative	81,449	65,584	67,877	24.2%	(3.4)%
Amortization of purchased intangible assets	7,270	2,650	3,515	NM	(24.6)%
Restructuring, restatement related costs, post-emergence fees and other	6,687	8,842	2,406	(24.4)%	NM
Total	$121,758	$99,469	$97,252	22.4%	2.3%

Research and Development and Engineering Expenses

Research and development and engineering (“R&D”) expenses are primarily comprised of employee compensation and related expenses and cost of materials for R&D projects.

2013 Compared with 2012

R&D expenses were $26.4 million, or 7.7% of sales, in 2013, compared with $22.4 million, or 8.2% of sales, in 2012. R&D expenses, in terms of total dollars, increased primarily due to the acquisition of NDS. The increase was partially offset by lower employee compensation as a result of our restructuring plans and lower project costs in 2013.

2012 Compared with 2011

R&D expenses were $22.4 million, or 8.2% of sales, in 2012, compared with $23.5 million, or 7.7% of sales, in 2011. R&D expenses, in terms of total dollars, decreased primarily attributable to lower employee related costs as a result of our 2011 and 2012 restructuring plans.

Selling, General and Administrative Expenses

Selling, general and administrative (“SG&A”) expenses include costs for sales and marketing, sales administration, finance, human resources, legal, information systems and executive management.

2013 Compared with 2012

SG&A expenses were $81.4 million, or 23.8% of sales, in 2013, compared to $65.6 million, or 24.2% of sales, in 2012. SG&A expenses increased in terms of total dollars due to the acquisition of NDS and, to a lesser extent, from the increase in employee compensation versus the prior year. These increases were partially offset by lower facility related costs as a result of our restructuring plans.

2012 Compared with 2011

SG&A expenses were $65.6 million, or 24.2% of sales, in 2012, compared to $67.9 million, or 22.3% of sales, in 2011. SG&A expenses decreased $2.3 million versus 2011, primarily driven by lower outside services, partially offset by higher employee compensation as a result of strategic hires in the areas of business development, process excellence, and corporate functions.

Amortization of Purchased Intangible Assets

Amortization of purchased intangible assets is charged to our Laser Products, Medical Technologies and Precision Motion segments. Amortization of core technologies is included in cost of goods sold in the consolidated statement of operations. Amortization of customer relationships, trademarks, backlog and other intangibles are included in operating expenses in the consolidated statement of operations.

2013 Compared with 2012

Amortization of purchased intangible assets, excluding the amortization of core technologies, was $7.3 million, or 2.1% of sales, in 2013, compared to $2.7 million, or 1.0% of sales, in 2012. The increase, in terms of total dollars and as a percentage of sales, was related to the amortization of acquired intangible assets as part of the NDS acquisition.

2012 Compared with 2011

Amortization of purchased intangible assets, excluding the amortization of core technologies, was $2.7 million, or 1.0% of sales, in 2012, compared to $3.5 million, or 1.1% of sales, in 2011. The decrease, in terms of total dollars and as a percentage of sales, was related to the completion of amortization related to non-compete agreements acquired as part of the 2008 Excel acquisition.

Restructuring Costs, Restatement Related Costs, Post-Emergence Fees and Other

We recorded restructuring, restatement related costs, post-emergence fees and other charges of $6.7 million, $8.8 million and $2.4 million during 2013, 2012 and 2011, respectively. These charges primarily relate to our restructuring programs as well as the acquisition related costs incurred for the acquisition of NDS in January 2013 and the expected acquisition of JADAK in March 2014. Post-emergence professional fees represent costs incurred subsequent to bankruptcy emergence for financial and legal advisors to assist with matters in finalizing the bankruptcy process. Post-emergence professional fees totaled $0.3 million during 2011, with no comparable amount for 2012 and 2013.

2013 Compared with 2012

The Company recorded restructuring and other costs of $6.7 million in 2013, compared to $8.8 million in 2012. The decrease in restructuring costs primarily relates to a decrease in our 2011 restructuring plan costs. In 2013, we recorded cash and non-cash costs of $4.3 million and $0.8 million, respectively. This decrease was offset by higher acquisition related charges, which related to the acquisition of NDS and the expected acquisition of JADAK in March 2014. Acquisition related charges totaled $1.6 million and $0.8 million during 2013 and 2012, respectively.

In 2013, the following significant restructuring charges were incurred. In January 2013, the Company consolidated our laser scanners business into our Bedford, Massachusetts production facility. In June 2013, we also sold our previously exited scientific lasers facility located in East Setauket, New York for net cash consideration of $4.3 million and recognized a loss on the sale of the facility of $0.2 million. In addition, the Company also recorded severance charges associated with our 2011 and 2013 restructuring plans.

2012 Compared with 2011

The Company recorded restructuring and other costs of $8.8 million in 2012, compared to $2.4 million in 2011. The increase in restructuring costs was primarily related to our 2011 and 2012 restructuring programs for which we recorded cash and non-cash costs of $5.9 million and $2.0 million, respectively, in 2012.

As part of our 2011 restructuring program, which began in December 2011, the Company incurred cash and non-cash restructuring charges of $1.1 million and $0.9 million, respectively, in 2011 primarily related to the consolidation of operations in Japan and the United States. As of December 31, 2012, the Company had substantially completed the 2011 restructuring program and exited nine facilities, including three facilities exited as part of the sale of the Laser Systems businesses. In 2012, the Company consolidated the manufacturing operations of its scientific lasers and optics product lines and consolidated each of its sales and service operations in Germany and Japan. The Company incurred cash and non-cash charges of $4.1 million and $2.0 million, respectively, related to the 2011 restructuring plan during 2012. Cash charges incurred were primarily related to severance, moving and consulting costs while non-cash charges were primarily related to accelerated depreciation for changes in estimated useful lives of certain long-lived assets.

In 2012, the Company initiated and completed the 2012 restructuring program to identify additional cost savings due to the continued uncertainty and volatility of the macroeconomic environment, primarily related to the air bearing spindles product line. The Company recorded cash charges of $1.8 million in 2012 related to severance costs under the 2012 restructuring program.

Operating Income by Segment

The following table sets forth operating income by segment for 2013, 2012 and 2011(in thousands):

	2013	2012	2011
Operating Income			
Laser Products	$ 23,388	$ 19,225	$ 28,572
Medical Technologies	3,566	8,285	8,855
Precision Motion	12,062	9,482	15,675
Corporate, shared services and unallocated	(21,325)	(21,985)	(17,254)
Total	$ 17,691	$ 15,007	$ 35,848

Laser Products

2013 Compared with 2012

Laser Products segment operating income for 2013 increased by $4.2 million, or 21.7%, from 2012 primarily due to higher profitability from our laser scanners products, lower restructuring and lower research and development costs related to the scientific laser product line versus the prior year partially offset by a decrease in operating income from our CO_2 products. The Company recorded restructuring charges of $3.2 million in 2013, compared to $5.4 million in 2012. The decrease in restructuring costs primarily relates to the 2011 restructuring program which consolidated the manufacturing operations of its scientific laser and optics product lines in 2012 and the relocation of the laser scanner product line in 2013. Additional restructuring charges were incurred during 2012 related to severance, moving and consulting costs. Research and development costs for the scientific laser product line have decreased primarily due to lower employee compensation as a result of restructuring programs and lower project costs. Amortization of intangible assets for the laser products segment was $4.1 million in both 2013 and 2012.

2012 Compared with 2011

Laser Products segment operating income for 2012 decreased by $9.3 million, or 32.7%, from 2011 primarily due to a 12.1% decline in gross profit and an increase in operating expenses. Operating expenses increased due to higher restructuring costs. Restructuring costs increased to $5.4 million in 2012 from $1.8 million in the prior year due to the consolidation of the scientific lasers and optics facilities during 2012. Amortization of intangible assets for the laser products segment was $4.1 million in both 2012 and 2011.

Medical Technologies

2013 Compared with 2012

Medical Technologies segment operating income for 2013 decreased by $4.7 million, or 57.0%, primarily due to an increase in amortization of intangibles and step up of inventory fair value related to the acquisition of NDS totaling $7.4 million and an increase in restructuring costs of $0.9 million compared to zero in the prior year.

2012 Compared with 2011

Medical Technologies segment operating income for 2012 decreased by $0.6 million, or 6.4%, from 2011 primarily due to a decline in sales of thermal printers.

Precision Motion

2013 Compared with 2012

Precision Motion segment operating income for 2013 increased by $2.6 million, or 27.2%, from 2012. The increase in operating income was primarily due to an increase in gross margin and lower operating costs as a

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result of our restructuring plans related to our air bearing spindles product line. The Company recorded restructuring charges of $0.4 million in 2013 compared to $1.0 million in 2012.

2012 Compared with 2011

Precision Motion segment operating income for 2012 decreased by $6.2 million, or 39.5%, from 2011 primarily due to the 24.6% decline in gross profit. In addition, the decrease in our Precision Motion segment operating income was also partially attributable to higher restructuring costs recorded in 2012 compared to 2011.

Corporate, Shared Services and Unallocated

Corporate, shared services and unallocated costs primarily represent costs of corporate and shared service functions, management incentive compensation, stock-based compensation, and other public company costs that are not allocated to the operating segments, including certain restructuring and all acquisition related costs.

2013 Compared with 2012

Corporate, shared services and unallocated costs for 2013 were consistent with 2012.

2012 Compared with 2011

Corporate, shared services and unallocated costs in 2012 increased by $4.7 million, or 27.4%, from 2011 primarily due to higher employee compensation as a result of implementing a company-wide incentive compensation structure for all managers and functional leaders, strategic hires, particularly for functions that were displaced during 2009 and 2010 time period.

Interest Expense, Foreign Exchange Transaction Gains (Losses), and Other Income (Expense), Net

The following table sets forth interest expense, net, foreign exchange transactions and other income (expense), net (in thousands):

	2013	2012	2011
Interest expense, net	$(3,455)	$ (2,788)	$(12,977)
Foreign exchange transaction gains (losses), net	(1,208)	(1,267)	172
Other income (expense), net	1,502	582	1,177
Total	$(3,161)	$ (3,473)	$(11,628)

Interest Expense, Net

2013 Compared with 2012

The increase in net interest expense from 2012 to 2013 was the result of higher average debt outstanding during 2013, which was partially offset by lower average interest rates. The higher debt levels in 2013 were the result of borrowings to purchase NDS in January 2013. The weighted average interest rate on the Senior Credit Facilities was 2.83% and 3.35% during 2013 and 2012, respectively. Included in interest income (expense), net was non-cash interest expense of $0.9 million and $1.0 million in 2013 and 2012, respectively, related to amortization of deferred financing costs on our debt.

2012 Compared with 2011

The decrease in net interest expense from 2011 to 2012 was primarily attributable to the substantial reduction and refinancing of our debt in 2011, which was achieved through a redemption of our Senior Secured

PIK Elections Notes (the "2014 Notes"), which carried a 12.25% fixed rate interest, versus interest on our Senior Credit Facilities, which carried a weighted average interest rate of 3.35%. In addition, we recorded non-cash interest expense of $1.0 million and $1.9 million in 2012 and 2011, respectively. In 2012, our non-cash interest expense was related to the amortization of deferred financing fees for our Senior Credit Facilities. In 2011, our non-cash interest expense was comprised of a $1.1 million loss on extinguishment of debt related to the write-off of unamortized deferred financing fees on our 2014 Notes, $0.3 million of PIK interest and $0.5 million related to the amortization of deferred financing costs.

Foreign Exchange Transaction Gains (Losses), Net

Foreign exchange transaction gains (losses), net, were ($1.2) million, ($1.3) million and $0.2 million during 2013, 2012 and 2011, respectively, due to the performance of the U.S. Dollar against the Euro, British Pound and Japanese Yen.

Other Income (Expense), Net

We recognized $1.5 million, $0.6 million and $1.2 million in 2013, 2012 and 2011, respectively, related to earnings on our equity investment in Laser Quantum. As a result of a share buy-back program by Laser Quantum, our equity ownership percentage increased from 25.1% to 41.2% during the second quarter of 2013.

The summarized financial information for Laser Quantum is as follows (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Sales	$16,269	$13,039	$18,384
Income from operations	$ 4,720	$ 3,592	$ 3,994
Net income	$ 3,745	$ 2,215	$ 4,684

Discontinued Operations

2013 Compared with 2012

Loss from discontinued operations, net of tax, was ($0.9) million and ($5.2) million during 2013 and 2012, respectively. The decrease in the loss is primarily due to the sale of the Semiconductor Systems and Laser Systems businesses in May 2013 and October 2012, respectively, offset by severance paid to Semiconductor Systems employees during 2013 as a result of the sale.

In May 2013, we consummated the sale of certain assets and liabilities of the Semiconductor Systems business for $8.0 million in cash, subject to closing working capital adjustments. We recorded a $0.3 million loss on the sale, net of tax, in the consolidated statement of operations.

In September 2013, we settled the closing working capital adjustments with the buyers of both the Semiconductor Systems and Laser Systems businesses. As a result, we recorded an additional $0.3 million loss on sale, net of tax.

2012 Compared with 2011

Income (loss) from discontinued operations, net of tax, was ($5.2) million and $7.3 million during 2012 and 2011, respectively. The substantial decrease in 2012 compared with 2011 is primarily due to a decline in sales from our discontinued businesses in 2012, an inventory provision for our Semiconductor Systems business of $1.9 million, and a $0.9 million impairment related to our Orlando building, which was retained by the Company after the sale of our Laser Systems business and was the location of our Control Laser business. The increase in the inventory provision was caused by industry trends in the memory repair market, which resulted in lower expected future demand for our memory repair products. In addition, we recognized severance costs of $0.7 million primarily related to our memory repair product line and Laser Systems business and consulting costs primarily related to tax, legal and due diligence services of $0.9 million related to our discontinued businesses in 2012.

In October 2012, we sold certain assets and liabilities of the Laser Systems business for cash proceeds of $7.0 million, subject to working capital adjustments. We recognized a gain of $2.3 million from the sale of the assets, which included a $1.5 million gain from cumulative translation adjustments recognized in the consolidated statement of operations associated with the liquidation of one of our German subsidiaries as part of the Laser Systems divestiture.

Income Taxes

2013 Compared with 2012

We recorded a tax expense of $5.7 million in 2013, as compared to a tax benefit of $10.9 million in 2012. The effective tax rate for 2013 was 39.1% of income before taxes, compared to an effective tax rate of (94.9%) of income before taxes for 2012. We are incorporated in Canada and therefore use the Canadian statutory rate. Our effective tax rate in 2013 differs from the Canadian statutory rate of 26.0% primarily due to additional valuation allowance on net operating losses in certain jurisdictions offset by a tax benefit for tax credits generated during the year.

2012 Compared with 2011

We recorded a tax benefit of $10.9 million in 2012, as compared to a tax expense of $2.5 million in 2011. The effective tax rate for 2012 was (94.9%) of income before taxes, compared to an effective tax rate of 10.5% of income before taxes for 2011. Our tax rate in 2012 differs from the Canadian statutory rate of 25.0% primarily due to a release of a portion of our valuation allowance on deferred tax assets of $15.3 million which we believe are more likely than not to be realized. In addition, we recorded a benefit of $4.1 million due to a decrease in unrecognized tax benefits relating mainly to settlement of a multi-year IRS examination. These benefits were partially offset by $1.4 million of international tax rate differences and $1.8 million of additional taxes resulting from the aforementioned IRS examination.

Liquidity and Capital Resources

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing, and financing activities. Our primary ongoing cash requirements are funding operations, capital expenditures, investments in businesses, and repayment of our debt and related interest expense. Our primary sources of liquidity are cash flows from operations and borrowings under our revolving credit facility. We believe our future operating cash flows will be sufficient to meet our future operating and capital expenditure cash needs for the foreseeable future, including at least the next 12 months. The availability of borrowings under our revolving credit facility provides an additional potential source of liquidity should it be required for business acquisitions. In addition, we may seek to raise additional capital, which could be in the form of bonds, convertible debt or equity, to fund business development activities or other future investing cash requirements, subject to approval by the lenders in the Amended and Restated Credit Agreement.

Significant factors affecting the management of our ongoing cash requirements are the adequacy of available bank lines of credit and our ability to attract long-term capital with satisfactory terms. The sources of our liquidity are subject to all of the risks of our business and could be adversely affected by, among other factors, a decrease in demand for our products, our ability to integrate current and future acquisitions, deterioration in certain financial ratios, and market changes in general. See “Risks Relating to Our Common Shares and Our Capital Structure” included in Item 1A of this Annual Report on Form 10-K.

Our ability to make payments on our indebtedness and to fund our operations may be dependent upon the earnings and the distribution of funds from our subsidiaries. Local laws and regulations and/or the terms of our indebtedness restrict certain of our subsidiaries from paying dividends and transferring assets to us. We cannot assure you that applicable laws and regulations and/or the terms of our indebtedness will permit our subsidiaries to provide us with sufficient dividends, distributions or loans when necessary.

In October 2013, the Company’s Board of Directors authorized a share repurchase plan under which the Company may repurchase outstanding shares of the Company’s common stock up to an aggregate amount of $10.0 million. The shares may be repurchased from time to time, at the Company’s discretion, based on ongoing assessment of the capital needs of the business, the market price of the Company’s common stock, and general market conditions. Shares may also be repurchased through an accelerated stock purchase agreement, on the open market or in privately negotiated transactions in accordance with applicable federal securities laws. Repurchases may be made under certain SEC regulations, which would permit common stock to be purchased when the Company would otherwise be prohibited from doing so under insider trading laws. The share repurchase plan does not obligate the Company to acquire any particular amount of common stock. No time limit was set for the completion of the share repurchase program, and the program may be suspended or discontinued at any time. The Company expects to fund the share repurchase through cash on hand and future cash flow from operations. In December 2013, the Company repurchased 50 thousand shares of its common stock for an aggregate amount of $0.5 million on the open market.

As of December 31, 2013, $24.3 million of our $61.0 million cash and cash equivalents was held by our subsidiaries outside of Canada. Generally, our intent is to use cash held in these foreign subsidiaries to fund our local operations or acquisitions by those local subsidiaries. However, in certain instances, we have identified excess cash for which we may repatriate and have established liabilities for the expected tax cost. Additionally, we may use intercompany loans to address short-term cash flow needs for various subsidiaries.

Amended and Restated Credit Agreement

In December 2012, we entered into an amended and restated senior secured credit agreement (the “Amended and Restated Credit Agreement”), consisting of a $50.0 million, 5-year term loan facility and a $75.0 million, 5-year revolving credit facility (collectively, the “Senior Credit Facilities”). The Senior Credit Facilities mature in December 2017. The Company entered into three amendments in 2013 and one amendment during 2014. The first and second amendments resulted in immaterial modifications. On September 13, 2013, we entered into a third amendment to the Amended and Restated Credit Agreement (the “Third Amendment”). The Third Amendment increased the accordion feature provided in the Amended and Restated Credit agreement from an uncommitted $50.0 million to an uncommitted $100.0 million in aggregate of our revolving credit facility and term loan. On February 10, 2014, we entered into a fourth amendment to the Amended and Restated Credit Agreement (the “Fourth Amendment”). The Fourth Amendment increased the revolving credit facility commitment under the Amended and Restated Credit Agreement by $100 million from $75 million to $175 million and resets the accordion feature to $100 million for future expansion. Additionally, the Fourth Amendment increased the maximum permitted consolidated leverage ratio financial covenant from 2.75 to 3.00.

As of December 31, 2013, we had outstanding term loans in the amount of $42.5 million and revolving loans of $29.0 million outstanding under the Amended and Restated Credit Agreement.

The Amended and Restated Credit Agreement contains various covenants that we believe are usual and customary for this type of agreement, including a maximum allowed leverage ratio, and a minimum required fixed charge coverage ratio (as defined in the Amended and Restated Credit Agreement). The covenant requirements below have been updated to reflect our requirements in accordance with the Fourth Amendment. The following table summarizes these financial covenant requirements and our compliance as of December 31, 2013.

	Requirement	Actual December 31, 2013
Maximum consolidated leverage ratio	3.00	1.41
Minimum consolidated fixed charge coverage ratio	1.50	4.16

In addition, the Amended and Restated Credit Agreement contains various other customary representations, warranties and covenants applicable to the Company and its subsidiaries, including: (i) limitations on certain payments; (ii) limitations on fundamental changes involving the Company or its subsidiaries; (iii) limitations on the disposition of assets; and (iv) limitations on indebtedness, investments, and liens.

Cash Flows

Cash and cash equivalents totaled $61.0 million at December 31, 2013, compared to $65.8 million at December 31, 2012. The net decrease in cash and cash equivalents is primarily related to net cash inflows from operating activities of $49.2 million, net borrowings of $60.0 million under our Senior Credit Facilities, and net cash proceeds from the sale of our Semiconductor System and Laser Systems businesses totaling $8.2 million. These cash inflows were offset by cash paid for the acquisition of NDS of $80.8 million, repayments of our debt of $38.5 million, and capital expenditures of $5.0 million.

The following table summarizes our cash and cash equivalent balances, cash flows and unused and available funds on our revolving credit facility for the years indicated (in thousands):

	2013	2012	2011
Cash and cash equivalents	$ 60,980	$ 65,788	$ 54,835
Net cash provided by operating activities	$ 49,200	$ 28,430	$ 45,173
Net cash provided by (used in) investing activities	$(72,956)	$ 2,975	$ (4,217)
Net cash provided by (used in) financing activities	$ 18,574	$(21,112)	$(43,095)
Unused and available funds under revolving credit facility	$ 46,000	$ 75,000	$ 12,000

Operating Cash Flows

Cash provided by operating activities was $49.2 million in 2013 compared to $28.4 million and $45.2 million in 2012 and 2011, respectively. Our operating cash flow increased in 2013 by $20.8 million which was primarily due to net tax refunds received of $11.8 million as a result of the settlement with the IRS and an increase in cash flows as a result of increased income from operations and a decrease in losses from discontinued operations. The increase in cash provided by operations was partially offset by an increase in customer receivables as our days receivable outstanding increased from 53 days at December 31, 2012 to 56 days at December 31, 2013 and an increase in inventories as a result of timing of inventory purchases.

Our operating cash flow declined in 2012 by $16.7 million compared to the prior year, which was primarily due to a reduction in income from operations of $20.8 million driven by a decline in revenues. The decline in income from operations was partially offset by a reduction in interest paid of $10.4 million and working capital improvements which primarily related to better vendor payments management as our days payable outstanding increased from 29 days at December 31, 2011 to 42 days at December 31, 2012. The $45.2 million of cash provided by operating activities in 2011 was primarily related to our net income of $29.0 million and non-cash adjustments of $27.3 million.

