

Mistras Group, Inc.  
Form 10-K  
August 14, 2013  
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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## Form 10-K

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

For the fiscal year ended May 31, 2013

Commission File Number 001-34481

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## Mistras Group, Inc.

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**22-3341267**  
(I.R.S. Employer  
Identification Number)

**195 Clarksville Road**

**Princeton Junction, New Jersey 08550**

**(609) 716-4000**

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(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)



Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value \$.01 par value	New York Stock Exchange

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



Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the Exchange Act). Yes  No

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

Indicate by check mark whether the registrant has submitted electronically 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 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

Smaller reporting company

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the Registrant as of November 30, 2012, based upon the closing price of the common stock as reported by New York Stock Exchange on such date was approximately \$364.0 million.

As of August 1, 2013, a total of 28,211,006 shares of the Registrant's common stock were outstanding.

### **DOCUMENTS INCORPORATED BY REFERENCE**

Information required by Part III (Items 10, 11, 12, 13 and 14) is incorporated by reference to portions of the registrant's definitive Proxy Statement for its 2013 Annual Meeting of Shareholders (the "Proxy Statement"), which is expected to be filed not later than 120 days after the registrant's fiscal year ended May 31, 2013. Except as expressly incorporated by reference, the Proxy Statement shall not be deemed to be a part of this report on Form 10-K.

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**ANNUAL REPORT ON FORM 10-K**

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**ITEM 1. BUSINESS**

**FORWARD-LOOKING STATEMENTS**

This Report on Form 10-K contains forward-looking statements regarding us and our business, financial condition, results of operations and prospects within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as goals, expects, anticipates, intends, plans, believes, estimates, may, could, should, would, predicts, appears, projects, or the negative of such terms or other similar expressions. Factors that cause or contribute to differences in results and outcomes from those in our forward-looking statements include, without limitation, those discussed elsewhere in this Report in Part I, Item 1A. Risk Factors and in this Item 1, as well as those discussed in our other Securities and Exchange Commission (SEC) filings. We undertake no obligation to (and expressly disclaim any obligation to) revise or update any forward-looking statements made herein whether as a result of new information, future events or otherwise. However, you should consult any further disclosures we may make on these or related topics in our reports on Form 8-K or Form 10-Q filed with the SEC.

The following discussions should be read in conjunction with the sections of this Report entitled Management's Discussion and Analysis of Financial Condition and Results of Operations and Risk Factors.

**Our Business**

We offer our customers one source for asset protection solutions and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in mechanical integrity (MI), Non-Destructive Testing (NDT), Destructive Testing (DT) and predictive maintenance (PdM) services, proprietary data analysis and enterprise inspection database management warehousing software to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity management and assessments. These mission critical solutions enhance our customers' ability to comply with governmental safety and environmental regulations, extend the useful life of their assets, increase productivity, minimize repair costs, manage risk and avoid catastrophic disasters. Given the role our solutions play in ensuring the safe and efficient operation of infrastructure, we have historically provided a majority of our services to our customers on a regular, recurring basis. We serve a global customer base of companies with asset-intensive infrastructure, including companies in the oil and gas (downstream, midstream, upstream and petrochemical), power generation (natural gas, fossil, nuclear, alternative, renewable, and transmission and distribution), public infrastructure, chemicals, commercial aerospace and defense, transportation, primary metals and metalworking, pharmaceutical/biotechnology, food processing industries and research and engineering institutions. As of May 31, 2013, we had approximately 4,400 employees, including approximately 30 Ph.D.'s and 100 other degreed engineers and certified Level III technicians, in approximately 100 offices across 16 countries. We have established long-term relationships as a critical solutions provider to many of the leading companies in our target markets. The following chart represents the percentage of consolidated revenues we generated from our various markets for fiscal 2013.



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**Mistras Revenues by End Market**