Investing Cash Flows

Cash used in investing activities was $73.0 million during 2013 primarily due to cash consideration of $80.8 million paid for the purchase of NDS in January 2013 and $5.0 million in capital expenditures, partially offset by net cash received from the sale of the Semiconductor Systems business and finalization of our Laser

Systems divestiture working capital adjustments totaling $8.2 million. In addition, the Company received $4.6 million in cash for the sale of assets primarily driven by the sale of our East Setauket, New York facility in 2013.

Cash provided by investing activities of $3.0 million in 2012 was driven by the sale of our Laser Systems business of $7.0 million, partially offset by $4.3 million in capital expenditures as compared to cash used in investing activities of $4.2 million in 2011 for capital expenditures.

The Company anticipates paying $93.5 million for the acquisition of JADAK utilizing cash on hand as well as borrowings under our revolving credit facility. We have no material commitments to purchase plant property and equipment and expect such expenditures to be approximately $5 million to $6 million in 2014.

Financing Cash Flows

Cash provided by financing activities was $18.6 million during 2013, primarily due to $60.0 million of borrowings under our revolving credit facility used to pay for a portion of the cash consideration paid for NDS, partially offset by $7.5 million for our contractual term loan payments and $31.0 million of optional repayments of borrowings under our revolving credit facility. Cash used in financing activities was $21.1 million during 2012, primarily due to the $23.0 million in debt repayments, offset by the $5.0 million of proceeds from our Senior Credit Facilities as a result of the Amended and Restated Credit Agreement. We also paid $1.8 million for debt issuance costs. Cash used in financing activities was $43.1 million during 2011, primarily due to the $40.1 million net reduction of our principal debt, resulting from repayments and extinguishment of our 2014 Notes of $113.2 million, offset by the $73.1 million of proceeds from our Senior Credit Facilities. We also paid $3.0 million for debt issuance costs.

We expect to use $8.3 million of cash in 2014 for financing activities, comprised of quarterly contractual payments of $1.875 million on our term loan facility, and $0.8 million for our capital lease obligations. In addition, from time to time we may make payments to paydown our revolving credit facility with future cash flows generated from operating activities.

Other Liquidity Matters

Pension Plans

We maintain two defined benefit pension plans—one plan in the U.K. (the “U.K. Plan”) and one plan in Japan (the “Japan Plan”). Our U.K. Plan was closed to new members in 1997 and stopped accruing additional pension benefits for existing members in 2003, thereby limiting our obligation to benefits earned through that date. Benefits under this plan were based on the employees’ years of service and compensation. Our Japan Plan is an active plan.

Our funding policy is to fund pensions and other benefits based on actuarial methods as permitted by regulatory authorities. The results of funding valuations depend on the assumptions that we make with regard to attributes such as asset returns, rates of members’ benefits increases, mortality, retail price inflation and other market driven changes. The assumptions used represent one estimate of a possible future outcome. The final cost to us will be determined by events as they actually become known. Due to the underfunded positions that our pension plans currently have and potential changes in the actual outcomes relative to our assumptions, we may have to increase payments to fund these plans in the future.

In August 2013, we agreed to increase our annual funding contributions for the U.K. Plan from approximately $0.8 million to $1.0 million annually through 2021. The Japanese plan includes a guarantee of return of principal and yearly interest of 0.75%; therefore, there are no significant fluctuations in this plan. See Note 13 to Consolidated Financial Statements for further information about these plans.

As a result of the covenant that exists between our U.K. subsidiary and the Plan Trustees regarding the funding of the U.K. Plan, our ability to transfer assets outside our U.K. subsidiary, and its wholly owned subsidiary in China, may be limited.

Off-Balance Sheet Arrangements, Contractual Obligations

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2013 and the effect such obligations are expected to have on liquidity and cash flow in future years. We have excluded the future cash payments for FIN 48 (codified within ASC 740) unrecognized tax benefits, including interest and penalties, in the amount of $7.3 million because we are uncertain if and when such amounts may be settled. These FIN 48 liabilities have been classified as long-term liabilities on the consolidated balance sheets and have been further explained in Note 14 to our Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

Contractual Obligations	Total	2014	2015-2016	2017-2018	Thereafter
			(In thousands)		
Senior Credit Facilities (1)	$ 71,500	$ 7,500	$ 15,000	$ 49,000	$ —
Interest on Senior Credit Facilities (2)	5,911	1,810	3,002	1,099	—
Capital leases	838	838	—	—	—
Operating leases (3)	27,098	4,716	7,507	6,564	8,311
Purchase commitments (4)	46,598	42,570	4,028	—	—
U.K. pension plan (5)	7,775	1,005	2,098	2,221	2,451
Total contractual cash obligations	$159,720	$58,439	$31,635	$58,884	$10,762

(1) On December 27, 2012, we entered into an amended and restated credit agreement. As of December 31, 2013, a total of $42.5 million of term loan debt and $29.0 million of revolving credit facility were outstanding under the Senior Credit Facilities. The term loan is payable in 16 quarterly installments of $1.875 million with the remaining amount due upon maturity in December 2017. The revolving credit facility is due at maturity in 2017.

(2) For the purpose of this calculation, interest rates on floating rate obligations, LIBOR plus applicable margin, as defined in the Amended and Restated Credit Agreement, were used throughout the contractual life of the term loan.

(3) These amounts primarily represent the gross amounts due for facilities that are leased. The amounts include payments due with respect to both continuing operating facilities and facilities that have been vacated as a result of our restructuring actions.

(4) Purchase commitments represent unconditional purchase obligations as of December 31, 2013.

(5) Assumes funding obligations equivalent to $1.0 million per year through January 2021 based on annual funding contributions in effect as of December 31, 2013. Future funding requirements will be affected by various actuarial assumptions and actual experience of the pension plan.

Off-Balance Sheet Arrangements

The Company has an equity method investment in a privately held company located in the United Kingdom, Laser Quantum Ltd. Group (“Laser Quantum”). As a result of a share buy-back program initiated by Laser Quantum during the second quarter of 2013, our ownership percentage in the equity increased from 25.1% to 41.2%. We continue to recognize the earnings of the equity under the equity method.

Through December 31, 2013, we have not entered into any off-balance sheet arrangements or material transactions with unconsolidated entities or other persons.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. On an ongoing basis, we evaluate our estimates, assumptions and judgments, including those related to revenue recognition, inventory valuation, the assessment of the valuation of goodwill, intangible assets and tangible long-lived assets, employee benefit plans, restructuring charges, accounting for income taxes, and accounting for loss contingencies. Actual results could differ significantly from our estimates in the future.

We believe that the following critical accounting policies and estimates most significantly affect the portrayal of our financial condition and results of operations and require the most difficult and subjective judgments.

Revenue Recognition. Revenue from the sale of products is recognized when we meet all four of the criteria for revenue recognition within the fiscal period. These criteria are: evidence of an arrangement exists; delivery has occurred; the price is fixed or determinable; and collection of the resulting receivable is reasonably assured. Revenue recognition requires judgment and estimates, which may affect the amount and timing of revenue recognized in any given period.

On January 1, 2011, we adopted the provisions of Accounting Standards Update (“ASU”) 2009-13, “Revenue Recognition (Topic 605)—Multiple-Deliverable Revenue Arrangements” (“ASU 2009-13”) using the modified prospective approach. All multiple-element revenue arrangements entered into after January 1, 2011 have been accounted for under the ASU 2009-13 guidance. ASU 2009-13 addresses the accounting for multiple-element arrangements by providing two significant changes. First, this guidance removes the requirement to have objective and reliable evidence of fair value for undelivered elements in an arrangement, which generally results in more elements being treated as separate units of accounting. Specifically, this guidance amends the criteria in Subtopic 605-25, “Revenue Recognition-Multiple-Element Arrangements” (“ASC 605-25”), for separating consideration in multiple-element arrangements. This guidance establishes a selling price hierarchy for determining the “selling price” of an element, which is based on: (a) vendor-specific objective evidence; (b) third-party evidence; or (c) management’s best estimate. Our best estimates are based on factors such as gross margin, volume discounts, new strategic customers, geography, customer class and competitive pressures. The second change modifies the manner in which the transaction consideration is allocated across the separately identified elements. Entities are no longer able to apply the residual method of allocation. Instead, the arrangement consideration is required to be allocated at the inception of the arrangement to all elements using the relative selling price method. The relative selling price method uses the weighted average of the “selling price” and applies that to the contract value to establish the consideration for each element.

For transactions entered into prior to the adoption of ASU 2009-13, we followed the provisions of ASC 605-25 for all multiple-element arrangements. Under the guidance prior to ASU 2009-13, we assessed whether the elements specified in a multiple-element arrangement should be treated as separate units of accounting for revenue recognition purposes and whether objective and reliable evidence of fair value existed for these separate units of accounting. We applied the residual method when objective and reliable evidence of fair value existed for all of the undelivered elements in a multiple-element arrangement. When objective and reliable evidence of fair value did not exist for all of the undelivered elements in a multiple-element arrangement, we recognized revenue under the multiple units shipped methodology, whereby revenue was recognized in each period based upon the lowest common percentage of the products shipped in the period. This approximated a proportional performance model (the “Proportional Performance Model”) of revenue recognition. This generally resulted in a partial deferral of revenue to a later reporting period. No revenue was recognized unless one or more units of each product had been delivered.

The Laser Products, Medical Technologies, and Precision Motion segments have revenue transactions that are comprised of both single-element and multiple-element transactions. Multiple-element transactions may include two or more products and occasionally also contain installation, training, non-standard/extended warranties, or preventative maintenance plans. For multiple-element transactions entered into or materially modified after January 1, 2011, revenue is recognized under ASU 2009-13, generally upon shipment using the relative selling price method. For multiple-element transactions entered into prior to January 1, 2011, revenue was generally recognized under the Proportional Performance Model described above. Single-element transactions are generally recognized upon shipment. Installation and training is generally a routine process that occurs within a short period of time from delivery and we have concluded that this obligation is inconsequential and perfunctory.

The Company generally provides warranties for its products. The standard warranty period is typically 12 to 24 months for the Laser Products and Precision Motion segments. The Medical Technologies segment contains standard warranties that range from 12 months to 60 months. The initial standard warranty for product sales is accounted for under the provisions of ASC 450, "Contingencies," as the Company has the ability to ascertain the likelihood of the liability and can estimate the amount of the liability. A provision for the estimated cost related to warranty is recorded to cost of goods sold at the time revenue is recognized. The Company's estimate of costs to service the warranty obligations is based on historical experience and expectations of future conditions. To the extent the Company experiences warranty claims or costs associated with servicing those claims that differ from the original estimates, revisions to the estimated warranty liability are recorded at that time, with an offsetting entry recorded to cost of goods sold. On occasion, the Company sells separately priced non-standard/extended warranty services or preventative maintenance plans, which are accounted for in accordance with provisions of ASC 605-20-25-3 "Separately Priced Extended Warranty and Product Maintenance Contracts". Under this guidance we recognize the separately priced extended/non-standard warranty and preventative maintenance fees ratably over the associated period.

At the request of our customers, we may at times perform professional services for our customers, generally for the maintenance and repairs of products previously sold to those customers. These services are usually in the form of time and materials based contracts which are short in duration. Revenue for time and materials services is recorded at the completion of services requested under a customer's purchase order. Customers may, at times subsequent to the initial product sale, purchase a service contract whereby services, including preventative maintenance plans, are provided over a defined period, generally one year. Revenue for such service contracts are recorded ratably over the period of the contract while related costs of such services are recorded when incurred.

We typically negotiate trade discounts and agreed terms in advance of order acceptance and record any such items as a reduction of revenue. Our revenue recognition policy allows for revenue to be recognized under arrangements where the payment terms are 180 days or less, presuming all other revenue recognition criteria have been met. From time to time, based on our review of customer creditworthiness and other factors, we may provide our customers with payment terms that exceed 180 days. To the extent all other revenue recognition criteria have been met, we recognize revenue for these extended payment arrangements as the payments become due. We currently have no payment terms with customers that exceed 180 days.

Inventories. Inventories, which include materials and conversion costs, are stated at the lower of cost or market, using a first-in, first-out method. We periodically review these values to ascertain that market value of the inventory continues to exceed its recorded cost. Generally, reductions in value of inventory below cost are caused by technological obsolescence of the inventory.

We regularly review inventory quantities on hand and, when necessary, record provisions for excess and obsolete inventory based on either our forecasted product demand and production requirements or historical trailing usage of the product. If our sales do not materialize as planned or at historical levels, we may have to increase our reserve for excess and obsolete inventory, which would reduce our earnings. If actual market conditions are more favorable than anticipated, inventory previously written down may be sold, resulting in lower costs of sales and higher income from operations than expected in that period.

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Valuation of Long-lived Assets. The purchase price we pay for acquired companies is allocated first to the identifiable assets acquired and liabilities assumed at their fair value. Any excess purchase price is then allocated to goodwill. We make various assumptions and estimates in order to assign fair value to acquired tangible and intangible assets and liabilities, including those associated with cash flow forecasts, as well as discount rates and terminal values, among others. Actual cash flows may vary from forecasts used to value the intangible assets at the time of the business combination.

Our most significant intangible assets are customer relationships, acquired technologies, trademarks and trade names. In addition to our review of the carrying values of each asset, the useful life assumptions for each asset, including the classification of certain intangible assets as "indefinite lived", are reviewed on a periodic basis to determine if changes in circumstances warrant revisions to them. All definite-lived intangible assets are amortized over the periods in which their economic benefits are expected to be realized.

Impairment analyses of goodwill and indefinite-lived intangible assets are conducted in accordance with ASC 350, "Intangibles—Goodwill and Other." We test our goodwill balances annually as of the beginning of the second quarter or more frequently if indicators are present or changes in circumstances suggest that impairment may exist. In performing the test, we utilize the two-step approach which requires a comparison of the carrying value of each of our reporting units to the fair value of these reporting units. The Company's product lines generally correspond with its reporting units which is the level at which the Company evaluates its goodwill, intangible assets and other long-lived assets for impairment. If the carrying value of a reporting unit exceeds its fair value, we calculate the implied fair value of the reporting unit's goodwill and compare it to the goodwill's carrying value. If the carrying value of goodwill exceeds its implied fair value, an impairment charge is recorded for the difference. The fair value of a reporting unit is primarily based on a discounted cash flow ("DCF") method. The DCF approach requires that we forecast future cash flows for each of the reporting units and discount the cash flow streams based on a weighted average cost of capital ("WACC") that is derived, in part, from comparable companies within similar industries. The DCF calculations also include a terminal value calculation that is based upon an expected long-term growth rate for the applicable reporting unit. The carrying values of each reporting unit include assets and liabilities which relate to the reporting unit's operations. Additionally, reporting units that benefit from corporate assets or liabilities are allocated a portion of those corporate assets and liabilities on a proportional basis.

Our indefinite-lived intangible assets represent trade names that were acquired as part of our acquisition of Excel Technologies Inc. in 2008. We assess these indefinite-lived intangible assets for impairment on an annual basis, and more frequently if impairment indicators are identified. We also periodically reassess their continuing classification as indefinite-lived intangible assets. Impairment exists if the fair value of the intangible asset is less than its carrying value. An impairment charge equal to the difference is recorded to reduce the carrying value to its fair value.

We evaluate amortizable intangible assets and other long-lived assets for impairment in accordance with ASC 360-10-35-15, "Impairment or Disposal of Long-Lived Assets", whenever changes in events or circumstances indicate carrying values may exceed their undiscounted cash flow forecasts. If undiscounted cash flow forecasts indicate the carrying value of a definite-lived intangible asset or other long-lived asset may not be recoverable, a fair value assessment is performed. For intangible assets, fair value estimates are derived from discounted cash flow forecasts. For other long-lived assets (primarily property, plant and equipment), fair value estimates are derived from the sources most appropriate for the particular asset and have historically included such approaches as: sales comparison approach and replacement cost approach. If fair value is less than carrying value, an impairment charge equal to the difference is recorded. We also review the useful life and residual value assumptions for definite-lived intangible assets and other long-lived assets on a periodic basis to determine if changes in circumstances warrant revisions to them.

Factors which may trigger an impairment of our goodwill, intangible assets and other long-lived assets include the following:

- underperformance relative to historical or projected future operating results;

- changes in our use of the acquired assets or the strategy for our overall business;
- negative industry or economic trends;
- interest rate changes;
- technological changes or developments;
- changes in competition;
- loss of key customers or personnel;
- adverse judicial or legislative outcomes or political developments;
- significant declines in our stock price for a sustained period of time; and
- the decline of our market capitalization below net book value as of the end of any reporting period.

The occurrence of any of these events or any other unforeseeable event or circumstance that materially affects future results or cash flows may cause an impairment that is material to our results of operations or financial position in the reporting period in which it occurs or is identified.

The most recent annual goodwill and indefinite-lived intangible asset impairment test was performed as of the beginning of the second quarter of 2013, noting no impairment. As of December 31, 2013 there were no indicators of impairment of our long lived assets.

We maintain a significant balance in our goodwill, intangible assets and other long-lived assets. The following table shows the December 31, 2013 breakdown of goodwill, intangibles and property, plant and equipment by reportable segment (in thousands):

	Goodwill	Intangible Assets	Property, Plant & Equipment
Laser Products	$ 30,493	$29,995	$ 10,036
Medical Technologies	31,418	32,846	3,015
Precision Motion	9,245	2,452	4,619
Corporate, shared services and unallocated	—	—	14,820
Total	$71,156	$ 65,293	$ 32,490

Pension Plans. Two of our subsidiaries, located in the U.K. and Japan, maintain defined benefit pension plans.

Our pension plan in the U.K (the “U.K. Plan”) was closed to new membership in 1997 and we stopped accruing for additional pension benefits for existing members in 2003, limiting our obligation to benefits earned through that date. Benefits under this plan were based on the employees’ years of service and compensation as of the date the plan was frozen, adjusted for inflation. At December 31, 2013, the market value of the plan assets was $1.7 million less than the projected benefit obligation.

The cost and obligations of our U.K. Plan are calculated using many assumptions to estimate the benefits, the amount of which cannot be completely determined until the benefit payments cease. Major assumptions used in the accounting for this pension plan include the discount rate, rate of inflation, and expected return on plan assets. Assumptions are determined each year based on data and appropriate market indicators in consultation with a third-party actuary. Should any of these assumptions change, they would have an effect on net periodic pension cost and the unfunded benefit obligation at year end. A 50 basis point change in the discount rate as of December 31, 2013 would change the pension obligation by $3.3 million.

Our Japanese pension plan is a tax qualified plan that covers substantially all Japanese employees. Benefits are based on years of service and the employee’s compensation at retirement. We fund the plan periodically to meet requirements for current benefit payments as well as a portion of future benefits as permitted by local regulations. Since this is an active plan, a significant portion of the pension benefit obligation is determined based on the rate of future compensation increases. We purchase annuities under group insurance contracts. At December 31, 2013, the market value of the plan assets was $0.8 million less than the projected benefit obligation. Changes in assumptions are not material to the plan.

Restructuring Charges. In accounting for our restructuring activities, we follow the provisions of ASC 420, "Exit or Disposal Cost Obligations". In accounting for these obligations, we make assumptions related to the amounts of employee severance and benefits related costs, the time period over which facilities will remain vacant, sublease terms, sublease rates, and discount rates. Additionally, we make assumptions on the estimated remaining useful lives of assets being restructured and the residual value of the assets. Estimates and assumptions are based on the best information available at the time the obligation has arisen. These estimates are reviewed and revised as facts and circumstances dictate. Changes in these estimates could have a material effect on the amount previously expensed against our earnings and currently accrued on our consolidated balance sheet.

Accounting for Income Taxes. As part of the process of preparing our consolidated financial statements, we are required to calculate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are reported on our consolidated balance sheet.

Judgment is required in determining our worldwide income tax provision. In the ordinary course of a global business, there are many transactions and calculations where the ultimate outcome is uncertain. Although we believe our estimates are reasonable, no assurance can be given that the final outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. Such differences could have a material impact on our income tax provision and net income in the period in which such determination is made.

We record a valuation allowance on our deferred tax assets when it is more likely than not that they will not be realized. We have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. In the event we determine that we are able to realize our deferred tax assets in the future in excess of their net recorded amount, an adjustment to the valuation allowance for the deferred tax assets would increase our net income in the period such determination is made. Likewise, should we determine that we will not be able to realize all or part of our net deferred tax assets in the future, an adjustment to the valuation allowance for the deferred tax assets will reduce our net income in the period such determination is made.

In conjunction with our ongoing review of our actual results and anticipated future earnings, we continuously reassess the possibility of releasing the valuation allowance currently in place on our deferred tax assets. We adjusted a portion of our Canadian loss carryforward and the related valuation allowance of $4.8 million and released $0.3 million valuation allowance on certain U.S. state tax credits during the year ended December 31, 2013. The partial release of our valuation allowance was determined in accordance with the provisions of ASC 740, "Income Taxes," which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. Such assessment is required on a jurisdiction by jurisdiction basis. Based on historical operating income and continuing projected income, future reversals of temporary differences and tax planning strategies, we have concluded that sufficient positive evidence indicates that it is more likely than not that deferred tax assets will be realized. Accordingly, the partial release of our valuation allowance was recorded in the fourth quarter of 2013 with no impact on cash flows in the quarter in which it was released.

The amount of income taxes we pay is subject to audits by federal, state and foreign tax authorities, which may result in proposed assessments. We believe that we have adequately provided for any reasonably foreseeable outcome related to these matters. However, our future results may include favorable or unfavorable adjustments to our tax liabilities in the period that the assessments are made or resolved, or when the statute of limitations for certain periods expires. As of December 31, 2013, the total amount of gross unrecognized tax benefits was $7.1 million, of which $4.9 million would favorably affect our effective tax rate, if recognized. As of December 31, 2012, the amount of gross unrecognized tax benefits totaled approximately $7.6, of which $4.3 million would favorably affect our effective tax rate, if recognized. Over the next twelve months, the Company may need to record up to $2.1 million of previously unrecognized tax benefits in the event of statute of limitations closures. We believe that there are no other jurisdictions in which the outcome of unresolved issues or claims is likely to be material to our results of operations, financial position or cash flows. Furthermore, we believe that we have adequately provided for all income tax uncertainties.

Income and foreign withholding taxes have not been recognized on the excess of the amount for financial reporting purposes over the tax basis of investments in foreign subsidiaries that are essentially permanent in nature. This amount becomes taxable upon a repatriation of assets from a subsidiary or a sale or liquidation of a subsidiary. The amount of undistributed earnings of foreign subsidiaries totaled $13.9 million as of December 31, 2013. Determination of the amount of any unrecognized deferred income tax liabilities on this temporary difference is not practicable because of the complexities of the hypothetical calculation.

Loss Contingencies. We are subject to legal proceedings, lawsuits and other claims relating to labor, service and other matters arising in the ordinary course of business. Quarterly, we review the status of each significant matter and assess our potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of uncertainties related to these matters, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and may revise our estimates. Such revisions in the estimates of the potential liabilities could have a material impact on our results of operations and financial position. We expense legal fees as incurred.

Recent Accounting Pronouncements

See Note 3 to Consolidated Financial Statements for recent accounting pronouncements that could have an effect on us.

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

We are exposed to market risk from changes in foreign currency exchange rates and interest rates, which could affect our operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities. We generally do not enter into derivative financial instruments to manage foreign currency exposure.

Foreign Currency Exchange Rate Risk and Sensitivity

We are exposed to changes in foreign currency exchange rates which could affect operating results as well as our financial position and cash flows. The primary foreign currency denominated transactions include revenue and expenses and the resulting accounts receivable and accounts payable balances reflected on our balance sheet. Therefore, the change in the value of the U.S. dollar compared to foreign currencies will have either a positive or negative effect on our financial position and results of operations. Historically, our primary exposure has related to transactions denominated in the Japanese Yen, Euro and British Pound.

A hypothetical depreciation of 10% in foreign currency exchange rate, primarily cumulative translation adjustments from the quoted foreign currency exchange rates as of December 31, 2013 would impact shareholder equity by $ 8.0 million or 3%. We did not hold foreign currency rate derivative contracts as of December 31, 2013.

Interest Rates

Our exposure to market risk associated with changes in interest rates relates primarily to our cash and cash equivalents and debt obligations. At December 31, 2013, we had $61.0 million in cash and cash equivalents, as compared to $65.8 million at December 31, 2012. Due to the average maturities and the nature of the cash portfolio at December 31, 2013, a 100 basis point increase in interest rates could have a $0.6 million impact on interest income on an annual basis. In addition, we have $71.5 million of outstanding variable rate debt as of December 31, 2013. A 100 basis point increase in interest rates at December 31, 2013 would increase our annual pre-tax interest expense by approximately $0.7 million. We do not actively trade derivative financial instruments, but may use them in the future to manage interest rate positions associated with our debt instruments. We did not hold interest rate derivative contracts as of December 31, 2013.

Item 8. ***Financial Statements and Supplementary Data***

GSI GROUP INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of GSI Group Inc.

In our opinion, the accompanying consolidated balance sheet as of December 31, 2013 and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for the year then ended present fairly, in all material respects, the financial position of GSI Group Inc. and its subsidiaries at December 31, 2013 and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control—Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 13, 2014

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of GSI Group Inc.

We have audited the accompanying consolidated balance sheet of GSI Group Inc. as of December 31, 2012, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of GSI Group Inc. at December 31, 2012, and the consolidated results of its operations and its cash flows for each of the two years in the period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 3 to the consolidated financial statements, the Company adopted the guidance of Accounting Standards Update (ASU) No. 2009-13, Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements effective January 1, 2011.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 18, 2013, except for Notes 7, 15 and 17, as to which the date is
March 13, 2014

GSI GROUP INC.

CONSOLIDATED BALANCE SHEETS
(In thousands of U.S. dollars or shares)

	December 31, 2013	December 31, 2012
ASSETS		
Current Assets		
Cash and cash equivalents	$ 60,980	$ 65,788
Accounts receivable, net of allowance of $651 and $374, respectively	53,913	42,652
Inventories	66,744	52,801
Deferred tax assets	7,016	7,583
Income taxes receivable	5,769	16,540
Prepaid expenses and other current assets	5,380	5,486
Assets of discontinued operations	—	17,618
Total current assets	199,802	208,468
Property, plant and equipment, net	32,490	32,338
Deferred tax assets	564	3,884
Other assets	9,502	8,172
Intangible assets, net	65,293	40,020
Goodwill	71,156	44,578
Total assets	$ 378,807	$ 337,460
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Current portion of long-term debt	$ 7,500	$ 7,500
Accounts payable	26,745	18,824
Income taxes payable	1,018	3,317
Deferred tax liabilities	177	402
Accrued expenses and other current liabilities	24,576	19,278
Liabilities of discontinued operations	54	5,605
Total current liabilities	60,070	54,926
Long-term debt	64,000	42,500
Deferred tax liabilities	1,474	255
Income taxes payable	5,596	1,764
Other liabilities	5,264	9,809
Total liabilities	136,404	109,254
Commitments and Contingencies (Note 16)		
Stockholders' Equity:		
Common shares, no par value; Authorized shares: unlimited; Issued and outstanding: 33,991 and 33,796, respectively	423,856	423,856
Additional paid-in capital	25,383	21,924
Accumulated deficit	(200,913)	(208,222)
Accumulated other comprehensive loss	(6,342)	(9,749)
Total GSI Group Inc. stockholders' equity	241,984	227,809
Noncontrolling interest	419	397
Total stockholders' equity	242,403	228,206
Total liabilities and stockholders' equity	$ 378,807	$ 337,460

The accompanying notes are an integral part of these consolidated financial statements.

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GSI GROUP INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands of U.S. dollars or shares, except per share amounts)

	Year Ended December 31,		
	2013	2012	2011
Sales	$ 341,612	$271,498	$ 304,296
Cost of goods sold	202,163	157,022	171,196
Gross profit	139,449	114,476	133,100
Operating expenses:			
Research and development and engineering	26,352	22,393	23,454
Selling, general and administrative	81,449	65,584	67,877
Amortization of purchased intangible assets	7,270	2,650	3,515
Restructuring, restatement related costs, post-emergence fees and other	6,687	8,842	2,406
Total operating expenses	121,758	99,469	97,252
Income from operations	17,691	15,007	35,848
Interest expense, net	(3,455)	(2,788)	(12,977)
Foreign exchange transaction gains (losses), net	(1,208)	(1,267)	172
Other income (expense), net	1,502	582	1,177
Income from continuing operations before income taxes	14,530	11,534	24,220
Income tax provision (benefit)	5,680	(10,940)	2,544
Income from continuing operations	8,850	22,474	21,676
Income (loss) from discontinued operations, net of tax	(927)	(5,151)	7,325
Gain (loss) on disposal of discontinued operations, net of tax	(592)	2,255	—
Consolidated net income	7,331	19,578	29,001
Less: Net income attributable to noncontrolling interest	(22)	(40)	(28)
Net income attributable to GSI Group Inc.	$ 7,309	$ 19,538	$ 28,973
Earnings per common share from continuing operations:			
Basic	$ 0.26	$ 0.66	$ 0.65
Diluted	$ 0.26	$ 0.66	$ 0.64
Earnings (Loss) per common share from discontinued operations:			
Basic	$ (0.05)	$ (0.08)	$ 0.22
Diluted	$ (0.05)	$ (0.08)	$ 0.22
Earnings per common share attributable to GSI Group Inc.:			
Basic	$ 0.21	$ 0.58	$ 0.87
Diluted	$ 0.21	$ 0.58	$ 0.86
Weighted average common shares outstanding—basic	34,073	33,775	33,481
Weighted average common shares outstanding—diluted	34,396	33,936	33,589
Amounts attributable to GSI Group Inc.:			
Income from continuing operations	$ 8,828	$ 22,434	$ 21,648
Income (loss) from discontinued operations	(1,519)	(2,896)	7,325
Net income	$ 7,309	$ 19,538	$ 28,973

The accompanying notes are an integral part of these consolidated financial statements.

GSI GROUP INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In thousands of U.S. dollars)

	Year Ended December 31,		
	2013	2012	2011
Consolidated net income	$ 7,331	$19,578	$ 29,001
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of tax (1)	54	(1,510)	241
Pension liability adjustments, net of tax (2)	3,353	(3,215)	(1,836)
Total other comprehensive income (loss)	3,407	(4,725)	(1,595)
Total consolidated comprehensive income	10,738	14,853	27,406
Less: Comprehensive income attributable to noncontrolling interest	(22)	(40)	(28)
Comprehensive income attributable to GSI Group Inc.	$10,716	$ 14,813	$ 27,378

(1) The tax effect on the component of comprehensive income was $477 and $1,942 in 2013 and 2012, respectively, and was nominal for the year ended 2011.
(2) The tax effect on the component of comprehensive income was $900 and $829 in 2013 and 2012, respectively, and was nominal for the year ended 2011.

The accompanying notes are an integral part of these consolidated financial statements.

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GSI GROUP INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands of U.S. dollars or shares)

	GSI Group Inc. Stockholders						
	Capital Stock						
	# of Shares	Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Noncontrolling Interest	Total
Balance at December 31, 2010	33,342	$423,856	$14,655	$ (3,429)	$(256,733)	$ 329	$178,678
Net income	—	—	—	—	28,973	28	29,001
Issuance of common stock upon vesting of non-vested stock awards	136	—	—	—	—	—	—
Share-based compensation	—	—	3,276	—	—	—	3,276
Other comprehensive loss, net of tax	—	—	—	(1,595)	—	—	(1,595)
Balance at December 31, 2011	33,478	423,856	17,931	(5,024)	(227,760)	357	209,360
Net income	—	—	—	—	19,538	40	19,578
Issuance of common stock upon vesting of non-vested stock awards	383	—	—	—	—	—	—
Share-based compensation	—	—	4,631	—	—	—	4,631
Net settlement of vested stock awards	(65)	—	(543)	—	—	—	(543)
Tax benefit (shortfalls) of vested stock awards	—	—	(95)	—	—	—	(95)
Other comprehensive loss, net of tax	—	—	—	(4,725)	—	—	(4,725)
Balance at December 31, 2012	33,796	423,856	21,924	(9,749)	(208,222)	397	228,206
Net income	—	—	—	—	7,309	22	7,331
Issuance of common stock upon vesting of non-vested stock awards	395	—	—	—	—	—	—
Repurchase of common stock	(50)	—	(526)	—	—	—	(526)
Share-based compensation	—	—	5,624	—	—	—	5,624
Net settlement of vested stock awards	(150)	—	(1,495)	—	—	—	(1,495)
Tax benefit (shortfalls) of vested stock awards	—	—	(144)	—	—	—	(144)
Other comprehensive income, net of tax	—	—	—	3,407	—	—	3,407
Balance at December 31, 2013	33,991	$423,856	$ 25,383	$ (6,342)	$ (200,913)	$ 419	$ 242,403

The accompanying notes are an integral part of these consolidated financial statements.

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GSI GROUP INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands of U.S. dollars)

	Year Ended December 31,		
	2013	2012	2011
Cash flows from operating activities:			
Consolidated net income	$ 7,331	$ 19,578	$ 29,001
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	20,207	13,676	15,267
Provision for inventory	2,153	4,472	6,646
Share-based compensation	5,499	4,580	3,276
Deferred income taxes	3,045	(14,979)	78
Earnings from equity investment	(1,469)	(556)	(1,171)
Loss (gain) on disposal of business	592	(2,255)	—
Business acquisition inventory fair value adjustment	690	—	—
Non-cash interest expense	965	1,049	1,881
Non-cash restructuring charges	432	3,825	1,163
Other	453	(50)	199
Changes in operating assets and liabilities:			
Accounts receivable	(1,886)	2,261	4,822
Inventories	(3,220)	(4,361)	(6,062)
Deferred cost of goods sold	105	1,522	5,791
Income taxes receivable, prepaid expenses, and other current assets	12,031	6,545	(837)
Deferred revenue	(1,004)	(4,133)	(9,343)
Long-term income taxes payable	532	(6,293)	1,413
Accounts payable, short-term income taxes payable, accrued expenses, and other current liabilities	2,874	3,783	(5,898)
Other non-current assets and liabilities	(130)	(234)	(1,053)
Cash provided by operating activities	49,200	28,430	45,173
Cash flows from investing activities:			
Purchases of property, plant and equipment	(4,988)	(4,308)	(4,217)
Acquisition of business	(80,773)	—	—
Proceeds from sale of business, net of transaction costs	8,190	7,000	—
Proceeds from the sale of property, plant and equipment	4,615	283	—
Cash provided by (used in) investing activities	(72,956)	2,975	(4,217)
Cash flows from financing activities:			
Repayments of long-term debt and revolving credit facility	(38,500)	(23,000)	(113,214)
Proceeds from term loan and revolving credit facility	60,000	5,000	73,107
Payments for debt issuance costs	(145)	(1,826)	(2,988)
Payments of withholding taxes from stock-based awards	(1,495)	(543)	—
Repurchase of common stock	(526)	—	—
Excess tax benefits from stock-based awards	35	36	—
Capital lease payments	(795)	(779)	—
Cash provided by (used in) financing activities	18,574	(21,112)	(43,095)
Effect of exchange rates on cash and cash equivalents	374	660	193
Increase (decrease) in cash and cash equivalents	(4,808)	10,953	(1,946)
Cash and cash equivalents, beginning of year	65,788	54,835	56,781
Cash and cash equivalents, end of year	$ 60,980	$ 65,788	$ 54,835
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 2,291	$ 2,067	$ 12,464
Cash paid for income taxes	2,197	3,440	1,912
Income tax refunds received	12,607	222	25
Supplemental disclosure of non-cash investing activity:			
Accrual for capital expenditures	184	925	362
Supplemental disclosure of non-cash financing activity:			
Issuance of PIK notes	—	—	532
Assets acquired under capital lease obligation	—	—	2,214

The accompanying notes are an integral part of these consolidated financial statements.

GSI GROUP INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2013

1. Organization and Presentation

GSI Group Inc. and its subsidiaries (collectively referred to as the "Company", "we", "us", "ours") design, develop, manufacture and sell precision photonic and motion control components and subsystems primarily to original equipment manufacturers ("OEM's") in the medical, industrial, electronics and scientific markets. Our highly engineered enabling technologies include laser sources, scanning and beam delivery products, medical visualization and informatics solutions, and precision motion control products. We specialize in collaborating with OEM customers to adapt our component and subsystem technologies to deliver highly differentiated performance in their applications.

Basis of Presentation

These consolidated financial statements have been prepared by the Company in U.S. dollars and in accordance with U.S. generally accepted accounting principles, applied on a consistent basis.

Basis of Consolidation

The consolidated financial statements include the accounts of GSI Group Inc. and its wholly owned subsidiaries. Intercompany accounts and transactions have been eliminated. The accounts include a 50% owned joint venture, Excel Laser Technology Private Limited ("Excel SouthAsia JV"), since it is a variable interest entity and the Company is the primary beneficiary of the joint venture. The accompanying consolidated financial statements of the Company include the assets, liabilities, revenue, and expenses of Excel SouthAsia JV over which the Company exercises control. The Company records noncontrolling interest in its consolidated statements of operations for the ownership interest of the minority owners of Excel SouthAsia JV. Financial information related to the joint venture is not considered material to the consolidated financial statements. The Company accounts for investments in businesses in which it owns between 20% and 50% using the equity method.

Reclassifications

As discussed in Note 17, the Company realigned its segment presentation during the fourth quarter of 2013 into the following three reportable segments: Laser Products, Medical Technologies, and Precision Motion. The Company's reportable segment financial information has been reclassified in Note 7, 15 and 17 to conform to the updated reportable segment structure for all periods presented.

Listing of Common Shares

On February 9, 2011, the Company's common shares were approved for listing on The NASDAQ Global Select Market and began trading on February 14, 2011 under the symbol "GSIG". Following the Company's emergence from bankruptcy on July 23, 2010, its common shares were quoted on the OTC Markets Group, Inc. under the trading symbol "LASR.PK".

2. Bankruptcy Disclosures

In 2008, the Company did not file its quarterly report on Form 10-Q for the quarter ended September 26, 2008 within the time period required by the rules and regulations of the Securities and Exchange Commission ("SEC") as a result of errors discovered by the Company in its application of revenue recognition standards concerning multiple-element revenue arrangements. The delay in the quarterly report on Form 10-Q caused a noncompliance with the covenant in the indenture governing the $210.0 million of 11% unsecured senior notes due 2013 (the "2008 Senior Notes"). On June 30, 2009, the Company reached an agreement with certain beneficial owners holding greater than 75% of the outstanding aggregate principal amount of the 2008 Senior Notes on a non-binding term sheet to consensually restructure the outstanding obligations under the 2008 Senior Notes. Between December 2008 and March 2009, the Company announced that it had discovered material errors related to its revenue recognition affecting 2004 through 2008 and that the annual reports for 2006, 2007 and 2008 and quarterly reports through the second quarter of 2008 should not be relied upon. In November 2009, the NASDAQ announced that the Company's common stock was delisted and ceased trading on the NASDAQ Global Select Market as a result of the continued delays in Company's periodic filings with the SEC.

On November 20, 2009 (the "Petition Date"), GSI Group Inc. and two of its United States subsidiaries filed voluntary petitions for relief under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Court") (the "Chapter 11 Cases"). Following the Petition Date, the Company continued to operate its business as "debtors-in-possession" in accordance with the applicable provisions of the Bankruptcy Code and orders of the Bankruptcy Court. In late December 2009, the United States trustee overseeing the Chapter 11 Cases appointed an Official Committee of Equity Security Holders (the "Equity Committee") to represent the interests of the Company's equity holders. In May 2010, the Company filed the final Chapter 11 reorganization plan with the Bankruptcy Court, which was supported by eight of ten beneficial holders of the 2008 Senior Notes (the "Consenting Noteholders"), the Equity Committee, and the individual members of the Equity Committee. On May 27, 2010, the Bankruptcy Court entered an order confirming and approving the plan of reorganization (the "Final Chapter 11 Plan").

On July 23, 2010 (the "Effective Date"), the Company successfully emerged from bankruptcy as a reorganized company pursuant to the Final Chapter 11 Plan. The Final Chapter 11 Plan deleveraged the Company's balance sheet by reducing debt and increasing stockholders' equity. The financial restructuring was accomplished through a debt-for-equity exchange and by using the proceeds from a shareholder rights offering and cash on hand to reduce outstanding indebtedness.

Upon the Company's emergence from Chapter 11 bankruptcy proceedings on July 23, 2010, the Company was not required to apply fresh-start accounting based on the provisions of Accounting Standards Codification ("ASC") 852, "Reorganizations," due to the fact that the pre-petition holders of the Company's outstanding common shares immediately before confirmation of the Final Chapter 11 Plan received more than 50% of the Company's outstanding common shares upon emergence. Accordingly, a new reporting entity was not created for accounting purposes. From the Company's bankruptcy filing through the date of emergence, the Company prepared the consolidated financial statements in accordance with ASC 852 and on a going-concern basis, which assumed continuity of operations, realization of assets and satisfaction of liabilities in the ordinary course of business.

The Chapter 11 Cases were closed on September 2, 2011, and the Company no longer has any legal or material financial constraint relating to those cases.

3. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities,

GSI GROUP INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
AS OF DECEMBER 31, 2013

disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of sales and expenses during the reporting periods. The Company evaluates its estimates based on historical experience, current conditions and various other assumptions that it believes are reasonable under the circumstances. Estimates and assumptions are reviewed on an on-going basis and the effects of revisions are reflected in the period in which they are deemed to be necessary. Actual results could differ significantly from those estimates.

Foreign Currency Translation

The financial statements of the Company and its subsidiaries outside the United States have been translated into United States dollars. Assets and liabilities of foreign operations are translated from foreign currencies into United States dollars at the exchange rates in effect on the balance sheet date. Sales and expenses are translated at the average exchange rate in effect for the period. Accordingly, gains and losses resulting from translating foreign currency financial statements are reported as a separate component of other comprehensive loss in stockholders' equity. Foreign currency transaction gains and losses, primarily from transactions denominated in currencies other than the functional currency, are included in the accompanying consolidated statements of operations.

Cash and Cash Equivalents

Cash equivalents, primarily money market accounts, are highly liquid investments with original maturities of three months or less. These investments are carried at cost, which approximates fair value.

Long-Term Investments

At December 31, 2012, the Company had a 25.1% equity investment in a privately held company located in the United Kingdom, Laser Quantum ("Laser Quantum"). During the second quarter of 2013, the Company's ownership percentage increased from 25.1% to 41.2% as a result of a share buy-back program by Laser Quantum. The Company continues to use the equity method to record the results of this entity as it does not have a controlling interest in the entity. The Company recognized investment income of $1.5 million, $0.6 million and $1.2 million during 2013, 2012 and 2011, respectively, which is included in other income (expense) in the accompanying consolidated statements of operations. The Company's net investment balance was $5.7 million and $4.1 million at December 31, 2013 and 2012, respectively, and is included in other long-term assets in the accompanying consolidated balance sheets.

The summarized financial information for Laser Quantum is as follows (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Sales	$16,269	$13,039	$18,384
Income from operations	$ 4,720	$ 3,592	$ 3,994
Net income	$ 3,745	$ 2,215	$ 4,684

	2013	2012
Total assets	$20,990	$21,596
Total liabilities	$ 4,240	$ 5,330

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount. The Company maintains an allowance for doubtful accounts. The allowance for doubtful accounts is based on the Company's best estimate of the amount of probable credit losses resulting from the inability of the Company's customers to make required payments. The Company determines the allowance based on a variety of factors including the age of amounts outstanding relative to their contractual due date, specific customer factors, and other known risks and economic trends. Charges recorded to the allowance for doubtful accounts are reflected as selling, general and administrative expenses and are recorded in the period that the outstanding receivables are determined to be uncollectible. Account balances are charged off against the allowance when the Company believes it is probable the receivable will not be recovered.

For the years ended December 31, 2013, 2012 and 2011, the allowance for doubtful accounts was as follows (in thousands):

	2013	2012	2011
Balance at beginning of year	$ 374	$ 337	$ 499
Provision (benefit) charged to selling, general and administrative expense	325	185	(61)
Allowance resulting from acquisition	117	—	—
Write-offs, net of recoveries of amounts previously reserved	(187)	(162)	(102)
Exchange rate changes	22	14	1
Balance at end of year	$ 651	$ 374	$ 337

Inventories

Inventories, which include materials and conversion costs, are stated at the lower of cost or market, using the first-in, first-out method. Market is defined as replacement cost for raw materials and net realizable value for other inventories. Demo inventory is recorded at the lower of cost or its net realizable value. The Company periodically reviews quantities of inventories on hand and compares these amounts to the expected use of each product. The Company records a charge to cost of goods sold for the amount required to reduce the carrying value of inventory to net realizable value. Costs associated with the procurement of inventories such as inbound freight charges, purchasing and receiving costs are capitalized in inventory on the consolidated balance sheets.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost, adjusted for any impairment, less accumulated depreciation. The Company uses the straight-line method to calculate the depreciation of its fixed assets over their estimated useful lives. Estimated useful lives for buildings and improvements range from 3 to 30 years and 1 to 13 years for machinery and equipment. Leasehold improvements are amortized over the lesser of their useful lives or lease terms, including any renewal period options that are reasonably assured of being exercised. Repairs and maintenance costs are expensed as incurred. Certain costs to develop software for internal use are capitalized when the criteria under ASC 350-40, "Internal-Use Software," are met. Lease arrangements meeting the criteria of ASC 840-30, "Leases – Capital Leases," are capitalized based on the present value of future lease payments and depreciated over the term of the lease.