**(Fiscal 2013)**

Our asset protection solutions continuously evolve over time as we combine the disciplines of NDT, DT, PdM, MI services and data analysis and enterprise inspection warehousing software to provide value to our customers. The foundation of our business is NDT, which is the examination of assets without impacting current and future usefulness or impairing the integrity of these assets. The ability to inspect infrastructure assets and not interfere with their operating performance makes NDT a highly attractive alternative to many traditional intrusive inspection techniques, which may require dismantling equipment or shutting down a plant, mill or site. Our MI services are a systematic engineering-based approach to developing best practices for ensuring the on-going integrity and safety of equipment and industrial facilities. MI services involve conducting an inventory of infrastructure assets, developing and implementing inspection and maintenance procedures, training personnel in executing these procedures and managing inspections, testing and assessments of customer assets. By assisting customers in implementing MI programs we enable them to identify gaps between existing and desired practices, find and track deficiencies and degradations to be corrected and establish quality assurance standards for fabrication, engineering and installation of infrastructure assets. We believe our MI services improve plant safety and reliability and regulatory compliance, and in so doing reduce maintenance costs. Our solutions also incorporate comprehensive Risk Based Inspection (RBI) data analysis from our proprietary asset protection software to provide customers with detailed, integrated and cost-effective solutions that rate the risks of alternative maintenance approaches and recommend actions in accordance with consensus industry codes and standards and help to establish and support key performance indicators (KPI s) to ensure continued safe and economic operations.

We differentiate ourselves by delivering these solutions under our *One Source* umbrella, utilizing a proven systematic method that creates a closed loop life cycle for addressing continuous asset protection and improvement. Under this business model, customers outsource their

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inspection to us on a run and maintain basis. As a global asset protection leader, we provide a comprehensive range of solutions that includes:

- traditional and advanced outsourced NDT services conducted by our technicians, mechanical integrity assessments, above-ground storage tank inspection, pipeline inspection and American Petroleum Institute (API) visual inspections and PdM program development;
- destructive testing (DT) is a definitive discipline in material testing, taking specimens through to mechanical failure while examining a host of factors. Hardness, stiffness and strength are a few key indicators drawn from destructive tests per customer specifications. DT is a strength of our recent acquisition, Mistras-GMA in Germany, which specializes in an array of destructive testing applications utilized throughout the materials selection and approval process in the aerospace, automotive, chemical, oil & gas and power generation industries. Example testing includes;



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- **Mechanical tests** Materials, specimens and even composites are subjected to increasing levels of tension, compression, shear and peeling until failure. There are a number of variations of mechanical testing in which adding temperature, strain, unidirectional load or shear can provide useful results
- **Physical/Chemical** Used to examine specific material and thermal characteristics as well as chemical compositions, including differential scanning calorimetry (DSC), high performance liquid chromatography, fiber volume content and fourier transformation infrared spectroscopy (FTIR)
- **Materialography** Gives an insight into the geometries of structural composites, which presents an inside track with regards to determining failure mechanisms and asset lifespan expectations.
- advanced asset protection solutions, in most cases involving proprietary acoustic emission (AE), digital radiography, infrared, wireless and/or automated ultrasonic inspections and sensors, which are operated by our highly trained technicians;
- a proprietary and customized portfolio of software products for testing and analyzing data captured in real-time by our technicians and sensors, including advanced features such as pattern recognition and neural networks;
- enterprise software and relational databases to store and analyze inspection data, comparing it to prior operations and testing of similar assets, industrial standards and specific risk conditions, such as use with highly flammable or corrosive materials, and developing asset integrity management plans based on risk-based inspection that specify an optimal schedule for the testing, maintenance and retirement of assets;
- on-line monitoring systems that provide secure web-based remote or on-site asset inspection, real-time reports and analysis of plant or enterprise-wide structural integrity data, comparison of integrity data to our library of historical inspection data and analysis to better assess structural integrity and provide alerts for and prioritize future inspections and maintenance; and
- **in-house testing services:** Mistras in-house inspection services provide cost-effective, efficient solutions that improve the integrity and lifespan of critical assets featuring a dynamic suite of testing and inspection services. With a network of 15 in-house laboratories, Mistras provides a one-stop shop for traditional (NDT), advanced non-destructive testing (ANDT), and destructive testing (DT) of materials and fabricated structures by offering a complete inspection package from preparation and production all the way to post-processing. These capabilities are available through our state-of-the-art testing equipment and expertise in our grid of in-house testing laboratories across the U.S.A., Canada and Europe.

Our labs hold a wide variety of certifications that allow them to perform inspections to meet or exceed stringent regulatory requirements, such as: NADCAP, AS9100/ISO-9001, FAA Repair Station and ITAR/EAR. With these certifications comes a comprehensive range of approvals from Prime Contractors, the military, and internationally renowned products and systems manufactures from aerospace to nuclear energy; transportation to petrochemical industries.

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We offer our customers a customized package of services, products and systems, or our enterprise software and other niche high-value products on a stand-alone basis. For example, customers can purchase most of our sensors and accompanying software to integrate with their own systems, or they can purchase a complete turn-key solution, including installation, monitoring and assessment services. Importantly, however, we do not sell certain of our advanced and proprietary software and other products as stand-alone offerings; instead, we embed them in our comprehensive service offerings to protect our investment in intellectual property while providing an added value which generates a substantial source of recurring revenues.