GSI GROUP INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
AS OF DECEMBER 31, 2013

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price in a business combination over the fair value of the acquired net tangible and intangible assets. In connection with its acquisition of Excel Technologies, Inc. ("Excel") in 2008, the Company acquired certain trade names that are classified as intangible assets with indefinite lives. Goodwill and indefinite-lived intangibles are not amortized but are assessed for impairment at least annually to ensure their current fair values exceed their carrying values.

Other identifiable intangible assets are amortized over their estimated useful lives. The Company's most significant intangible assets are patents and customer relationships, acquired technologies, trademarks and trade names. All definite-lived intangible assets are amortized over the periods in which their economic benefits are expected to be realized. The Company reviews the useful life assumptions, including the classification of certain intangible assets as "indefinite-lived", on a periodic basis to determine if changes in circumstances warrant revisions to them.

The Company's product lines generally correspond with its reporting units which is the level at which the Company evaluates its goodwill, intangible assets and other long-lived assets for impairment.

Impairment Charges

Impairment analyses of goodwill and indefinite-lived intangible assets are conducted in accordance with Accounting Standards Codification ("ASC") 350, "Intangibles—Goodwill and Other". This guidance specifies that goodwill and other intangible assets must be periodically tested for impairment. The Company tests its goodwill balances annually as of the beginning of the second quarter or more frequently if indicators are present or changes in circumstances suggest that an impairment may exist. In the second quarter of 2012, the Company adopted Accounting Standards Update ("ASU") 2011-08, "Intangibles – Goodwill and Other (Topic 350) – Testing Goodwill for Impairment" (ASU 2011-08). This guidance allows the Company to use a qualitative approach to test goodwill for impairment. In performing the impairment test, the Company continues to utilize a quantitative analysis to test goodwill for impairment. This two-step approach requires a comparison of the carrying value of each of the Company's reporting units to the fair value of these reporting units. If the carrying value of a reporting unit exceeds its fair value, the Company calculates the implied fair value of the reporting unit's goodwill and compares it to the goodwill's carrying value. If the carrying value of the goodwill exceeds its implied fair value, an impairment charge is recorded for the difference.

During the second quarter of 2013, the Company adopted ASU 2012-02, "Testing Indefinite-Lived Intangible Assets for Impairment". Similar to goodwill impairment testing guidance under ASU 2011-08, the revised standard allows entities to use a qualitative approach to test indefinite-lived intangible assets for impairment. ASU 2012-02 permits entities to perform a qualitative assessment by considering events and circumstances which would impact the fair value of the entity's indefinite-lived intangible assets to determine whether it is more likely than not that the fair value of the entity's indefinite-lived intangible assets are impaired. An entity would continue to calculate the fair value of an indefinite-lived intangible asset if the asset fails the qualitative assessment, while no further analysis would be required if it passes. The provisions of the new guidance were adopted and had no impact on our 2013 annual indefinite-lived intangible asset impairment test results as the Company continues to use a quantitative analysis.

The Company assesses indefinite-lived intangible assets for impairment on an annual basis as of the beginning of the second quarter, and more frequently if indicators are present or changes in circumstances suggest that an impairment may exist. The Company will also reassess the continuing classification of these indefinite-lived intangible assets as indefinite-lived when circumstances change such that the useful life may no longer be indefinite. The fair values of the Company's indefinite-lived intangible assets are determined using the relief from royalty method, based on forecasted revenues. If the fair value of an indefinite-lived intangible asset is less than its carrying value, an impairment charge is recorded for the difference between the carrying value and the fair value of the impaired asset.

The carrying amounts of definite-lived long-lived assets are reviewed for impairment whenever changes in events or circumstances indicate that their carrying values may not be recoverable. The recoverability of carrying value is generally determined by comparison of the reporting unit's carrying value to its future undiscounted cash flows. When this test indicates the potential for impairment, a fair value assessment is performed. Once an impairment is determined and measured, an impairment charge is recorded for the difference between the carrying value and the fair value of the impaired asset.

Accumulated Other Comprehensive Income (Loss)

In 2013, the Company adopted ASU 2013-02, "Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Comprehensive Income". Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of accumulated other comprehensive income (loss) by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of accumulated other comprehensive income (loss) by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income (loss) in the financial statements. The adoption of this amendment did not have any material impact on the Company's consolidated financial statements.

Revenue Recognition

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, price is fixed or determinable, and collection of the resulting receivable is reasonably assured. Revenue recognition requires judgment and estimates, which may affect the amount and timing of revenue recognized in any given period.

On January 1, 2011, the Company adopted the provisions of ASU 2009-13, "Revenue Recognition (Topic 605) – Multiple-Deliverable Revenue Arrangements," using the modified prospective approach. All multiple-element revenue arrangements entered into after January 1, 2011 have been accounted for under the ASU 2009-13 guidance. ASU 2009-13 addresses the accounting for multiple-element arrangements by providing two significant changes. First, this guidance removes the requirement to have objective and reliable evidence of fair value for undelivered elements in an arrangement, which generally results in more elements being treated as separate units of accounting. Specifically, this guidance amends the criteria in Subtopic 605-25, "Revenue Recognition-Multiple-Element Arrangements" ("ASC 605-25"), for separating consideration in multiple-element arrangements. This guidance establishes a selling price hierarchy for determining the "selling price" of an element, which is based on: (a) vendor-specific objective evidence; (b) third-party evidence; or (c) management's best estimate. Management's best estimate for the Company is based on factors such as gross margin, volume discounts, new strategic customers, geography, customer class and competitive pressures. The second change modifies the manner in which the transaction consideration is allocated across the separately identified elements. Entities are no longer able to apply the residual method of allocation. Instead, the arrangement consideration is required to be allocated at the inception of the arrangement to all elements using the relative selling price method. The relative selling price method uses the weighted average of the "selling price" and applies that to the contract value to establish the consideration for each element.

For transactions entered into prior to the adoption of ASU 2009-13, the Company followed the provisions of ASC 605-25 for all multiple-element arrangements. Under the guidance prior to ASU 2009-13, the Company assessed whether the elements specified in a multiple-element arrangement should be treated as separate units of accounting for revenue recognition purposes and whether objective and reliable evidence of fair value existed for these separate units of accounting. The Company applied the residual method when objective and reliable evidence of fair value existed for all of the undelivered elements in a multiple-element arrangement. When objective and reliable evidence of fair value did not exist for all of the undelivered elements, the Company recognized revenue under the multiple units shipped methodology, whereby revenue was recognized in each period based upon the lowest common percentage of the products shipped in the period. This approximated a proportional performance model (the "Proportional Performance Model") of revenue recognition. This generally resulted in a partial deferral of revenue to a later reporting period. No revenue was recognized unless one or more units of each product had been delivered.

The Company's revenue transactions are comprised of both single-element and multiple-element transactions. Multiple-element transactions may include two or more products and occasionally also contain installation, training, non-standard/extended warranties, or preventative maintenance plans. For multiple-element transactions entered into or materially modified after January 1, 2011, revenue is recognized under ASU 2009-13, generally upon shipment using the relative selling price method. For multiple-element transactions entered prior to January 1, 2011, revenue was generally recognized under the Proportional Performance Model described previously. Single-element transactions were generally recognized upon shipment.

Installation is generally a routine process that occurs within a short period of time following delivery and the Company has concluded that this obligation is inconsequential and perfunctory.

The Company generally provides warranties for its products. The standard warranty period is typically 12 to 24 months for the Laser Products and Precision Motion segments. The Medical Technologies segment contains standard warranties that range from 12 months to 60 months. The initial standard warranty for product sales is accounted for under the provisions of ASC 450, "Contingencies," as the Company has the ability to ascertain the likelihood of the liability, and can estimate the amount of the liability. A provision for the estimated cost related to warranty is recorded to cost of goods sold at the time revenue is recognized. The Company's estimate of costs to service the warranty obligations are based on historical experience and expectations of future conditions. To the extent the Company experiences warranty claims or costs associated with servicing those claims that differ from the original estimates, revisions to the estimated warranty liability are recorded at that time.

The Company also sells optional extended/non-standard warranty services and preventative maintenance contracts to customers. The Company accounts for these agreements in accordance with provisions of ASC 605-20-25-3, "Separately Priced Extended Warranty and Product Maintenance Contracts," under which it recognizes the separately priced extended warranty and preventative maintenance fees ratably over the associated period.

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The Company, at the request of its customers, may at times perform professional services for its customers, generally for the maintenance and repairs of products previously sold to those customers. These services are usually in the form of time and materials based contracts which are short in duration. Revenue for time and material services is recorded at the completion of services requested under a customer's purchase order. At times, customers may purchase a service contract subsequent to the initial product sale whereby services, including preventative maintenance plans, are provided over a defined period, generally one year. Revenue for such service contracts are recorded ratably over the period of the contract.

The Company typically negotiates trade discounts and agreed terms in advance of order acceptance and records any such items as a reduction of revenue. The Company's revenue recognition policy allows for revenue to be recognized under arrangements where the payment terms are 180 days or less, presuming all other revenue recognition criteria have been met. From time to time, based on the Company's review of customer creditworthiness and other factors, the Company may provide its customers with payment terms that exceed 180 days. To the extent all other revenue recognition criteria have been met, the Company recognizes revenue for these extended payment arrangements when payment is due. The Company currently does not have payment terms with customers that exceed 180 days.

The Company had certain pre ASU 2009-13 multiple-element arrangements, delivered over multiple periods, from which the Company recognized $31.5 million in revenue for the year ended December 31, 2011 and $0.3 million for the year ended December 31, 2012. There was no related revenue recognized during the year ended December 31, 2013. Such arrangements continued to be accounted for under the prior accounting standards until they were completed.

Research and Development and Engineering Costs

Research and development and engineering ("R&D") expenses are primarily comprised of employee related expenses and cost of materials for R&D projects. These costs are expensed as incurred.

Share-Based Compensation

The Company records the expense associated with share-based compensation awards to employees and directors based on the fair value of awards as of the grant date. Such expenses are recognized in the consolidated statements of operations ratably over the vesting period of the award, net of estimated forfeitures.

Shipping & Handling Costs

Shipping and handling costs are recorded in cost of goods sold.

Advertising Costs

Advertising costs are expensed to selling, general and administrative expense as incurred and were not material for 2013, 2012 and 2011.

Restructuring, Restatement Related Costs, Post-Emergence Fees and Other Charges

In accounting for its restructuring activities, the Company follows the provisions of ASC 420, "Exit or Disposal Cost Obligations". The Company makes assumptions related to the amounts of employee severance benefits and related costs, the time period over which facilities will remain vacant, useful lives and residual value of long-lived assets, sublease terms, sublease rates and discount rates. Estimates and assumptions are based on the best information available at the time the obligation is recognized. These estimates are reviewed and revised as facts and circumstances dictate.

The costs incurred related to third parties, including auditors, attorneys, forensic accountants and other advisors, for services performed in connection with the restatement of the Company's previously issued financial statements as reported in its Annual Report on Form 10-K for the year ended December 31, 2008 and its Quarterly Report on Form 10-Q for the quarter ended September 26, 2008, including the SEC investigation and certain shareholder actions, have been included within the Company's restructuring, restatement related costs, post-emergence fees and other charges line in the accompanying consolidated statements of operations.

Post-emergence professional fees represent costs incurred subsequent to bankruptcy emergence for financial and legal advisors to assist with matters in finalizing the bankruptcy process. Post-emergence professional fees totaled $0.3 million during 2011, with no comparable amount during 2013 and 2012.

Accounting for Income Taxes

The asset and liability method is used to account for income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits, such as net operating loss carryforwards, to the extent that it is more likely than not that such benefits will be realized. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which the differences are expected to be recovered or settled. A valuation allowance is established to reduce the deferred tax assets if it is more likely than not that some or all of the related tax benefits will not be realized in the future and is assessed periodically to determine whether it is more likely than not that the tax benefits will be realized in the future and that such valuation should be released.

The majority of the Company's business activities are conducted through its subsidiaries outside of Canada. Earnings from these subsidiaries are generally indefinitely reinvested in the local businesses. Further, local laws and regulations may also restrict certain subsidiaries from paying dividends to their parents. As such, the Company generally does not accrue income taxes for the repatriation of such earnings in accordance with ASC 740, "Income Taxes". To the extent that there are excess accumulated earnings that the Company intends to repatriate from any such subsidiaries, the Company recognizes deferred tax liabilities on such foreign earnings.

The Company assesses its income tax positions and records tax benefits for all years subject to examination based on the evaluation of the facts, circumstances, and information available at each reporting date. For those tax positions with a greater than 50 percent likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information, the Company records a tax benefit. For those income tax positions that are not likely to be sustained, no tax benefit is recognized in the consolidated financial statements. The Company recognizes interest and penalties related to uncertain tax positions as part of the provision for income taxes.

Recent Accounting Pronouncements

Accounting for the Cumulative Translation Adjustment

In March 2013, the FASB issued ASU 2013-05, "Foreign Currency Matters (Topic 830): Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of

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Assets within a Foreign Entity or of an Investment in a Foreign Entity". ASU 2013-05 provides clarification regarding whether ASC 810-10, "Consolidation – Overall" or ASC 830-30, "Foreign Currency Matters—Translation of Financial Statements," applies to the release of cumulative translation adjustments into net income when a reporting entity either sells a part or all of its investment in a foreign entity or ceases to have a controlling financial interest in a subsidiary or group of assets that constitute a business within a foreign entity. The revised standard is effective for reporting periods beginning after December 15, 2013, with early adoption permitted. The adoption of this amendment is not expected to have a material impact on the Company's consolidated financial statements.

Presentation of Unrecognized Tax Benefits

In July 2013, the FASB issued ASU 2013-11, "Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists". ASU 2013-11 requires, unless certain conditions exists, an unrecognized tax benefit or a portion of an unrecognized tax benefit be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, similar to a tax loss or a tax credit carryforward. ASU 2013-11 is effective prospectively for reporting periods beginning after December 15, 2013. The adoption of this amendment is not expected to have a material impact on the Company's consolidated financial statements.

4. Discontinued Operations

Beginning in 2011, the Company initiated a strategic review of its businesses to focus our priorities and investments, while simplifying and streamlining our business model. In June 2012, the Company committed to a plan for the sale of the Semiconductor Systems operating segment, sold under the GSI brand name, and Laser Systems product lines, sold under the Control Laser and Baublys brand names. The Company began accounting for these businesses as discontinued operations beginning in the second quarter of 2012.

Laser Systems

In October 2012, the Company sold certain assets and liabilities of the Laser Systems business for $7.0 million to Hans Laser, subject to working capital adjustments, and recorded a $2.3 million gain in the consolidated statement of operations during the fiscal year ended December 31, 2012. In September 2013, the Company paid $0.4 million to Hans Laser as the final net working capital adjustment which resulted in an additional loss of $0.2 million, net of tax.

As Hans Laser did not purchase the Orlando facility which had been used as the main operating facility for Laser Systems, the Company retained the facility and is currently leasing the facility to Hans Laser under an operating lease agreement through October 2014. As of the end of the second quarter of 2013, it was determined that it was no longer probable that the facility would be sold within the next twelve months and, as a result, the facility was reclassified from assets of discontinued operations to property, plant and equipment.

Semiconductor Systems

In May 2013, the Company consummated the sale of certain assets and liabilities of the Semiconductor Systems business to Electro Scientific Industries, Inc. ("ESI") for $8.0 million in cash, subject to closing working capital adjustments. In September 2013, the Company settled final net working capital adjustment with ESI for $1.7 million in favor of the Company, resulting in an adjusted selling price of $9.7 million for the sale. The

Company recognized a $0.4 million loss on the sale, net of tax, in the consolidated statements of operations during 2013, which included selling costs of $1.1 million.

The major components of the assets and liabilities of discontinued operations as of December 31, 2013 and 2012, respectively, are as follows (in thousands):

	2013	2012
Accounts receivable, net	$—	$ 2,981
Inventories	—	8,231
Other assets	—	694
Property, plant and equipment, net	—	5,712
Assets of discontinued operations	$—	$17,618
Accounts payable	$ 10	$ 1,358
Accrued expenses and other current liabilities	44	2,116
Deferred revenue	—	1,453
Other liabilities	—	678
Liabilities of discontinued operations	$ 54	$ 5,605

Liabilities of discontinued operations as of December 31, 2013 primarily relate to accrued severance and professional service costs associated with the closing of the transaction.

The following table presents the Semiconductor Systems and Laser Systems operating results which are reported as discontinued operations in the Company's consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Sales from discontinued operations	$ 9,090	$44,655	$61,984
Income (loss) from discontinued operations before income taxes	$(1,713)	$ (5,041)	$ 7,837
Income (loss) from discontinued operations, net of tax	$ (927)	$ (5,151)	$ 7,325
Gain (loss) on disposal of discontinued operations, net of tax	$ (592)	$ 2,255	$ —

In 2012, the Company recorded an inventory provision of $1.9 million related to the Semiconductor Systems business. This provision was included in the consolidated statement of operations in income (loss) from discontinued operations, net of tax. The increase in the inventory provision was caused by changes in industry trends in the memory repair market, which resulted in lower expected future demand for the Company's memory repair products.

5. Business Combinations

On January 15, 2013, the Company acquired 100% of the outstanding membership interests of NDS Surgical Imaging, LLC and 100% of the outstanding stock of NDS Surgical Imaging KK (collectively, "NDS") for $82.7 million in cash consideration, subject to customary closing working capital adjustments. In October 2013, the Company finalized the closing working capital adjustments with the seller for $1.9 million in favor of the Company, resulting in an adjusted purchase price of $80.8 million. In addition, a total of $5.4 million held in escrow after the payment of closing working capital adjustments can be utilized as indemnification for certain

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representations and warranty claims against the seller until the expiration of the escrow arrangement in July 2014. The Company recognized acquisition-related costs, which are included in restructuring, restatement related costs, post emergences fees and other in the consolidated statements of operations, as follows (in thousands):

	Year Ended December 31, 2013	Year Ended December 31, 2012	Cumulative Costs December 31, 2013
Acquisition-related charges	$ 1,164	$ 685	$ 1,849

The acquisition of NDS has been accounted for as a business combination. The allocation of the purchase price is based upon a valuation of assets and liabilities acquired. Assets acquired and liabilities assumed have been recorded at their estimated fair values as of the acquisition date. The fair values of intangible assets were based on valuations using an income approach, with estimates and assumptions provided by management of NDS and the Company. The excess of the purchase price over the tangible assets, identifiable intangible assets and assumed liabilities was recorded as goodwill.

The total purchase price allocation was as follows (in thousands):

	Estimated Purchase Price Allocation
Accounts receivable	$ 10,327
Inventory	14,144
Property and equipment	2,426
Intangible assets	37,817
Other assets	1,782
Goodwill	26,578
Total assets acquired	93,074
Accounts payable	4,768
Accrued expenses	6,217
Deferred tax liabilities	384
Other liabilities assumed	932
Total liabilities assumed	12,301
Total net assets acquired	$ 80,773

The fair value of intangible assets is comprised of the following (in thousands):

	Estimated Fair Value	Weighted Average Amortization Period
Customer relationships	$ 22,294	20 years
Developed technology	6,689	10 years
Trademarks and tradenames	7,565	20 years
Backlog	1,269	1 year
Total	$ 37,817	

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The purchase price allocation resulted in $26.6 million of goodwill and $37.8 million of identifiable intangible assets, the majority of which are expected to be deductible for tax purposes. As a result, the Company recorded deferred tax liabilities of $0.4 million in purchase accounting, equal to the deferred tax effect of certain acquired intangible assets. Intangible assets are being amortized over their weighted average useful lives primarily based upon the pattern in which economic benefits related to such assets are expected to be realized. The resulting amount of goodwill reflects the Company's expectations of the following synergistic benefits: (1) the potential growth due to additional financial resources to spend on research and development activities, increase of sales resources and the ability to enhance product offerings; (2) the potential to sell NDS products into the Company's existing customer base and to sell the Company's products into NDS's customer base; and (3) the Company's intention to leverage its expertise in light and color measurement technologies. Excluding the $5.4 million dollar representations and warranties claims, the purchase price is final.

The results of the NDS operations have been included in the consolidated statements of operations since the acquisition date. NDS contributed sales of $68.4 million and loss from continuing operations before income taxes of $3.4 million for the year ended December 31, 2013.

The pro forma information for all periods presented below includes the effects of acquisition accounting, including amortization charges from acquired intangible assets, interest expense on borrowings in connection with the acquisition, acquisition-related charges, and the related tax effects as though the acquisition had been consummated as of the beginning of 2012. These pro forma results exclude the impact of transaction costs included in the historical results and the related tax effects. The pro forma financial information is presented for comparative purposes only and is not necessarily indicative of the results of operations that actually would have been achieved if the acquisition had taken place at the beginning of 2012.

The following unaudited pro forma information presents the combined financial results for the Company and NDS as if the acquisition of NDS had been completed as of January 1, 2012 (in thousands, except per share information):

	Year Ended December 31,	
	2013	2012
Sales	$342,478	$357,247
Income from continuing operations, net of tax	$ 9,121	$ 24,370
Earnings per share from continuing operations—Basic	$ 0.27	$ 0.72
Earnings per share from continuing operations—Diluted	$ 0.26	$ 0.72

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6. Accumulated Other Comprehensive Income (Loss)

Comprehensive income (loss) is defined as net income or loss and other changes in stockholders' equity from non-owner sources. Changes in accumulated other comprehensive income (loss) is as follows (in thousands):

	Total accumulated other comprehensive income (loss)	Foreign currency translation adjustments	Pension liability
Balance at December 31, 2010	$ (3,429)	$ 2,568	$ (5,997)
Other comprehensive income (loss)	(1,901)	241	(2,142)
Amounts reclassified from other comprehensive income	306	—	306
Balance at December 31, 2011	(5,024)	2,809	(7,833)
Other comprehensive loss	(6,973)	(3,020)	(3,953)
Amounts reclassified from other comprehensive income	2,248	1,510	738
Balance at December 31, 2012	(9,749)	1,299	(11,048)
Other comprehensive income	2,686	54	2,632
Amounts reclassified from other comprehensive income	721	—	721
Balance at December 31, 2013	$ (6,342)	$ 1,353	$ (7,695)

7. Goodwill and Intangible Assets

Goodwill

Goodwill is recorded when the consideration for a business combination exceeds the fair value of net tangible and identifiable intangible assets acquired. The Company performed its annual goodwill impairment test at the beginning of the second quarter and noted no impairment of goodwill. As of the date of our most recent annual impairment test, the fair value of our medical components reporting unit exceeded its carrying value by approximately 10%. The gap between the fair value and the carrying value is relatively small for this reporting unit because our recent NDS acquisition constitutes the majority of the reporting unit.

The following table summarizes changes in goodwill during the year ended December 31, 2013 (in thousands):

	December 31, 2013
Balance at beginning of year	$ 44,578
Goodwill acquired from NDS acquisition	26,578
Balance at end of year	$ 71,156

Goodwill acquired from the NDS acquisition is reflected in the Medical Technologies segment. Goodwill by reportable segment as of December 31, 2013 is as follows (in thousands):

	Reportable Segment			
	Laser Products	Medical Technologies	Precision Motion	Total
Goodwill	$ 132,954	$ 43,565	$ 26,291	$ 202,810
Accumulated impairment of goodwill	(102,461)	(12,147)	(17,046)	(131,654)
Total	$ 30,493	$ 31,418	$ 9,245	$ 71,156

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Goodwill by reportable segment as of December 31, 2012 is as follows (in thousands):

	Reportable Segment			
	Laser Products	Medical Technologies	Precision Motion	Total
Goodwill	$ 132,954	$16,987	$26,291	$ 176,232
Accumulated impairment of goodwill	(102,461)	(12,147)	(17,046)	(131,654)
Total	$ 30,493	$ 4,840	$ 9,245	$ 44,578

Intangible Assets

Intangible assets as of December 31, 2013 and 2012, respectively, are summarized as follows (in thousands):

	December 31, 2013			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Life (Years)
Amortizable intangible assets:				
Patents and acquired technologies	$ 68,500	$ (56,327)	$ 12,173	5.3
Customer relationships	55,585	(24,340)	31,245	13.9
Trademarks, trade names and other	13,378	(4,530)	8,848	16.4
Customer backlog	1,269	(1,269)	—	—
Amortizable intangible assets	138,732	(86,466)	52,266	12.3
Non-amortizable intangible assets:				
Trade names	13,027	—	13,027	
Total	$ 151,759	$(86,466)	$ 65,293	

	December 31, 2012			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Life (Years)
Amortizable intangible assets:				
Patents and acquired technologies	$ 61,667	$ (50,904)	$ 10,763	3.9
Customer relationships	33,245	(18,981)	14,264	6.5
Trademarks, trade names and other	5,780	(3,814)	1,966	6.2
Amortizable intangible assets	100,692	(73,699)	26,993	5.4
Non-amortizable intangible assets:				
Trade names	13,027	—	13,027	
Total	$ 113,719	$(73,699)	$ 40,020	

All definite-lived intangible assets are amortized either on a straight-line basis or an economic benefit basis over their remaining life. Amortization expense for customer relationships and definite-lived trademarks, trade names and other intangibles is included in operating expenses in the accompanying consolidated statements of

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operations. Amortization expense for patents and acquired technologies is included in cost of goods sold in the accompanying consolidated statements of operations. Amortization expense is as follows (in thousands):

	Year ended December 31,		
	2013	2012	2011
Amortization – Cost of goods sold	$ 5,280	$3,165	$3,851
Amortization – Operating expenses	7,270	2,650	3,515
Total	$12,550	$5,815	$7,366

Estimated amortization expense for each of the five succeeding years and thereafter as of December 31, 2013 is as follows (in thousands):

Year Ending December 31,	Cost of Goods Sold	Operating Expenses	Total
2014	$ 4,953	$ 6,044	$ 10,997
2015	3,310	5,448	8,758
2016	1,965	5,053	7,018
2017	1,573	4,723	6,296
2018	146	4,387	4,533
Thereafter	226	14,438	14,664
Total	$ 12,173	$40,093	$52,266

Impairment Charges

The Company did not have any goodwill or indefinite-lived intangible asset impairment charges during the years ended December 31, 2013, 2012 and 2011.

8. Fair Value Measurements

ASC 820, “Fair Value Measurement,” establishes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the third is considered unobservable:

Level 1: Quoted prices for identical assets or liabilities in active markets which the Company can access.

Level 2: Observable inputs other than those described in Level 1.

Level 3: Unobservable inputs.

The Company’s cash equivalents are investments in money market accounts, which represent the only asset the Company measures at fair value on a recurring basis. The Company determines the fair value of our cash equivalents using a market approach based on quoted prices in active markets. The fair values of cash, accounts receivable, income taxes receivable, accounts payable, income taxes payable and accrued expenses and other current liabilities approximate their carrying values because of their short-term nature.

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The following table summarizes the fair values of our financial assets as of December 31, 2013 (in thousands):

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$ 3,078	$ 3,078	$ —	$ —

The following table summarizes the fair values of our financial assets as of December 31, 2012 (in thousands):

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets				
Cash equivalents	$2,511	$ 2,511	$ —	$ —

Except for assets and liabilities acquired from the NDS acquisition, as disclosed in Note 5, there were no assets and liabilities that were measured at fair value on a non-recurring basis during 2013. The following table summarizes assets and liabilities that were measured at fair value on a non-recurring basis during 2012 (in thousands):

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)	Total Losses
Facility impairment	$ —	$ —	$ 856	$856

During the year ended December 31, 2012, the Company recorded non-recurring fair value measurements related to the impairment of our Orlando, Florida facility. As part of our periodic assessment of assets of discontinued operations, the Company recorded an impairment in the third quarter of 2012 on the facility to reduce the book value to the estimated fair value of the building, less costs to sell. The estimated fair value was determined using a combination of the income approach and comparable sales approach of similar properties within the Orlando, Florida area using information from third party real estate agents.

See Note 11 for discussion of the estimated fair value of the Company's outstanding debt and Note 13 for discussion of the estimated fair value of the Company's pension plan assets.

9. Earnings (Loss) per Share

Basic earnings (loss) per common share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the year. For diluted earnings (loss) per common share, the denominator also includes the dilutive effect of outstanding restricted stock awards and restricted stock units determined using the treasury stock method. For years in which net losses are generated, the dilutive potential common shares are excluded from the calculation of diluted earnings per share as the effect would be anti-dilutive.

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The following table sets forth the computation of basic and diluted earnings (loss) per share (in thousands, except per share amounts):

	Year Ended December 31,		
	2013	2012	2011
Numerators:			
Consolidated income from continuing operations	$ 8,850	$ 22,474	$21,676
Less: Income attributable to noncontrolling interest	(22)	(40)	(28)
Income from continuing operations attributable to GSI Group Inc.	8,828	22,434	21,648
Income (loss) from discontinued operations.	(1,519)	(2,896)	7,325
Net income attributable to GSI Group Inc.	$ 7,309	$19,538	$ 28,973
Denominators:			
Weighted average common shares outstanding—basic	34,073	33,775	33,481
Dilutive potential common shares	323	161	108
Weighted average common shares outstanding—diluted	34,396	33,936	33,589
Antidilutive common shares excluded from above	246	244	132
Basic Earnings (Loss) per Common Share:			
From continuing operations	$ 0.26	$ 0.66	$ 0.65
From discontinued operations	$ (0.05)	$ (0.08)	$ 0.22
Basic earnings per share attributable to GSI Group Inc.	$ 0.21	$ 0.58	$ 0.87
Diluted Earnings (Loss) per Common Share:			
From continuing operations	$ 0.26	$ 0.66	$ 0.64
From discontinued operations	$ (0.05)	$ (0.08)	$ 0.22
Diluted earnings per share attributable to GSI Group Inc.	$ 0.21	$ 0.58	$ 0.86

Common Stock Repurchases

In October 2013, the Company's Board of Directors authorized a share repurchase plan under which the Company may repurchase outstanding shares of the Company's common stock up to an aggregate amount of $10.0 million. The shares may be repurchased from time to time, at the Company's discretion, based on ongoing assessment of the capital needs of the business, the market price of the Company's common stock, and general market conditions. Shares may also be repurchased through an accelerated stock purchase agreement, on the open market or in privately negotiated transactions in accordance with applicable federal securities laws. Repurchases may be made under certain SEC regulations, which would permit common stock to be purchased when the Company would otherwise be prohibited from doing so under insider trading laws. The share repurchase plan does not obligate the Company to acquire any particular amount of common stock. No time limit was set for the completion of the share repurchase program, and the program may be suspended or discontinued at any time. In December 2013, the Company repurchased 50 thousand shares of its common stock in the open market for $0.5 million at an average price of $10.49.

GSI GROUP INC.

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10. Supplementary Balance Sheet Information

The following tables provide the details of selected balance sheet items as of the periods indicated (in thousands):

Inventories

	December 31, 2013	December 31, 2012
Raw materials	$39,194	$ 30,554
Work-in-process	13,186	11,959
Finished goods	10,885	8,023
Demo and consigned inventory	3,479	2,265
Total inventories	$66,744	$ 52,801

Property, Plant and Equipment, net

	December 31, 2013	December 31, 2012
Cost:		
Land, buildings and improvements	$ 38,591	$38,955
Machinery and equipment	50,755	45,821
Total cost	89,346	84,776
Accumulated depreciation	(56,856)	(52,438)
Property, plant and equipment, net	$ 32,490	$ 32,338

In 2011, the Company capitalized $2.2 million of assets which met the capital lease criteria of ASC 840-30, “Leases—Capital Lease”. The assets acquired under the capital lease are included in machinery and equipment and the related amortization expense is included in depreciation expense. The Company also capitalized software development costs of $0.2 million and $0.6 million in 2013 and 2012, respectively, based on the guidance in ASC 350-40, “Internal-Use Software”. The following table summarizes depreciation expense on property, plant and equipment, including amortization of demo units and the capital lease (in thousands):

	Year Ended December 31, 2013	2012	2011
Depreciation expense	$8,184	$9,612	$7,100

The following table summarizes total accumulated amortization on capital leases as of the periods indicated (in thousands):

	December 31, 2013	December 31, 2012
Accumulated amortization on capital leases	$1,653	$861

Accrued Expenses and Other Current Liabilities

The following table summarizes accrued expenses and other current liabilities as of the periods indicated (in thousands):

	December 31, 2013	December 31, 2012
Accrued compensation and benefits	$ 9,326	$ 6,655
Accrued warranty	3,690	2,777
Customer deposits	1,147	3,033
Other	10,413	6,813
Total accrued expenses and other current liabilities	$24,576	$19,278

Accrued Warranty

The following table summarizes accrued warranty activity for the periods indicated (in thousands):

	December 31, 2013	December 31, 2012
Balance at beginning of year	$ 2,777	$ 3,035
Provision charged to cost of goods sold	1,963	2,463
Acquisition related warranty accrual	998	—
Use of provision	(2,074)	(2,781)
Foreign currency exchange rate changes	26	60
Balance at end of year	$ 3,690	$ 2,777

11. Debt

Debt consisted of the following (in thousands):

	December 31, 2013	December 31, 2012
Senior Credit Facilities—term loan	$ 7,500	$ 7,500
Total current portion of long-term debt	$ 7,500	$ 7,500
Senior Credit Facilities—term loan	$ 35,000	$42,500
Senior Credit Facilities—revolving credit facility	29,000	—
Total long-term debt	$ 64,000	$42,500
Total Senior Credit Facilities	$71,500	$ 50,000

Senior Credit Facilities

On December 27, 2012, the Company entered into an amended and restated senior secured credit agreement (the "Amended and Restated Credit Agreement") with new and existing lenders for an aggregate credit facility of $125.0 million, consisting of a $50.0 million, 5-year, term loan facility and a $75.0 million, 5-year, revolving credit facility (collectively, the "Senior Credit Facilities"). The Senior Credit Facilities mature in December 2017. The Amended and Restated Credit Agreement amended and restated the credit agreement dated October 19, 2011 (the "Original Credit Agreement"). The terms and conditions of the Amended and Restated Credit Agreement did not substantially change from the Original Credit Agreement.

The borrowings outstanding under the credit facility bear interest at rates based on (a) the Eurodollar Rate, as defined in the Amended and Restated Credit Agreement, plus a rate ranging from 2.00% to 3.00% per annum or (b) the Base Rate, as defined in the Amended and Restated Credit Agreement, plus a rate ranging from 1.00% to 2.00% per annum, in each case based upon the Company's consolidated leverage ratio. Inclusive of commitment fees, the interest rate for the credit facility was approximately 2.7% as of December 31, 2013. The Company is also required to pay a commitment fee on unused commitments under the revolving credit facility ranging between 0.250% and 0.625% per annum, which is based upon the Company's consolidated leverage ratio. As of December 31, 2013, the Company had $46.0 million available to be drawn under the revolving credit facility.

The Amended and Restated Credit Agreement contains various customary representations, warranties and covenants applicable to the Company and its subsidiaries, including, (i) covenants regarding maximum consolidated leverage ratio and minimum consolidated fixed charge coverage ratio; (ii) limitations on restricted payments, including dividend payments and stock repurchases, provided that the Company may repurchase their equity interests, so long as immediately after giving effect to the repurchase, the Company's consolidated leverage ratio is no more than 2.25:1.00, the Company has unrestricted cash plus amounts available for borrowing under the Senior Credit Facilities of at least $25.0 million, and other customary conditions; (iii) limitations on fundamental changes involving the Company; (iv) limitations on the disposition of assets; and (v) limitations on indebtedness, investments, and liens. The Amended and Restated Credit Agreement requires the Company to satisfy certain financial covenants, such as maintaining a minimum consolidated fixed charge coverage ratio of 1.50 to 1.00 and a maximum consolidated leverage ratio of 2.75 to 1.00.

The Company's obligations under the Senior Credit Facilities are secured on a senior basis by a lien on substantially all of the assets of the Company and its material United States ("U.S.") and United Kingdom ("U.K.") subsidiaries and guaranteed by the Company and its material U.S. and U.K. subsidiaries. The Amended and Restated Credit Agreement also contains customary events of default.

The Company entered into three amendments to the Amended and Restated Credit Agreement during 2013 and one amendment during 2014. The first and second amendments resulted in immaterial modifications. On September 13, 2013, the Company entered into a third amendment (the "Third Amendment") which increased the accordion feature provided in the Amended and Restated Agreement from uncommitted $50.0 million to uncommitted $100.0 million in aggregate of the revolving credit facility and term loan. On February 10, 2014, the Company entered into a fourth amendment (the "Fourth Amendment.") The Fourth Amendment increases the revolving credit facility commitment under the Amended and Restated Credit Agreement by $100 million from $75 million to $175 million and resets the accordion feature to $100 million for future expansion. Additionally, the Fourth Amendment increases the maximum permitted consolidated leverage ratio from 2.75 to 3.00, and increases the maximum consolidated leverage ratio for permitted acquisitions and stock repurchases from 2.25 to 2.50. The Company was in compliance with these debt covenants as of December 31, 2013.

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The principal on the Company's term loan outstanding matures as follows (in thousands):

	Term Loan
2014	$ 7,500
2015	7,500
2016	7,500
2017	20,000
Total debt repayments	$42,500

Subject to certain exceptions, the Company will be required to prepay outstanding loans under the Amended and Restated Credit Agreement with the net proceeds of certain asset dispositions and incurrences of certain debt. The Company may voluntarily prepay loans or reduce commitments under the Senior Credit Facilities, in whole or in part, without premium or penalty, subject to certain minimum principal amounts.

Guarantees

Each Guarantor, as defined in the Amended and Restated Credit Agreement, jointly and severally, unconditionally guarantees the due and punctual payment of the principal, interest and fees on the Senior Credit Facilities, when due and payable, whether at maturity, by required prepayment, by acceleration or otherwise. In addition, guarantors guarantee the due and punctual payment, fees and interest on the overdue principal of the Senior Credit Facilities and the due and punctual performance of all obligations of the Company in accordance with the terms of the Amended and Restated Credit Agreement. Furthermore, each Guarantor, jointly and severally, unconditionally guarantees that in the event of any extension, renewal, amendment, refinancing or modification of any of the Senior Credit Facilities or any of such other Obligations, as defined in the Amended and Restated Credit Agreement, amounts due will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, at stated maturity, by acceleration or otherwise.

The obligations of each Guarantor are limited to the maximum amount, after giving effect to all other contingent and fixed liabilities or any collections from or payments made by or on behalf of any other Guarantor. Each Guarantor that makes a payment or distribution under a Guarantee is entitled to a contribution from each other Guarantor of its Pro Rata Share, as defined in the Amended and Restated Credit Agreement, based on the adjusted net assets of each Guarantor. The Guarantees will continue to be effective or be reinstated, as the case may be, if at any time any payment of any of the obligations of the Guarantors is rescinded or must otherwise be returned upon the insolvency, bankruptcy or reorganization of the Company, a Guarantor or otherwise, all as though such payment had not been made.

Each Guarantor may be released from its obligations under its respective Guarantee and its obligations under the Amended and Restated Credit Agreement upon the occurrence of certain events, including, but not limited to: (i) the Guarantor ceases to be a subsidiary; and (ii) payment in full of the principal, accrued and unpaid interest on the Senior Credit Facilities and all other obligations.

As of December 31, 2013, the maximum potential amount of future payments the Guarantors could be required to make under the Guarantee is the principal amount of the Senior Credit Facilities plus all unpaid but accrued interest thereon. However, as of December 31, 2013, the Guarantors are not expected to be required to perform under the Guarantee.

Mortgages

In connection with the Amended and Restated Credit Agreement and as required thereby Synrad, Inc. ("Synrad"), Photo Research, Inc. ("Photo Research") and Excel Technology, Inc. ("Excel"), each a subsidiary of the Company continues to be subject to an Open-End Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of October 19, 2011, in favor of or for the benefit of the Trustee, wherein Synrad, Photo Research and Excel mortgaged, granted, bargained, assigned, sold and conveyed their respective interest in the property located in Mukilteo, Washington, Chatsworth, California and Orlando, Florida, respectively, to secure (a) the payment of all of the obligations of the Borrower and the Guarantors under the Amended and Restated Credit Agreement, the respective mortgages and the other Security Documents (as defined in the respective mortgage), and (b) the performance of all terms, covenants, conditions, provisions, agreements and liabilities contained in the credit agreement.

Fair Value of Debt

As of December 31, 2013 and 2012, the outstanding balance of the Company's debt approximated fair value based on current rates available to the Company for debt of the same maturity.

12. Share-Based Compensation

Capital Stock

The authorized capital of the Company consists of an unlimited number of common shares without nominal or par value. Holders of common shares are entitled to one vote per share. Holders of common shares are entitled to receive dividends, if and when declared by the Board of Directors, and to share ratably in its assets legally available for distribution to the stockholders in the event of liquidation. Holders of common shares have no redemption or conversion rights.

2010 Incentive Award Plan

As of December 31, 2013, the Company has one active equity compensation plan under which it may grant share-based compensation awards to employees, consultants and directors (the "2010 Incentive Plan"). The Company's shareholders approved the 2010 Incentive Plan in November 2010. The maximum number of shares which can be issued pursuant to the 2010 Incentive Plan is 2,898,613, subject to adjustment as set forth in the 2010 Incentive Plan. The 2010 Incentive Plan provides for the grant of incentive stock options, non-qualified stock options, restricted stock, restricted stock units, stock appreciation rights, deferred stock, deferred stock units, dividend equivalents, performance awards and stock payments (collectively referred to as "Awards") to employees, consultants and directors. The 2010 Incentive Plan provides for specific limits on the number of shares that may be subject to different types of Awards and the amount of cash that can be paid with respect to different types of Awards. The 2010 Incentive Plan will expire and no further Awards may be granted after October 13, 2020, the tenth anniversary of its approval by the Company's Board of Directors. As of December 31, 2013, there are 1,125,859 shares available for future issuance under the 2010 Incentive Plan.

Restricted stock units represent the right to receive common shares or the fair market value of such shares in cash as determined by the administrator of the plan at a specified date in the future, subject to forfeiture of such right. The purchase price for restricted stock units will be determined by the administrator of the plan on an award-by-award basis. Deferred stock units entitle the recipient thereof to receive one share of common stock on the date such deferred stock unit becomes vested and other conditions are removed or expire, if applicable or upon a specified settlement date thereafter. Deferred stock units are typically awarded without payment of consideration.

Shares subject to Awards that have expired, forfeited or settled in cash, or repurchased by the Company at the same price paid by the awardee may be added back to the number of shares available for grant under the 2010 Incentive Plan and may be granted as new Awards. Shares that are used to pay the exercise price for an option, shares withheld to pay taxes, shares subject to a stock appreciation right that are not issued in connection with the stock settlement of the stock appreciation right on exercise thereof, and shares purchased on the open market with the cash proceeds from the exercise of options will not be added back to the number of shares available for grant under the 2010 Incentive Plan. Shares issued to satisfy Awards under the 2010 Incentive Plan may be previously authorized but unissued shares or shares bought on the open market or otherwise.

The table below summarizes activities relating to restricted stock units issued and outstanding under the 2010 Incentive Plan during year ended December 31, 2013:

	Restricted Stock Units (In thousands)	Weighted Average Grant Date Fair Value	Weighted Average Remaining Vesting Period in Years	Aggregate Intrinsic Value(1) (In thousands)
Unvested at December 31, 2012	804	$ 10.90		
Granted	460	9.69		
Vested	(395)	10.99		
Forfeited	(60)	10.40		
Unvested at December 31, 2013	809	$ 10.20	1.03 years	$ 9,089
Expected to vest as of December 31, 2013	795	$ 10.20	1.03 years	$ 8,930

(1) The aggregate intrinsic value is calculated based on the fair value of $11.24 per share of the Company's common stock on December 31, 2013 due to the fact that the restricted stock units carry a $0 purchase price.

The total fair value of restricted stock units that vested in 2013, based on the market price of the underlying stock on the day of vesting, was $3.9 million.

Other Issuances

On September 2, 2010, the Company granted 83,337 deferred stock units to the members of its Board of Directors at a weighted average grant date fair value of $6.66 per share. The deferred stock units were issued pursuant to standalone award agreements that are independent of an equity incentive plan. These transactions were exempt from registration under the Securities Act of 1933 pursuant to Section 4(2) of such act as transactions not involving a public offering. Each deferred stock unit represents the right to receive one common share of the Company on the date of termination of the holder's service with the Company's Board of Directors. The deferred stock units were fully vested and nonforfeitable on the date of grant.