We generated revenues of \$529.3 million, \$436.9 million and \$338.6 million, net income of \$11.6 million, \$21.4 million and \$16.4 million, and adjusted EBITDA of \$68.3 million, \$65.2 million and \$52.3 million for fiscal 2013, 2012 and 2011, respectively. An explanation of adjusted EBITDA and a reconciliation of these amounts to net income are set forth in Item 6 - Selected Financial Data. For fiscal 2013, we generated approximately 72% of our revenues from our Services segment. Our revenues are diversified, with our top ten customers accounting for approximately 34%, 39% and 44% of our revenues during fiscal 2013, 2012 and 2011, respectively.

### **Asset Protection Industry Overview**

Asset protection is a large and rapidly growing industry that consists of NDT inspection, DT inspection, PdM and MI services and inspection data warehousing and analysis. NDT plays a crucial role in assuring the operational and structural integrity and reliability of critical infrastructure without compromising the usefulness of the tested materials or equipment. The evolution of NDT services, in combination with broader industry trends, including increased asset utilization and aging of infrastructure, the desire by companies to extend the useful life of their existing infrastructure, new construction projects, enhanced government regulation and the shortage of certified NDT professionals, have made NDT an integral and increasingly outsourced part of many asset-intensive industries. Well-publicized industrial and public infrastructure failures and accidents such as the Deepwater Horizon oil spill in the Gulf of Mexico and

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the I-35W Mississippi River bridge collapse in Minnesota continues to raise the level of safety and environmental awareness of regulators, and owners and operators are recognizing the benefits that asset protection solutions can provide.

Historically, NDT solutions predominantly used qualitative testing methods aimed primarily at detecting defects in the tested materials. This methodology, which we categorize as traditional NDT, is typically labor intensive and, as a result, considerably dependent upon the availability and skill level of the certified technicians, engineers and scientists performing the inspection services. The traditional NDT market has been highly fragmented, with a significant number of small vendors providing inspection services to divisions of companies or local governments situated in close proximity to the vendor's field inspection engineers and technicians. The current trend, however, is for customers to look for a select few vendors capable of providing a wider spectrum of asset protection solutions for global infrastructure that we call one source. This shift in underlying demand, which began in the early 1990s, has contributed to a transition from traditional NDT solutions to more advanced solutions that employ automated digital sensor technologies and accompanying enterprise software, allowing for the effective capture, storage, analysis and reporting of inspection and engineering results electronically and in digital formats. These advanced techniques, taken together with advances in wired and wireless communication and information technologies, have further enabled the development of remote monitoring systems, asset-management and predictive maintenance capabilities and other data analytics and management. We believe that as advanced asset protection solutions continue to gain acceptance among asset-intensive organizations, those vendors offering broad, complete and integrated solutions, scalable operations and a global footprint will have a distinct competitive advantage. Moreover, we believe that vendors that are able to effectively deliver both advanced solutions and data analytics, by virtue of their access to customers' data, create a significant barrier to entry for competitors, and lead the opportunity to create significant recurring revenues.

We believe the following represent key dynamics driving the growth of the asset protection industry:

- *Extending the Useful Life of Aging Infrastructure.* The prohibitive cost and challenge of building new infrastructure has resulted in the significant aging of existing infrastructure and caused companies to seek ways to extend the useful life of existing assets. For example, due to the significant cost associated with constructing new refineries, stringent environmental regulations which have increased the costs of managing them and difficulty in finding suitable locations on which to build them, no new refineries have been constructed in the United States since 1976. Another example is in the area of power transmission and distribution. The Smart Grid initiative in the United States is causing increased loading on aging transformers that are more than 40 years old in many cases. The need to test and monitor these units to ensure their reliability until replacement is instrumental in support of a reliable Smart Grid network. Because aging infrastructure requires relatively higher levels of maintenance and repair in comparison to new infrastructure, as well as more frequent, extensive and ongoing testing, companies and public authorities are increasing spending to ensure the operational and structural integrity of existing infrastructure.
- *Outsourcing of Non-Core Activities and Technical Resource Constraints.* The increasing sophistication and automation of NDT programs, together with a decreasing supply of skilled professionals and stricter governmental regulations, has caused many companies and public authorities to outsource NDT and other services rather than recruit and train such capabilities internally. Owners and operators of infrastructure are increasingly contracting with third party providers that have the necessary technical product portfolio, engineering expertise, technical workforce and proven track record of results-oriented performance to effectively meet their increasing requirements.
- *Increasing Asset and Capacity Utilization.* Due to high energy prices, the availability of new and inexpensive sources of raw materials, high repair and replacement costs and the limited construction of new infrastructure, existing infrastructure in some of our target markets is being used at higher capacities, causing increased stress and fatigue that accelerate deterioration. These higher prices and costs also motivate our customers to complete repairs, maintenance, replacements and upgrades more quickly. For example, increasing demand for refined petroleum products, combined with high plant utilization rates, is driving refineries to upgrade facilities to make them more efficient and expand capacity. In order to sustain high capacity utilization rates, customers are increasingly using asset protection solutions to efficiently ensure the integrity and safety of their assets. Implementation of asset protection solutions can also lead to increased productivity as a result of reduced