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Share-Based Compensation Expense

The table below summarizes share-based compensation expense recorded in the consolidated statement of operations under the 2010 Incentive Plan (in thousands):

	Year Ended December 31,	
	2013	2012
Cost of goods sold	$ 118	$ 83
Research and development and engineering	180	112
Selling, general and administrative	5,201	4,385
Restructuring, restatement related costs, post-emergence fees and other	125	51
Total share-based compensation expense	$5,624	$4,631

The Company recognized share-based compensation expense totaling $3.3 million during the year ended December 31, 2011. Share-based compensation expense was primarily included in selling, general and administrative expenses in the consolidated statements of operations during 2011. The expense recorded during each of the years ended December 31, 2013, 2012 and 2011 also includes $0.5 million, $0.6 million and $0.6 million, respectively, related to deferred stock units granted to the members of the Company's Board of Directors, pursuant to the Company's 2010 Incentive Plan. The expense associated with the respective deferred stock units was recognized in full on the respective date of grant, as the deferred stock units were fully vested and nonforfeitable on the date of grant.

The restricted stock and restricted stock unit awards have generally been issued with a three-year vesting period and vest based solely on service conditions. Accordingly, the Company generally recognizes compensation expense on a straight-line basis over the requisite service period. The Company reduces the compensation expense by an estimated forfeiture rate which is based on anticipated forfeitures and actual experience.

As of December 31, 2013, the Company's outstanding equity awards for which compensation expense will be recognized in the future consist of time-based restricted stock units granted under the 2010 Incentive Plan. The Company expects to record aggregate share-based compensation expense of $5.1 million, including an estimate of forfeitures, subsequent to December 31, 2013, over a weighted average period of 1.9 years, for all outstanding equity awards.

13. Employee Benefit Plans

Defined Benefit Plans

The Company maintains a defined benefit pension plan in the United Kingdom (the "U.K. Plan"). In 1997, membership to the U.K. Plan was closed. In 2003, the Company was allowed to stop accruing additional benefits to the participants. Benefits under the U.K. Plan were based on the employees' years of service and compensation as of 2003.

The Company also maintains a tax qualified pension plan in Japan (the "Japan Plan") that covers certain of the Company's Japanese employees. Benefits are based on years of service and compensation at retirement. Employees with less than twenty years of service to the Company receive a lump sum benefit payout. Employees with twenty or more years of service to the Company receive a benefit that is guaranteed for a certain number of years. Participants may, under certain circumstances, receive a benefit upon termination of employment.

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Pension and other benefit costs reflected in the accompanying consolidated statements of operations are based on a projected benefit method of valuation. The funded status of pension plan liabilities are included in other long term liabilities in the accompanying consolidated balance sheets. The Company continues to fund each plan in sufficient amounts to meet current benefits as well as fund a portion of future benefits as permitted by regulatory authorities.

The net periodic pension cost for the U.K. Plan and Japan Plan included the following components (in thousands):

	U.K. Plan			Japan Plan		
	2013	2012	2011	2013	2012	2011
Components of the net periodic pension cost:						
Service cost	$ —	$ —	$ —	$ 147	$ 121	$ 106
Interest cost	1,403	1,359	1,486	22	15	18
Expected return on plan assets	(1,595)	(1,270)	(1,576)	(8)	—	—
Amortization of the unrecognized transition obligation	—	—	—	33	37	40
Amortization of prior service cost	—	—	—	20	3	2
Amortization of actuarial losses	668	392	224	—	—	—
Other	—	—	—	38	—	—
Net periodic pension cost	$ 476	$ 481	$ 134	$252	$176	$166

The actuarial assumptions used to compute the net periodic pension cost for the years ended December 31, 2013, 2012 and 2011, respectively, for the U.K. Plan and the Japan Plan were as follows:

	U.K. Plan			Japan Plan		
	2013	2012	2011	2013	2012	2011
Weighted-average discount rate	4.3%	4.9%	5.3%	1.3%	1.2%	1.3%
Weighted-average rate of compensation increase	—	—	—	3.0%	3.0%	3.0%
Weighted-average long-term rate of return on plan assets	5.7%	5.0%	5.9%	—	—	—

The actuarial assumptions used to compute the funded status as of December 31, 2013 and 2012, respectively, for the U.K. Plan and the Japan Plan were as follows:

	U.K. Plan		Japan Plan	
	2013	2012	2013	2012
Weighted-average discount rate	4.6%	4.3%	1.0%	1.3%
Weighted-average rate of compensation increase	—	—	3.0%	3.0%
Rate of inflation	2.7%	2.5%	—	—

The discount rates used are derived on (AA) corporate bonds that have maturities approximating the terms of the related obligations. In estimating the expected return on plan assets, the Company considered the historical performance of the major asset classes held and current forecasts of future rates of return for these asset classes.

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The following table provides a reconciliation of benefit obligations and plan assets of the U.K. Plan and the Japan Plan (in thousands):

	U.K. Plan		Japan Plan	
	2013	2012	2013	2012
Change in benefit obligation:				
Projected benefit obligation at beginning of year	$ 34,713	$ 27,335	$ 1,865	$ 1,401
Service cost	—	—	147	121
Interest cost	1,403	1,359	22	15
Amendments and transfers	—	—	—	417
Actuarial (gains) losses	(889)	5,008	(65)	89
Benefits paid	(688)	(582)	(1,119)	(140)
Foreign currency exchange rate changes	654	1,593	527	(38)
Projected benefit obligation at end of year	$ 35,193	$ 34,713	$ 1,377	$ 1,865
Accumulated benefit obligation at end of year	$ 35,193	$ 34,713	$ 1,006	$ 1,539
Change in plan assets:				
Fair value of plan assets at beginning of year	$ 28,629	$ 24,590	$ 827	$ 582
Actual return on plan assets	3,903	2,461	5	9
Employer contributions	847	793	628	324
Benefits paid	(688)	(582)	(1,119)	(140)
Foreign currency exchange rate changes	766	1,367	213	52
Fair value of plan assets at end of year	$ 33,457	$ 28,629	$ 554	$ 827
Funded status at end of year	$ (1,736)	$ (6,084)	$ (823)	$ (1,038)
Amounts included in accumulated other comprehensive loss not yet recognized in net periodic pension cost				
Net actuarial (loss) gain	$ (7,142)	$ (11,197)	$ 2	$ (110)
Prior service cost	$ —	$ —	$ (211)	$ (281)
Net transition obligation	$ —	$ —	$ (163)	$ (237)
Amounts expected to be amortized from accumulated other comprehensive loss into net periodic cost over the next fiscal year consists of:				
Net actuarial gain	$ 386	$ 702	$ —	$ —
Prior service cost	$ —	$ —	$ 20	$ 16
Net transition obligation	$ —	$ —	$ 33	$ 26

The following table reflects the total expected benefit payments to plan participants and have been estimated based on the same assumptions used to measure the Company’s benefit obligations as of December 31, 2013 (in thousands):

	U.K. Plan	Japan Plan
2014	$ 1,065	$ 142
2015	852	42
2016	1,007	45
2017	1,132	49
2018	930	53
2019-2023	7,897	560
Total	$ 12,883	$ 891

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In the U.K., funding valuations are conducted every three years in order to determine the future level of contributions. The Company's latest funding valuation was completed in August 2013. Based on the results of the valuation, the Company's annual contributions to the U.K. Plan are $1.0 million per year. The Company anticipates that contributions for 2014 will be $1.0 million for the U.K. Plan and $0.1 million for the Japan Plan.

Fair Value of Plan Assets

In the U.K., the Company's overall objective is to invest plan assets in a portfolio of diversified assets, primarily through the use of institutional collective funds, to achieve long-term growth. The strategic asset allocation uses a combination of risk controlled and index strategies in fixed income and global equities. The target allocations are approximately 61% to funds investing in global equities, approximately 23% to funds investing in global bonds, approximately 9% to alternative assets (including commodities, private equity and debt, real estate, infrastructure, hedge funds and currency funds), and approximately 7% in cash.

In Japan, the investment strategy is primarily focused on the preservation of principal invested in insurance contracts.

The following table summarizes the fair values of Plan assets as of December 31, 2013 by asset category (in thousands):

Asset Category	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
U.K. Plan				
Mutual Funds:				
Balanced (1)	$16,260	$ —	$16,260	$ —
Growth (2)	17,060	—	17,060	—
Cash	137	137	—	—
Total	$ 33,457	$ 137	$ 33,320	$ —
Japan Plan				
Insurance contracts (3)	$ 554	$ —	$ 554	$ —
Total	$ 554	$ —	$ 554	$ —

(1) This class comprises a diversified portfolio of global investments which seeks a balanced return between capital growth and fixed income and is allocated on a weighted average basis as follows: equities (51%), debt (33%), other assets (8%) and cash (8%).
(2) This class comprises a diversified portfolio of global investments which seeks long-term capital growth and is allocated on a weighted average basis as follows: equities (70%), debt (14%), other assets (9%) and cash (7%).
(3) This class represents funds invested in insurance contracts.

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The following table summarizes the fair values of Plan assets as of December 31, 2012 by asset category (in thousands):

Asset Category	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
U.K. Plan				
Mutual Funds:				
Balanced (1)	$ 14,266	$ —	$ 14,266	$ —
Growth (2)	14,244	—	14,244	—
Cash	119	119	—	—
Total	$ 28,629	$ 119	$ 28,510	$ —
Japan Plan				
Insurance contracts (3)	$ 827	$ —	$ 827	$ —
Total	$ 827	$ —	$ 827	$ —

(1) This class comprises a diversified portfolio of global investments which seeks a balanced return between capital growth and fixed income and is allocated on a weighted average basis as follows: equities (47%), debt (41%), other assets (9%) and cash (3%).

(2) This class comprises a diversified portfolio of global investments which seeks long-term capital growth and is allocated on a weighted average basis as follows: equities (68%), other assets (10%), debt (21%), and cash (1%).

(3) This class represents funds invested in insurance contracts.

The tables above present the fair value of plan assets in accordance with the fair value hierarchy. Certain pension plan assets are measured using net asset value per share (or its equivalent) and are reported as a level 2 investment above due to the Company's ability to redeem its investments either at the balance sheet date or within limited time restrictions.

Defined Contribution Plans

The Company has defined contribution employee savings plans in the U.K. and the U.S. The Company matches the contributions of participating employees on the basis of percentages specified in each plan. Company matching contributions to the plans were $1.8 million, $1.5 million and $1.8 million in 2013, 2012 and 2011, respectively.

14. Income Taxes

Components of our income (loss) from continuing operations are as follows (in thousands):

	Year Ended December 31, 2013	2012	2011
Income (loss) from continuing operations before income taxes:			
Canadian	$ (5,366)	$ (5,199)	$ (871)
U.S.	11,061	12,132	7,455
Other	8,835	4,601	17,636
Total	$ 14,530	$ 11,534	$ 24,220

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Components of the Company's income tax provision (benefit) are as follows (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Current			
Canadian	$ —	$ —	$ —
U.S.	1,082	3,625	388
Other	652	2,277	1,664
	1,734	5,902	2,052
Deferred			
Canadian	—	—	—
U.S.	2,206	(13,882)	(150)
Other	1,740	(2,960)	642
	3,946	(16,842)	492
Total	$5,680	$ (10,940)	$ 2,544

The Company is incorporated in Canada and therefore uses the Canadian statutory rate. The reconciliation of the statutory Canadian income tax rate to the effective rate related to income from continuing operations before income taxes is as follows (in thousands, except percentage data):

	Year Ended December 31,		
	2013	2012	2011
Statutory Canadian tax rate	26.00%	25.00%	27.00%
Expected income tax provision at statutory Canadian tax rate	$ 3,778	$ 2,884	$ 6,539
International tax rate differences	14	1,419	641
Permanent differences	121	241	5
Change in valuation allowance	(3,052)	(15,086)	(5,598)
Prior year provision to return differences	(296)	37	69
Net operating loss expirations	4,538	—	—
Statutory tax rate change	379	316	357
Uncertain tax positions	259	(4,093)	423
Tax credits	(938)	—	(144)
State income taxes, net	118	375	577
IRS audit	680	1,846	(268)
Withholding and other taxes	321	488	—
Other	(242)	633	(57)
Reported income tax provision (benefit)	$ 5,680	$ (10,940)	$ 2,544
Effective tax rate	39.1%	(94.9%)	10.5%

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Deferred income taxes result principally from temporary differences in the recognition of certain revenue and expense items and operating loss carryforwards and credit carryforwards for financial and tax reporting purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2013 and 2012 are as follows (in thousands):

	December 31,	
	2013	2012
Deferred tax assets		
Losses & IRC Section 163(j) carryforwards	$ 16,218	$ 24,372
Compensation related deductions	2,725	4,737
Tax credits	3,817	5,101
Restructuring related liabilities	406	510
Inventory	5,680	6,493
Depreciation	938	194
Amortization	163	—
Warranty	1,007	680
Other	854	598
Total deferred tax assets	31,808	42,685
Valuation allowance for deferred tax assets	(11,534)	(15,481)
Net deferred income tax assets	$ 20,274	$ 27,204
Deferred tax liabilities		
Equity investment	$ (1,025)	$ (807)
Depreciation	(471)	—
Amortization	(11,283)	(14,254)
Unrealized gain/loss	(985)	(1,132)
Other	(581)	(201)
Total deferred tax liabilities	$ (14,345)	$ (16,394)
Net deferred income tax assets (liabilities)	$ 5,929	$ 10,810

In determining its 2013, 2012, and 2011 income tax provisions, the Company calculated deferred tax assets and liabilities for each separate jurisdiction. The Company then considered a number of factors, including positive and negative evidence related to the realization of its deferred tax assets to determine whether a valuation allowance should be recognized with respect to its deferred tax assets.

In 2013, the Company adjusted a portion of its Canadian loss carryforward and the related valuation allowance of $4.8 million. The Company also recorded valuation allowances against its current year net operating losses in certain tax jurisdictions of $1.3 million and released valuation allowance previously recorded on certain U.S. state tax credits of $0.3 million. Additionally, the Company adjusted the carrying value of deferred tax assets on net operating losses and tax credits and their related valuation allowance in Canada and the U.K. as a result of changes in statutory tax rates amounting to $0.7 million in 2013.

In 2012, the Company recognized a tax benefit of $15.3 million due to the release of a portion of the valuation allowance on deferred tax assets which the Company believes are more likely than not to be realized. Our effective income tax rate benefited from the availability of previously unrealized deferred tax assets which the Company utilized to reduce tax expense for the U.S., U.K., France, and Japan for income tax purposes.

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Valuation allowance continues to be provided on U.S. capital loss, certain state net operating loss and certain foreign tax attributes that the Company has determined that it is more likely than not that they will not be realized. In conjunction with the Company's ongoing review of its actual results and anticipated future earnings, the Company continuously reassesses the possibility of releasing the valuation allowance currently in place on its deferred tax assets.

As of December 31, 2013, the Company had loss carryforwards of $10.0 million (tax effected) available to reduce future taxable income. Of this amount, approximately $1.8 million relates to the U.S. and expires through 2033; $7.1 million relates to Canada and expires starting in 2015; $0.7 million relates to the U.K. and can be carried forward indefinitely; and the remaining $0.4 million relates to various foreign jurisdictions.

As of December 31, 2013, the Company had tax credits of approximately $3.8 million available to reduce income taxes in future years. Approximately $1.6 million relates to the U.S., both federal and state, and expires through 2033. The remaining $2.2 million relates to Canada, of which $1.4 million expires through 2022 and $0.8 million can be carried forward indefinitely.

Income and foreign withholding taxes have not been recognized on the excess of the amount for financial reporting purposes over the tax basis of investments in foreign subsidiaries that are essentially permanent in nature. This amount becomes taxable upon a repatriation of assets from a subsidiary or a sale or liquidation of a subsidiary. The amount of undistributed earnings of foreign subsidiaries totaled $13.9 million as of December 31, 2013. Determination of the amount of any unrecognized deferred income tax liabilities on this temporary difference is not practicable because of the complexities of the hypothetical calculation.

As of December 31, 2011, the amount of gross unrecognized tax benefits totaled approximately $7.3 million, all of which would favorably affect the Company's effective tax rate, if recognized. As of December 31, 2012, the Company's total amount of gross unrecognized tax benefits was $7.6 million, of which $4.3 million would favorably affect its effective tax rate, if recognized. As a result of settling a U.S. federal tax examination, the Company released $3.0 million of unrecognized tax benefits during the year ended December 31, 2012. As of December 31, 2013, the Company's total amount of gross unrecognized tax benefits was $7.1 million, of which $4.9 million would favorably affect its effective tax rate, if recognized. Over the next twelve months, the Company may need to record up to $2.1 million of previously unrecognized tax benefits in the event of statute of limitations closures. The Company believes there are no other jurisdictions in which the outcome of unresolved issues or claims is likely to be material to its results of operations, financial position or cash flows. Furthermore, the Company believes it has adequately provided for all income tax uncertainties.

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The reconciliation of the total amounts of unrecognized tax benefits is as follows (in thousands):

Balance at December 31, 2010	$ 5,088
Additions based on tax positions related to the current year	2,318
Additions for tax positions of prior years	55
Reductions for tax positions of prior years	(177)
Balance at December 31, 2011	7,284
Additions based on tax positions related to the current year	2,618
Additions for tax positions of prior years	1,422
Reductions for tax positions of prior years	(481)
Reductions to tax positions resulting from a lapse of the applicable statute of limitations	(254)
Settlements with taxation authorities	(3,035)
Balance at December 31, 2012	7,554
Additions based on tax positions related to the current year	508
Additions for tax positions of prior years	1,475
Reductions for tax positions of current years	(1,888)
Reductions to tax positions resulting from a lapse of the applicable statute of limitations	(575)
Balance at December 31, 2013	$ 7,074

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2013 and 2012, the Company had approximately $0.3 million and $0.6 million, respectively, of accrued interest and penalties related to uncertain tax positions. During the years ended December 31, 2013 and 2012, the Company recognized approximately $0.3 million and $0.6 million, respectively, of benefits from lower interest and penalties related to uncertain tax positions.

The Company files income tax returns in Canada, the U.S., and various states and foreign jurisdictions. Generally, the Company is no longer subject to U.S. or foreign income tax examinations by tax authorities for the years before 2006.

The Company's income tax returns may be reviewed in the following countries for the following periods under the appropriate statute of limitations:

United States	2009 - Present
Canada	2006 - Present
United Kingdom	2009 - Present
China	2010 - Present
Japan	2008 - Present
Germany	2008 - Present
Netherlands	2009 - Present

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15. Restructuring, Restatement Related Costs, Post-Emergence Fees and Other

The following table summarizes restructuring, restatement related costs, post-emergence fees and other expenses recorded in the accompanying consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2013	2012	2011
2011 restructuring	$ 2,283	$6,057	$1,967
2012 restructuring	—	1,758	—
2013 restructuring	2,766	—	—
Novi and U.K. restructuring	—	(40)	—
Germany and other restructuring	8	276	81
Total restructuring charges	5,057	8,051	2,048
Restatement related costs and other charges	—	—	62
Acquisition related charges	1,630	791	—
Post-emergence fees	—	—	296
Total restructuring, restatement related costs, post-emergence fees and other	$6,687	$ 8,842	$ 2,406

2011 Restructuring

In November 2011, the Company announced a strategic initiative ("2011 restructuring"), which aimed to consolidate operations to reduce the Company's cost structure and improve operational efficiency. In total, eleven facilities have been exited as part of the 2011 restructuring plan. These eliminations resulted in the consolidation of the manufacturing facilities of the scientific lasers products and the optics products, consolidation of the Company's German operations into one facility, and consolidation of the laser scanners business into the Company's Bedford, MA manufacturing facility. Included in the eleven facilities exited are five facilities exited as part of the Semiconductor and Laser Systems business divestitures. The facility exit costs for the divested businesses have been excluded from the table above. The Company substantially completed the 2011 restructuring program during the third quarter of 2013.

Presented below are actual cash charges, including severance and relocation costs, facility closure costs and consulting costs and non-cash charges related to accelerated depreciation for changes in estimated useful lives of certain long-lived assets for which the Company exited with respect to the 2011 restructuring (in thousands):

	Year Ended December 31,			Cumulative Costs as of December 31, 2013
	2013	2012	2011	
Cash charges	$1,692	$ 4,109	$ 1,061	$ 6,862
Non-cash charges	591	1,948	906	3,445
Total restructuring costs	$ 2,283	$6,057	$1,967	$ 10,307

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The following table summarizes restructuring costs for each segment and unallocated corporate costs related to the 2011 restructuring plan (in thousands):

	Year Ended December 31,			Cumulative Costs as of December 31, 2013
	2013	2012	2011	
Laser Products	$ 2,038	$ 4,861	$ 1,790	$ 8,689
Medical Technologies	48	—	—	48
Precision Motion	5	52	65	122
Corporate, Shared Services and Unallocated costs	192	1,144	112	1,448
Total restructuring costs	$2,283	$6,057	$1,967	$ 10,307

2012 Restructuring

During 2012, the Company initiated and completed a program to identify additional cost savings due to the continued uncertainty and volatility of the macroeconomic environment ("2012 restructuring"). The Company incurred $1.8 million of severance costs associated with the 2012 restructuring program during the year ended December 31, 2012.

The following table summarizes the total costs associated with the 2012 restructuring program for each segment for the year ended December 31, 2012 (in thousands):

	Year Ended December 31, 2012
Laser Products	$ 501
Precision Motion	951
Corporate, Shared Services and Unallocated costs	306
Total restructuring costs	$ 1,758

2013 Restructuring

During the first half of 2013, the Company initiated a program following our acquisition of NDS to integrate the NDS business into our operating structure and further reduce manufacturing and operating costs across businesses to leverage our infrastructure and further integrate our product lines. The Company incurred $2.6 million of cash related charges primarily related to severance and exit costs associated with a facility exited during the year ended December 31, 2013.

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The following table summarizes restructuring costs for each segment and unallocated corporate costs related to the 2013 restructuring program (in thousands):

	Year Ended December 31, 2013
Laser Products	$ 1,139
Medical Technologies	806
Precision Motion	378
Corporate, Shared Services and Unallocated costs	443
Total restructuring costs	$ 2,766

Other Restructuring

The Company recorded restructuring charges related to the elimination of the Company's Munich, Germany facility as a result of a restructuring program undertaken beginning in 2000 ("Germany restructuring"). The Company terminated the lease agreement and completed the Germany restructuring by making a final payment of $0.3 million to the landlord in December 2012.

Rollforward of Accrued Expenses Related to Restructuring

The following table summarizes the accrual activities, by component, related to the Company's restructuring charges recorded in the accompanying consolidated balance sheets (in thousands):

	Total	Severance	Facility	Accelerated Depreciation	Other
Balance at December 31, 2011	$ 1,561	$ 470	$ 1,062	$ —	$ 29
Restructuring charges	8,051	3,314	967	1,892	1,878
Cash payments	(5,376)	(2,419)	(1,301)	—	(1,656)
Non-cash write-offs or other adjustments	(2,206)	(61)	(239)	(1,892)	(14)
Balance at December 31, 2012	2,030	1,304	489	—	237
Restructuring charges	5,057	2,549	1,176	190	1,142
Acquired lease obligation	128	—	128	—	—
Cash payments	(5,277)	(2,958)	(1,165)	—	(1,154)
Non-cash write-offs or other adjustments	(389)	(95)	15	(190)	(119)
Balance at December 31, 2013	$ 1,549	$ 800	$ 643	$ —	$ 106

The Company expects to make $1.5 million in cash payments during the twelve months ending December 31, 2014.

16. Commitments and Contingencies

Operating Leases

The Company leases certain equipment and facilities under operating lease agreements. Most of these lease agreements expire between 2014 and 2019. In the U.K., where longer lease terms are more common, the Company has a land lease that extends through 2078. Under the terms of the facility leases, generally the Company is responsible to pay real estate taxes and other operating costs.

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During the years ended December 31, 2013, 2012 and 2011, the Company recorded lease expense of $5.3 million, $4.4 million and $3.6 million, respectively. In addition to the base rent, the Company is generally required to pay insurance, real estate taxes and maintenance costs which is recorded in lease expense.

Capital Leases

In 2011, the Company capitalized $2.2 million of assets which met the criteria under ASC 840-30, "Leases—Capitalized Leases," which requires the Company to capitalize and depreciate the assets over the lease term.

Future minimum lease payments under operating and capital leases expiring subsequent to December 31, 2013, including operating leases associated with continuing and discontinued facilities and facilities that have been vacated as a result of the Company's restructuring actions, are as follows (in thousands):

	Operating Leases	Capital Leases(1)
2014	$ 4,716	$ 838
2015	4,136	—
2016	3,371	—
2017	3,301	—
2018	3,263	—
Thereafter	8,311	—
Total minimum lease payments	$27,098	$ 838

(1) Capital lease payments include interest payments of less than $0.1 million.

Purchase Commitments

As of December 31, 2013, the Company had unconditional commitments primarily for inventory purchases of $46.6 million. These purchase commitments are expected to be incurred as follows: $42.6 million in 2014, $3.7 million in 2015, and less than $0.4 million in 2016.

Legal Proceedings

During the third quarter of 2005, the Company's French subsidiary, GSI Lumonics SARL ("GSI France"), filed for bankruptcy protection, which was granted on July 7, 2005. On April 18, 2006, the commercial court of Le Creusot (France) ordered GSI France to pay approximately 0.7 million Euros to SCGI in the context of a claim filed by SCGI that a Laserdyne 890 system delivered in 1999 had unresolved technical problems. No appeal was lodged. On May 6, 2011, GSI Group Ltd. was served with summons from the official receiver of GSI France demanding that GSI Group Ltd. and the Company's German subsidiary, GSI Group GmbH, appear before the Paris commercial court. GSI Group GmbH was subsequently served with a separate summons from the official receiver. The cases against GSI Group Ltd. and GSI Group GmbH were subsequently combined into a single case (docket number 2011/088718). The receiver claimed (i) that the bankruptcy proceedings initiated against GSI France in 2005 should be extended to GSI Group Ltd. and GSI Group GmbH on the ground that GSI France's decisions were actually made by GSI Group Ltd. and that GSI Group GmbH made financial advances for no consideration, which would reveal in both cases confusion of personhood, or (ii) alternatively, that GSI Group Ltd. be ordered to pay approximately 3.1 million Euros (i.e. the aggregate of GSI France's liabilities, consisting primarily of approximately 0.7 million Euros to SCGI and approximately 2.4 million Euros to

GSI Group GmbH) on the ground that GSI Group Ltd. is liable in tort for having disposed of GSI France's assets freely and for having paid all of GSI France's debts except for the liability to SCGI. On June 19, 2012, the receiver withdrew its claim with respect to extending the bankruptcy proceedings to GSI Group Ltd. and GSI Group GmbH. On September 4, 2013, the Paris commercial court dismissed the receiver's tort claims in whole on the ground that the action was time-barred. On October 9, 2013, the receiver lodged an appeal before the court of appeals of Paris, and on March 4, 2014, the court of appeals affirmed the Paris commercial court's ruling.

The Company is also subject to various legal proceedings and claims that arise in the ordinary course of business. The Company does not believe that the outcome of these claims will have a material adverse effect upon its financial condition or results of operations but there can be no assurance that any such claims, or any similar claims, would not have a material adverse effect upon its financial condition or results of operations.

IRS Claim

On April 5, 2010, the IRS filed amended proofs of claim aggregating approximately $7.7 million with the United States Bankruptcy Court for Delaware (the "Bankruptcy Court") as part of the Company's proceedings under Chapter 11 of the Bankruptcy Code. On July 13, 2010, the Company filed a complaint, *GSI Group Corporation v. United States of America*, in the Bankruptcy Court in an attempt to recover refunds totaling approximately $18.8 million in federal income taxes the Company asserts it overpaid to the IRS relating to tax years 2000 through 2008, together with applicable interest. The complaint included an objection to the IRS proofs of claim which the Company believed were not allowable claims and should be expunged in their entirety.

During the fourth quarter of 2012, the Company reached a settlement agreement with the IRS and Department of Justice regarding the IRS audit for the 2000 through 2008 tax years. This settlement was accepted by the Congressional Joint Committee on Taxation during the second quarter of 2013. During 2013, the Company received cash refunds from the IRS of $12.5 million. As a result of the settlement acceptance by the Congressional Joint Committee on Taxation, the Company requested the Department of Justice to dismiss the matter without prejudice against the Company. On November 27, 2013, the case was dismissed by the court.

The Company continues to record an income tax receivable of $0.3 million as of December 31, 2013. In addition, the Company expects to realize the benefit relating to the carryback and carryforward of certain net operating losses in 2014, which will result in the refund of tax payments made in the carryback periods and lower income tax payments in the carryforward periods.

Guarantees and Indemnifications

In the normal course of its operations, the Company executes agreements that provide for indemnification and guarantees to counterparties in transactions such as business dispositions, sale of assets, sale of products and operating leases. Additionally, the by-laws of the Company require it to indemnify certain current or former directors, officers, and employees of the Company against expenses incurred by them in connection with each proceeding in which he or she is involved as a result of serving or having served in certain capacities. Indemnification is not available with respect to a proceeding as to which it has been adjudicated that the person did not act in good faith in the reasonable belief that the action was in the best interests of the Company. On June 5, 2009, the Board of Directors of the Company approved a form of indemnification agreement to be implemented by the Company with respect to its directors and officers. The form of indemnification agreement provides, among other things, that each director and officer of the Company who signs the indemnification

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agreement shall be indemnified to the fullest extent permitted by applicable law against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such officer or director in connection with any proceeding by reason of his or her relationship with the Company. In addition, the form of indemnification agreement provides for the advancement of expenses incurred by such director or officer in connection with any proceeding covered by the indemnification agreement, subject to the conditions set forth therein and to the extent such advancement is not prohibited by law. The indemnification agreement also sets out the procedures for determining entitlement to indemnification, the requirements relating to notice and defense of claims for which indemnification is sought, the procedures for enforcement of indemnification rights, the limitations on and exclusions from indemnification, and the minimum levels of directors' and officers' liability insurance to be maintained by the Company.

Credit Risks and Other Uncertainties

The Company maintains financial instruments such as cash and cash equivalents and trade receivables. From time to time, certain of these instruments may subject the Company to concentrations of credit risk whereby one institution may hold a significant portion of the cash and cash equivalents, or one customer may compose a large portion of the accounts receivable balances.

There was no significant concentration of credit risk related to the Company's position in trade accounts receivable as no individual customer represented 10% or more of the Company's outstanding accounts receivable at December 31, 2013 and 2012. Credit risk with respect to trade accounts receivables is generally minimized because of the diversification of the Company's operations, as well as its large customer base and its geographical dispersion.

Certain of the components and materials included in the Company's products are currently obtained from single source suppliers. There can be no assurance that a disruption of this outside supply would not create substantial manufacturing delays and additional cost to the Company.

The Company's operations involve a number of other risks and uncertainties including, but not limited to, the effects of general economic conditions, rapidly changing technology, and international operations.

17. Segment Information

Reportable Segments

The Company evaluates the performance of, and allocates resources to, its segments based on sales, gross profit and operating profit. The Company reports assets on a consolidated basis to the chief operating decision maker, which is the Chief Executive Officer. The Company's reportable segments have been identified based on commonality of end markets, customers, applications and technologies amongst the Company's individual product lines, which is consistent with the Company's operating structure, associated management structure, and management compensation programs.

The Company previously operated in two reportable segments: Laser Products and Precision Technologies. As a result of restructuring activities, the Company's divestitures, the acquisition of NDS, changes in organizational structure and reallocation of resources, the Company realigned its reportable segments during the fourth quarter of 2013 into three segments: Laser Products, Medical Technologies and Precision Motion. The Laser Products segment is comprised of four product lines: laser scanners, sealed CO_2 lasers, fiber lasers, and

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scientific lasers. The Medical Technologies segment consists of four product lines: visualization solutions, imaging informatics, thermal printers and light and color measurement instrumentation. The Precision Motion segment consists of two product lines: optical encoders and air bearing spindles. The Company's reportable segments are the same as our operating segments.

The segment realignment was based on the following factors: (i) customers and sales channel overlap; (ii) adjacency of the technologies and commonality amongst customer applications; (iii) Chief Operating Decision Maker's ("CODM") allocation of resources; (iv) better alignment of the product and technology platforms around our acquisition strategy; (v) grouping together those product lines whose organizational and operating cost structures present opportunities for further integration and consolidation in the future; and (vi) the strategy to compensate the CODM. The CODM's variable compensation is based on overall company performance.

The new reportable segments and their principal activities consist of the following:

Laser Products

The Laser Products segment designs, manufactures and markets photonics-based solutions to customers worldwide. The segment serves highly demanding photonics-based applications such as industrial material processing, and medical and life science imaging and laser procedures. The vast majority of the segment's product offerings are sold to OEM customers. The business sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

Medical Technologies

The Medical Technologies segment designs, manufactures and markets a range of medical grade technologies, including visualization solutions, imaging informatics products, thermal printers, and light and color measurement instrumentation to customers worldwide. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

Precision Motion

The Precision Motion segment designs, manufactures and markets optical encoders and air bearing spindles to customers worldwide. The vast majority of the segment's product offerings are sold to OEM customers. The vast majority of the segment's product offerings are sold to into the electronics, industrial and to a lesser extent the medical markets. The segment sells these products both directly, utilizing a highly technical sales force, and indirectly, through resellers and distributors.

Reportable Segment Financial Information

The following table represents sales and gross margin of the Company's reportable segments (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Sales			
Laser Products	$ 191,300	$ 186,341	$ 196,014
Medical Technologies	90,276	25,915	27,285
Precision Motion	60,036	59,242	80,997
Total	$ 341,612	$ 271,498	$ 304,296

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	Year Ended December 31,		
	2013	2012	2011
Gross Profit			
Laser Products	$ 76,040	$ 75,456	$85,891
Medical Technologies	35,824	13,149	13,647
Precision Motion	27,779	26,796	35,552
Corporate, Shared Services, and Unallocated	(194)	(925)	(1,990)
Total	$139,449	$114,476	$133,100

	Year Ended December 31,		
	2013	2012	2011
Operating Income			
Laser Products	$ 23,388	$ 19,225	$ 28,572
Medical Technologies	3,566	8,285	8,855
Precision Motion	12,062	9,482	15,675
Corporate, Shared Services, and Unallocated	(21,325)	(21,985)	(17,254)
Total	$ 17,691	$ 15,007	$ 35,848

	Year Ended December 31,		
	2013	2012	2011
Depreciation and Amortization			
Laser Products	$ 7,119	$ 9,192	$ 7,503
Medical Technologies	8,808	702	688
Precision Motion	1,979	2,066	2,768
Corporate, Shared Services, and Unallocated	2,828	3,467	3,507
Total	$20,734	$15,427	$14,466

Geographic Information

The Company aggregates geographic sales based on the customer location where products are shipped. Sales to these customers are as follows (in thousands except percentage data):

	Year Ended December 31,					
	2013		2012		2011	
	Sales	% of Total	Sales	% of Total	Sales	% of Total
United States	$115,351	33.8%	$ 86,310	31.8%	$102,792	33.8%
Germany	57,873	16.9	36,554	13.4	43,805	14.4
Rest of Europe	51,349	15.0	45,261	16.7	47,832	15.7
Asia-Pacific	75,016	22.0	67,717	24.9	72,201	23.7
Japan	29,689	8.7	27,808	10.2	30,597	10.1
Other	12,334	3.6	7,848	3.0	7,069	2.3
Total	$ 341,612	100.0%	$271,498	100.0%	$ 304,296	100.0%

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Long-lived assets consist of property, plant and equipment, net, and are aggregated based on the location of the assets. A summary of these long-lived assets are as follows (in thousands):

	December 31, 2013	December 31, 2012
United States	$23,691	$22,679
Europe	5,626	5,963
Japan	159	208
Asia-Pacific and other	3,014	3,488
Total	$ 32,490	$ 32,338

Significant Customers

No customers accounted for greater than 10% of the Company's sales during the years ended December 31, 2013, 2012 or 2011.

18. Subsequent Events

Agreement to Acquire JADAK

On February 18, 2014, the Company entered into a definitive agreement to acquire JADAK LLC, JADAK Technologies Inc. and Advance Data Capture Corporation (together, "JADAK"), a North Syracuse, New York-based provider of optical data collection and machine vision technologies to OEM medical device manufacturers, for $93.5 million in cash. The transaction, which is subject to customary closing conditions, is expected to close in March 2014. JADAK is a leading supplier of camera-based machine vision technologies that reduce medical errors and enhance safety in a wide range of medical procedures. JADAK's customer base consists of many leading medical OEM customers, many of whom are existing GSI customers.

Letter of Intent to Divest the Scientific Lasers Business

On January 31, 2014, the Company signed a letter of intent to sell certain assets and liabilities of its scientific lasers business, sold under the Continuum brand name, for $7.5 million in cash, subject to successful completion of confirmatory due diligence by the potential acquirer, entry into a definitive agreement and customary closing conditions. In addition, the agreement includes contingent consideration of up to $3.0 million based on the achievement of certain 2014 revenue targets. In accordance with ASC 360-10-45-9, "Property, Plant and Equipment – Overall – Other Presentation Matters – Long-Lived Assets Held for Sale," the Company expects that the business will qualify as "Held for Sale" and will also be reported as a discontinued operation in the first quarter of 2014. During the years ended December 31, 2013, 2012, and 2011, the scientific lasers business generated revenues of approximately $25 million, $28 million, and $35 million, respectively. The loss on the sale of the business before taxes is expected to be approximately $1.5 million to $2.5 million. As of December 31, 2013, total assets and liabilities were approximately $14 million and $4 million, respectively.

19. Selected Consolidated Financial Data

Quarterly Financial Information (unaudited)

The Company's interim financial statements are prepared on a quarterly basis ending on the Friday closest to the end of the calendar quarter, with the exception of the fourth quarter which always ends on December 31.

GSI GROUP INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
AS OF DECEMBER 31, 2013

On January 15, 2013, the Company acquired NDS and started to include the operating results of NDS in the consolidated financial statements as of the acquisition date. In the second quarter of 2013, the Company consummated the sale of certain assets and liabilities of the Semiconductor Systems business for $8.0 million in cash, subject to closing working capital adjustments, and recorded a $0.3 million loss, net of tax. In September 2013, the Company settled final working capital adjustments on the sale of the Laser Systems business and the Semiconductor Systems business and recognized additional loss on disposal of businesses of $0.3 million, net of tax.

During the fourth quarter of 2012, based on an accumulation of positive evidence such as cumulative profits over the prior three years and projections for future growth, the Company determined that it is more likely than not that the benefits of our deferred tax assets will be realized. Accordingly, a deferred tax valuation allowance release of $15.3 million was recorded as an income tax benefit during the fourth quarter of 2012. In addition, the Company sold certain assets and liabilities of the Lasers Systems business for $7.0 million, subject to working capital adjustments, and recorded a $2.3 million gain on the sale.

The following tables reflect the Company's unaudited condensed consolidated statements of operations (in thousands except per share data):

	Three Months Ended			
	December 31, 2013	September 27, 2013	June 28, 2013	March 29, 2013
Sales	$ 87,707	$ 85,484	$85,307	$ 83,114
Cost of goods sold	51,711	49,693	50,808	49,951
Gross profit	35,996	35,791	34,499	33,163
Operating expenses	29,319	30,073	30,152	32,214
Income from operations	6,677	5,718	4,347	949
Interest income (expense) and other income (expense), net	(847)	(1,936)	(1,048)	670
Income from continuing operations before income taxes	5,830	3,782	3,299	1,619
Income tax provision	1,463	1,610	2,457	150
Income from continuing operations	4,367	2,172	842	1,469
Income (loss) from discontinued operations, net of tax.	(79)	(113)	(1,384)	649
Loss on disposal of discontinued operations, net of tax	—	(281)	(311)	—
Consolidated net income (loss)	4,288	1,778	(853)	2,118
Net (income) loss attributable to noncontrolling interest	20	12	(18)	(36)
Net income (loss) attributable to GSI Group Inc	$ 4,308	$ 1,790	$ (871)	$ 2,082
Earnings from continuing operations per common share:				
Basic	$ 0.13	$ 0.06	$ 0.02	$ 0.04
Diluted	$ 0.13	$ 0.06	$ 0.02	$ 0.04
Earnings (loss) from discontinued operations per common share:				
Basic	$ —	$ (0.01)	$ (0.05)	$ 0.02
Diluted	$ —	$ (0.01)	$ (0.05)	$ 0.02
Net income (loss) per common share:				
Basic	$ 0.13	$ 0.05	$ (0.03)	$ 0.06
Diluted	$ 0.13	$ 0.05	$ (0.03)	$ 0.06

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GSI GROUP INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
AS OF DECEMBER 31, 2013

	Three Months Ended			
	December 31, 2012	September 28, 2012	June 29, 2012	March 30, 2012
Sales	$ 66,413	$ 69,520	$ 70,379	$65,186
Cost of goods sold	39,138	40,667	39,712	37,505
Gross profit	27,275	28,853	30,667	27,681
Operating expenses	23,978	25,061	25,570	24,860
Income from operations	3,297	3,792	5,097	2,821
Interest income (expense) and other income (expense), net	(772)	(1,174)	(13)	(1,514)
Income from continuing operations before income taxes	2,525	2,618	5,084	1,307
Income tax provision (benefit)	(12,350)	563	617	230
Income from continuing operations	14,875	2,055	4,467	1,077
Income (loss) from discontinued operations, net of tax	(1,317)	(4,570)	414	322
Gain on disposal of discontinued operations, net of tax.	2,255	—	—	—
Consolidated net income (loss)	15,813	(2,515)	4,881	1,399
Net (income) loss attributable to noncontrolling interest	5	(19)	(8)	(18)
Net income (loss) attributable to GSI Group Inc	$ 15,818	$ (2,534)	$ 4,873	$ 1,381
Earnings from continuing operations per common share:				
Basic	$ 0.44	$ 0.06	$ 0.13	$ 0.03
Diluted	$ 0.44	$ 0.06	$ 0.13	$ 0.03
Earnings (loss) from discontinued operations per common share:				
Basic	$ 0.03	$ (0.13)	$ 0.01	$ 0.01
Diluted	$ 0.03	$ (0.13)	$ 0.01	$ 0.01
Net income (loss) per common share:				
Basic	$ 0.47	$ (0.07)	$ 0.14	$ 0.04
Diluted	$ 0.47	$ (0.07)	$ 0.14	$ 0.04

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

The Audit Committee of the Board completed a competitive process to recommend the engagement of the Company's independent registered public accounting firm for the year ended December 31, 2013. As a result of this process, and in order that PricewaterhouseCoopers could assume office immediately and to comply with the requirements of the Business Corporations Act (New Brunswick), on April 12, 2013, the Board, upon the recommendation of the Audit Committee, requested that Ernst & Young resign as the Company's independent registered public accounting firm. Effective as of April 18, 2013, the Board approved the engagement of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm.

Ernst & Young's reports on the Company's consolidated financial statements as of and for the fiscal years ended December 31, 2012 and December 31, 2011 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles. The audit reports of Ernst & Young on the effectiveness of internal control over financial reporting as of December 31, 2012 and 2011 did not contain any adverse opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles. During the fiscal years ended December 31, 2012 and December 31, 2011, and the subsequent interim period through April 12, 2013, there were no "disagreements" as that term is defined in Item 304(a)(1)(iv) of Regulation S-K, between the Company and Ernst & Young on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, any of which that, if not resolved to the satisfaction of Ernst & Young, would have caused Ernst & Young to make reference to the subject matter of the disagreement in their reports on the financial statements for such years. During the fiscal years ended December 31, 2012 and December 31, 2011, and the subsequent interim period through April 12, 2013, there were no "reportable events" as that term is defined in Item 304(a)(1)(v) of Regulation S-K, except that, as reported in Item 9A of the Company's Annual Report on Form 10-K for the year ended December 31, 2011, the Company reported a material weakness in its internal control over financial reporting during such fiscal year, which was remediated as of December 31, 2011.

The Company provided Ernst & Young with a copy of the disclosures included in its Current Report on Form 8-K filed on April 18, 2013 (the "Current Report"). The Company requested that Ernst & Young furnish a letter addressed to the Securities and Exchange Commission stating whether or not it agrees with the statements made in the Current Report. A copy of Ernst & Young's letter dated April 16, 2013 was attached as Exhibit 16.1 to the Current Report.

During the fiscal years ended December 31, 2012 and December 31, 2011, and the subsequent interim period through April 17, 2013, neither the Company nor anyone acting on its behalf consulted with PricewaterhouseCoopers with respect to (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's financial statements, and neither a written report nor oral advice was provided to the Company that PricewaterhouseCoopers concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing, or financial reporting issue or (ii) any matter that was either the subject of a "disagreement" or "reportable event" as those terms are defined in Item 304(a)(1) of Regulation S-K.

Item 9A. *Controls and Procedures*

The required certifications of our Chief Executive Officer and Chief Financial Officer are included in Exhibits 31.1 and 31.2 to this Annual Report on Form 10-K. The disclosures set forth in this Item 9A contain information concerning the evaluation of our disclosure controls and procedures, management's report on internal controls over financial reporting and changes in internal control over financial reporting referred to in those certifications. Those certifications should be read in conjunction with this Item 9A for a more complete understanding of the matters covered by the certifications.

Evaluation of Disclosure Controls and Procedures as of December 31, 2013

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2013.

Changes in Internal Control Over Financial Reporting

There have been no changes to our internal control over financial reporting during the quarter ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) under the Exchange Act. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles. 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 our transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that 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.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2013. In making their assessment, our management utilized the criteria set forth in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in 1992. Based on our evaluation under the framework in *Internal Control—Integrated Framework*, issued by COSO in 1992, our management concluded that our internal control over financial reporting was effective as of December 31, 2013.

The effectiveness of our internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is contained in Item 8 of this Annual Report on Form 10-K.

Item 9B. ***Other Information***

None.

Certain information required by Part III is omitted from this Annual Report on Form 10-K and is incorporated herein by reference to the Registrant's Definitive Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on May 15, 2014 to be filed with the Securities and Exchange Commission.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

All of the Company's directors, officers and employees must act in accordance with the Code of Ethics and Business Conduct, which has been adopted by the Company's Board of Directors. A copy of the Code of Ethics and Business Conduct is available on the Company's website at http://www.gsig.com in the "About GSI" section. (This website address is not intended to function as a hyperlink, and the information contained in our website is not intended to be a part of this filing). The Company will provide to any person without charge, upon request, a copy of the Code of Ethics and Business Conduct. Such a request should be made in writing and addressed to GSI Group Inc., Attention: Investor Relations, 125 Middlesex Turnpike, Bedford, MA 01730. The Company intends to satisfy the disclosure requirement under NASDAQ rules regarding waivers or under Item 5.05 of Form 8-K regarding disclosure of an amendment to, or waiver from, a provision of this Code of Ethics and Business Conduct with respect to its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, by posting such information on the Company's website at http://www.gsig.com in the "About GSI" section, unless a Form 8-K is otherwise required by law or applicable listing rules.

The remainder of the response to this item is contained in the Proxy Statement for the Company's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 and is incorporated herein by reference.

Item 11. *Executive Compensation*

The information required to be disclosed by this item is contained in the Proxy Statement for the Company's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 and is incorporated herein by reference.

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

The information required to be disclosed by this item is contained in the Proxy Statement for the Company's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 and is incorporated herein by reference.

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

The information required to be disclosed by this item is contained in the Proxy Statement for the Company's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 and is incorporated herein by reference.

Item 14. *Principal Accounting Fees and Services*

The information required to be disclosed by this item is contained in the Proxy Statement for the Company's Annual Meeting of Shareholders scheduled to be held on May 15, 2014 and is incorporated herein by reference.

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PART IV

Item 15. *Exhibits and Financial Statement Schedules*

(a) Documents filed as part of this report:

1. List of Financial Statements

The financial statements required by this item are listed in Item 8, "Financial Statements and Supplementary Data" herein.

2. List of Financial Statement Schedules

All schedules are omitted because they are not applicable, not required or the required information is shown in the consolidated financial statements or notes thereto.

3. List of Exhibits

See the Company's SEC filings on Edgar at: http://www.sec.gov/ for all Exhibits.

		Incorporated by Reference				
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
2.1	Agreement and Plan of Merger, by and among the Registrant, Eagle Acquisition Corporation, and Excel Technology, Inc. dated July 9, 2008.	8-K	000-25705	2.1	7/11/08	
2.2	Asset Purchase Agreement, by and between GSI Group Corporation and Gooch & Housego (California) LLC., dated July 3, 2008.	10-Q	000-25705	2.1	4/13/10	
2.3	Final Fourth Modified Joint Chapter 11 Plan of Reorganization for the Registrant, GSI Group Corporation, and MES International, Inc., dated as of May 24, 2010, as supplemented on May 27, 2010, and as confirmed by the United States Bankruptcy Court for the District of Delaware on May 27, 2010.	8-K	000-25705	99.2	05/28/10	
2.4	Master Purchase and Sale Agreement, dated April 9, 2013, between GSI Group Inc., GSI Group Corporation, GSI Group Corporation, Korea Branch, GSI Group Corporation, Taiwan Branch, GSI Group Japan Corporation, GSI Group GmbH and Electro Scientific Industries, Inc.	8-K	000-25705	2.1	5/09/13	
2.5	Securities Purchase Agreement dated January 15, 2013, between NDSSI Holdings, LLC, NDS Surgical Imaging, Inc., GSI Group Inc. and GSI Group Limited UK.	8-K	001-35083	2.1	01/15/13	

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Exhibit Number	Exhibit Description	Incorporated by Reference: Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
2.6	Equity Purchase Agreement dated February 18, 2014, between JADAK, LLC, JADAK Technologies, Inc., Advanced Data Capture Corporation, GSI Group Inc. and GSI Group Corporation.	8-K	001-35083	10.1	02/18/14	
3.1	Certificate and Articles of Continuance of the Registrant, dated March 22, 1999.	S-4/A	333-71449	Annex H	2/11/99	
3.2	By-Laws of the Registrant, as amended.	10-Q	000-25705	3.2	4/13/10	
3.3	Articles of Reorganization of the Registrant, dated July 23, 2010.	8-K	000-25705	3.1	07/23/10	
3.4	Articles of Amendment of the Registrant, dated December 29, 2010.	8-K	000-25705	3.1	12/29/10	
4.1	Indenture, dated as of July 23, 2010, by and among GSI Group Corporation, as Issuer, the Guarantors named therein and The Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	000-25705	4.1	07/23/10	
4.2	Registration Rights Agreement, by and between the Registrant and the Common Shareholders named therein, dated as of July 23, 2010.	8-K	000-25705	4.2	07/23/10	
10.1†	Form of Indemnification Agreement.	8-K	000-25705	10.1	06/10/09	
10.2	Noteholder Restructuring Plan Support Agreement, by and among the Registrant, GSI Group Corporation, MES International, Inc. and Liberty Harbor Master Fund I, L.P., Tinicum Capital Partners II, L.P., Highbridge International LLC, Special Value Continuation Partners, L.P., Special Value Expansion Fund, LLC, Tennenbaum Opportunities Partners V, LP, Special Value Opportunities Fund, LLC, and Hale Capital Partners, LP., dated November 19, 2009.	8-K	000-25705	10.1	11/20/09	
10.3	Amended and Restated Noteholder Restructuring Plan Support Agreement, by and among the Registrant, GSI Group Corporation, MES International, Inc. and Liberty Harbor Master Fund I, L.P., Tinicum Capital Partners II, L.P., Highbridge International LLC, Special Value Continuation Partners, L.P., Special Value Expansion Fund, LLC, Tennenbaum Opportunities Partners V, LP, Special Value Opportunities Fund, LLC, and Hale Capital Partners, LP., dated March 16, 2010.	8-K	000-25705	10.1	03/19/10	

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
10.4	Lease, by and between GSI Group Corporation and 125 Middlesex Turnpike, LLC, dated November 2, 2007.	10-K	000-25705	10.19	04/13/10	
10.5	Lease Agreement, by and between GSI Lumonics Corporation and SEWS-DTC, INC., dated February 11, 2005.	8-K	000-25705	10.2	02/16/05	
10.6	Real Estate Purchase and Sale Agreement, by and between GSI Group Corporation and SAgE Aggregation, LLC, dated November 14, 2005.	8-K	000-25705	10.1	01/10/06	
10.7	Amendment to Real Estate Purchase and Sale Agreement, by and between GSI Group Corporation and SAgE Aggregation, LLC, dated December 26, 2005.	8-K	000-25705	10.2	01/10/06	
10.8	Second Amendment to Real Estate Purchase and Sale Agreement, by and between GSI Group Corporation and Stage II Maple Grove LLC (successor of SAgE Aggregation, LLC), dated December 29, 2005.	8-K	000-25705	10.3	01/10/06	
10.9	OEM Supply Agreement, by and between Registrant and Sumitomo Heavy Industries, Ltd., dated August 31, 1999.	10-K	000-25705	10.21	03/22/00	
10.10†	Form of Executive Retirement And Severance Benefits Agreement.	8-K	000-25705	10.1	02/16/05	
10.11	Letter from Jones Day, on behalf of Stephen Bershad, to Brown Rudnick LLP, on behalf of the Registrant and its debtor affiliates, dated December 2, 2009.	8-K	000-25705	10.1	12/07/09	
10.12	Restructuring Plan Support Agreement, by and among the Registrant, GSI Group Corporation, MES International, Inc., the Equity Committee, the Equity Holders, and the Note Holders, dated as of May 14, 2010.	8-K	000-25705	10.1	05/18/10	
10.13	Backstop Commitment Agreement, by and among the Registrant and the investors identified on Schedule I thereto, dated as of May 14, 2010.	8-K	000-25705	10.2	05/18/10	
10.14	Engagement Letter Between the Registrant, GSI Group Corporation, MES International, Inc. and FTI Consulting, Inc., dated as of May 6, 2010.	8-K	000-25705	10.3	05/18/10	
10.15†	Separation and Release Agreement, by and between the Registrant and Sergio Edelstein, dated as of May 24, 2010.	8-K	000-25705	10.1	05/28/10	

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
10.16	Security Agreement, by and among GSI Group Corporation, the Grantors named therein and The Bank of New York Mellon Trust Company, N.A., as collateral agent, dated as of July 23, 2010.	8-K	000-25705	10.1	07/23/10	
10.17	Escrow Agreement, by and among the Registrant and Law Debenture Trust Company of New York, as escrow agent, dated as of July 23, 2010.	8-K	000-25705	10.2	07/23/10	
10.18	Open-Ended Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filings, dated as of July 23, 2010, made by Synrad, Inc. in favor of First American Title Insurance Company and The Bank of New York Mellon Trust Company, N.A.	8-K	000-25705	10.3	07/23/10	
10.19	Open-Ended Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filings, dated as of July 23, 2010, made by Control Laser Corporation in favor of The Bank of New York Mellon Trust Company, N.A.	8-K	000-25705	10.4	07/23/10	
10.20	Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of July 23, 2010, made by Photo Research, Inc., in favor of First American Title Insurance Company and The Bank of New York Mellon Trust Company, N.A.	8-K	000-25705	10.5	07/23/10	
10.21	First Amendment to Lease, dated February 10, 2010 and effective as of May 27, 2010, by and between GSI Group Corporation and 125 Middlesex Turnpike, LLC.	10-K	000-25705	10.53	10/01/10	
10.22†	GSI Group, Inc. 2010 Incentive Award Plan.	8-K	000-25705	10.1	11/30/10	
10.23†	First Amendment to the GSI Group Inc. 2010 Incentive Award Plan.	10-K	001-35083	10.55	03/30/11	
10.24†	Employment Agreement, dated as of November 16, 2010, between GSI Group Inc. and John Roush.	8-K	000-25705	10.1	11/17/10	
10.25†	Employment Agreement, dated as of February 10, 2011, between GSI Group Inc. and Robert Buckley.	8-K	001-35083	10.1	02/11/11	
10.26†	Restricted Stock Cancellation Agreement, dated as of March 11, 2011 between GSI Group Inc. and Byron Pond.	10-K	001-35083	10.58	03/30/11	
10.27†	Form of Deferred Stock Unit Award Agreement.	10-K	001-35083	10.59	03/30/11	

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
10.28†	Form of Restricted Stock Unit Award Agreement for John Roush and Robert Buckley.	10-K	001-35083	10.60	03/30/11	
10.29	First Amendment to the Engagement Letter between the Registrant, GSI Group Corporation, MES International, Inc. and FTI Consulting, Inc., dated as of February 6, 2011.	10-K	001-35083	10.61	03/30/11	
10.30†	Form of U.S. Restricted Stock Unit Award Agreement.	10-Q	001-35083	10.2	05/16/11	
10.31†	Letter Agreement, between GSI Group Inc. and Anthony J. Bellantuoni, dated June 21, 2011.	8-K	001-35083	10.1	06/22/11	
10.32†	Severance Agreement, dated as of April 25, 2011, by and between GSI Group Inc. and David Clarke.	10-Q	001-35083	10.1	08/11/11	
10.33†	Offer Letter, dated June 23, 2011, between GSI Group Inc. and Jamie Bader.	10-Q	001-35083	10.3	08/11/11	
10.34†	Offer Letter, dated June 8, 2011, between GSI Group Inc. and Peter Chang.	10-Q	001-35083	10.1	11/10/11	
10.35†	Offer Letter, dated July 27, 2011, between GSI Group Inc. and Deborah Mulryan.	10-Q	001-35083	10.2	11/10/11	
10.36	Credit Agreement, dated October 19, 2011, by and among GSI Group Corporation, GSI Group, Inc., Bank of America, N.A., as Administrative Agent, Silicon Valley Bank, as Syndication Agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Sole Lead Arranger and Sole Book Manager, and HSBC.	8-K	001-35083	10.1	10/19/11	
10.37	First Amendment of Credit Agreement, dated March 9, 2012, by and among GSI Group Corporation, GSI Group, Inc., Bank of America, N.A., as Administrative Agent, Silicon Valley Bank, and HSBC.	10-K	001-35083	10.69	03/14/12	
10.38	Amended and Restated Lease, dated May 1, 2012, by and between GSI Group Inc. and 125 Middlesex Turnpike, LLC.	8-K	001-35083	10.1	05/04/12	
10.39	Second Amendment to Credit Agreement, dated July 19, 2012, by and among GSI Group Corporation, GSI Group Inc., and Bank of America, N.A., as Administrative Agent.	8-K	001-35083	10.1	07/23/12	
10.40†	Letter Agreement, dated September 4, 2012, between GSI Group Inc. and David Clarke.	8-K	001-35083	10.1	09/06/12	

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
10.41	Third Amendment to Credit Agreement, dated October 16, 2012, by and among GSI Group Corporation, GSI Group, Inc., and Bank of America, N.A., as Administrative Agent.	10-Q	001-35083	10.3	11/07/12	
10.42†	Severance Agreement, dated as of August 15, 2012, between GSI Group Inc. and Deborah Mulryan.	10-Q	001-35083	10.5	11/07/12	
10.43†	Severance Agreement, dated as of August 15, 2012, between GSI Group Inc. and Jamie Bader.	10-Q	001-35083	10.6	11/07/12	
10.44†	Severance Agreement, dated as of August 15, 2012, between GSI Group Inc. and Peter Chang.	10-Q	001-35083	10.7	11/07/12	
10.45	Amended and Restated Credit Agreement, dated as of December 27, 2012, by and among GSI Group Corporation, GSI Group Inc., Bank of America, N.A., as Administrative Agent, Line Lender and L/C Issuer, Silicon Valley Bank, as Syndication Agent, and HSBC Bank USA, N.A., as Documentation Agent, and the other lenders party thereto.	8-K	001-35083	10.1	01/03/13	
10.46	Consent and First Amendment to Amended and Restated Credit Agreement dated January 14, 2013 by and among GSI Group Corporation and Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer.	8-K	001-35083	10.1	01/15/13	
10.47	Joinder and Amendment Agreement, dated as of February 1, 2013, by and among GSI Group Corporation, NDS Surgical Imaging, LLC, GSI Group Inc., Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders party thereto.	8-K	001-35083	10.1	02/07/13	
10.48†	Letter Agreement, dated October 28, 2013, between GSI Group Inc. and Jamie Bader.	8-K	001-35083	10.1	10/30/13	
10.49	Third Amendment to Amended and Restated Credit Agreement, dated September 13, 2013, by and among GSI Group Corporation, NDS Surgical Imaging, LLC, GSI Group Inc., each of the other Guarantors party hereto, each lender party hereto, and Bank of America, N.A., as Administrative Agent.	10-Q	001-35083	10.1	11/05/13	
10.50	Lease Agreement, dated November 22, 2013, by and between Continuum Electro-Optics, Inc., GSI Group Corporation and Legacy Partners I San Jose, LLC.	8-K	001-35083	10.1	12/02/13	

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File No.	Exhibit	Filing Date	Filed/ Furnished Herewith
10.51	Fourth Amendment to Amended and Restated Credit Agreement, dated as of February 10, 2014, by and among GSI Group Corporation, NDS Surgical Imaging, LLC, GSI Group Inc., Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, and the other lenders party thereto.	8-K	001-35083	10.1	02/14/14	
21.1	Subsidiaries of the Registrant.					*
23.1	Consent of Independent Registered Public Accounting Firm.					*
23.2	Consent of Independent Registered Public Accounting Firm.					*
31.1	Chief Executive Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					*
31.2	Chief Financial Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					*
32.1	Chief Executive Officer Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					**
32.2	Chief Financial Officer Certification 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 Schema Document.					*
101.CAL	XBRL Calculation Linkbase Document.					*
101.DEF	XBRL Definition Linkbase Document.					*
101.LAB	XBRL Labels Linkbase Document.					*
101.PRE	XBRL Presentation Linkbase Document.					*

† This exhibit constitutes a management contract, compensatory plan, or arrangement.

* Filed herewith

** Furnished herewith

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets at December 31, 2013 and December 31, 2012, (ii) Consolidated Statements of Operations for the years ended December 31, 2013, December 31, 2012, and December 31, 2011, (iii) Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2013, December 31, 2012 and December 31, 2011, (iv) Consolidated Statements of Stockholders' Equity for the years ended December 31, 2013, December 31, 2012, and December 31, 2011, (v) Consolidated Statements of Cash Flows for the years ended December 31, 2013, December 31, 2012, and December 31, 2011, and (vi) Notes to Consolidated Financial Statements.

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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.

GSI GROUP INC.

By: /s/ John A. Roush

John A. Roush
Chief Executive Officer

Date: March 13, 2014

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.

GSI Group Inc. (Registrant)

Name	Title	Date
/s/ John A. Roush **John A. Roush**	Director, Chief Executive Officer	March 13, 2014
/s/ Robert J. Buckley **Robert J. Buckley**	Chief Financial Officer	March 13, 2014
/s/ Peter L. Chang **Peter L. Chang**	Vice President, Corporate Controller (Chief Accounting Officer)	March 13, 2014
/s/ Stephen W. Bershad **Stephen W. Bershad**	Chairman of the Board of Directors	March 13, 2014
/s/ Harry L. Bosco **Harry L. Bosco**	Director	March 13, 2014
/s/ Dennis J. Fortino **Dennis J. Fortino**	Director	March 13, 2014
/s/ Ira J. Lamel **Ira J. Lamel**	Director	March 13, 2014
/s/ Dominic A. Romeo **Dominic A. Romeo**	Director	March 13, 2014
/s/ Thomas N. Secor **Thomas N. Secor**	Director	March 13, 2014

Exhibit 21.1

GSI GROUP INC. SUBSIDIARIES

Subsidiary	Place of Incorporation
GSI Group Corporation	Michigan
GSI Group Japan Corporation	Japan
GSI Group Singapore Pte. Ltd.	Singapore
GSI Group GmbH	Germany
GSI Group Limited	United Kingdom
GSI Lumonics SARL	France
Westwind Air Bearings Limited	United Kingdom
GSI Group Precision Technologies (Suzhou) Co., Ltd.	China
General Scanning Securities Corporation	Massachusetts
MicroE Systems Corp.	Delaware
MES International Inc.	Delaware
GSI Lumonics Asia Pacific Ltd.	Hong Kong
Excel Technology, Inc.	Delaware
Cambridge Technology, Inc.	Massachusetts
The Optical Corporation	California
Synrad, Inc.	Washington
Continuum Electro-Optics, Inc.	Delaware
Photo Research, Inc.	Delaware
Excel Laser Technology Pvt. Ltd. (1)	India
Excel Technology Asia Sdn. Bhd	Malaysia
GSI Group Europe GmbH	Germany
GSI Application Development (Private) Limited in Sri Lanka	Sri Lanka
Excel Technology Italy Srl	Italy
GSI Group France S.A.S.	France
NDS Surgical Imaging K.K.	Japan
NDS Surgical Imaging, LLC	Delaware
NDS Imaging Holdings, LLC	Delaware
NDS Holdings, BV	Netherlands
NDS Surgical Imaging BV	Netherlands

(1) Excel Laser Technology Pvt. Ltd. is a 50% owned joint venture of Excel Technology Inc., an indirect wholly owned subsidiary of GSI Group Inc.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-180098 and 333-154157) and Form S-8 (Nos. 333-76849, 333-43080, 333-73666, 333-118320, and 333-171260) of GSI Group Inc. of our report dated March 13, 2014 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 13, 2014

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements (Form S-3, Nos. 333-180098 and 333-154157, and Form S-8, Nos. 333-43080, 333-76849, 333-73666, 333-118320, and 333-171260) of our report dated March 18, 2013 (except Notes 7, 15 and 17, as to which the date is March 13, 2014), with respect to the consolidated financial statements of GSI Group Inc. as of December 31, 2012 and for each of the two years in the period ended December 31, 2012, included in this Annual Report (Form 10-K) for the year ended December 31, 2013.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 13, 2014

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002
CERTIFICATION

I, John A. Roush, certify that:

1. I have reviewed this annual report on Form 10-K of GSI Group Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 13, 2014

/s/ John A. Roush

John A. Roush
Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002
CERTIFICATION

I, Robert J. Buckley, certify that:

1. I have reviewed this annual report on Form 10-K of GSI Group Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 13, 2014

/s/ Robert J. Buckley
Robert J. Buckley
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of GSI Group Inc. (the "Company") on Form 10-K for the period ended December 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John A. Roush, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) the Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ John A. Roush
John A. Roush
Chief Executive Officer

March 13, 2014

This Certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, or incorporated by reference into any of the Company's filings with the Securities and Exchange Commission by implication or by any reference in any such filings to the Report.

A signed original of this written statement required by Section 906 has been provided to GSI Group Inc. and will be retained by GSI Group Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of GSI Group Inc. (the "Company") on Form 10-K for the period ended December 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert J. Buckley, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) the Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert J. Buckley
Robert J. Buckley
Chief Financial Officer

March 13, 2014

This Certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, or incorporated by reference into any of the Company's filings with the Securities and Exchange Commission by implication or by any reference in any such filings to the Report.

A signed original of this written statement required by Section 906 has been provided to GSI Group Inc. and will be retained by GSI Group Inc. and furnished to the Securities and Exchange Commission or its staff upon request.