maintenance-related downtime.

- *Increasing Corrosion from Low-Quality Inputs.* High commodities prices and increasing energy demands have led to the use of lower grade raw materials and feedstocks used in refinery and power generation processes. These lower grade raw materials and feedstocks, especially in the case of the refining process dealing with higher sulfur content petroleum, can rapidly corrode the infrastructure they come into contact with, which in turn increases the need for asset protection solutions to identify such corrosion and enable infrastructure owners to proactively combat the problems caused by such corrosion.
- *Increasing Use of Advanced Materials.* Customers in our target markets are increasingly utilizing advanced materials, such as composites, and other unique technologies in the manufacturing and construction of new infrastructure and aerospace

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applications. As a result, they require advanced testing, assessment and maintenance technologies to inspect and to protect these assets, since many of these advanced materials cannot be tested using traditional NDT techniques. We believe that demand for NDT solutions will increase as companies and public authorities continue to use these advanced materials, not only during the operating phase of the lifecycle of their assets, but also during the design, manufacturing and quality control phases and are more frequently integrating and embedding sensors directly into the end product in support of total life cycle asset management.

- *Meeting Safety Regulations.* Owners and operators of infrastructure assets increasingly face strict government regulations and safety requirements. Failure to meet these standards can result in significant financial liabilities, increased scrutiny by Occupational Safety and Health Administration (OSHA) and other regulators, higher insurance premiums and tarnished corporate brand value. There have been several industrial accidents, including explosions and fires, in recent years. These accidents created significant damage to the reputation of refineries and coupled with concern by owners, led OSHA to strengthen process safety enforcement standards with the implementation of the National Emphasis Program (NEP) that also extends to chemical plants for compliance with applicable regulations. As a result, these owners and operators are seeking highly reliable asset protection suppliers with a proven track record of providing asset protection services, products and systems to assist them in meeting these increasingly stringent regulations.
- *Expanding Addressable End-Markets.* Advances in NDT sensor technology and asset protection software based systems, and the continued emergence of new technologies, are creating increased demand for asset protection solutions in applications where existing techniques were previously ineffective. Further, we expect increased demand in relatively new markets, such as the pharmaceutical and food processing industries, where infrastructure is now beginning to age to a point where significant maintenance may be required.
- *Expanding Addressable Geographies.* We believe that a substantial driver of incremental demand will come from international markets, including Canada, Asia, Europe and Latin America. Specifically, as companies and governments in these markets build and maintain infrastructure and applications that require the use of asset protection solutions, we believe demand for our solutions will increase.

We believe that the market available to us will continue to grow as a result of macro-market trends, including aging infrastructure, use of more advanced materials, such as composites, and the increasing outsourcing of asset protection solutions by companies who historically performed these services using internal resources.

**Our Target Markets**

We focus our sales, marketing and product development efforts on a range of infrastructure-intensive industries and governmental authorities. With our portfolio of asset protection services, products and systems, we can effectively serve our customer base throughout the lifecycle of their assets, beginning at the design stage, through the construction and maintenance phase and, as necessary, through the decommissioning of their infrastructure. In general, our largest market in broad terms is energy-related infrastructure.

The increase in world energy demand and prices from 2003 to 2012, combined with concerns about the environmental consequences of greenhouse gas emissions, has led to renewed interest in alternatives to traditional fossil fuels particularly with the discovery of large shale gas reserves, which are considered by some as a clean energy alternative, has driven the increase in the use of natural gas to fuel gas turbines in combined cycle power generation plants.

Long-term prospects continue to improve for generation from both nuclear and renewable energy sources supported by government incentives, demand and by higher fossil fuel prices.

Electricity from coal-fired generation, mainly in global emerging markets, is also expected to increase, making coal still the second fastest-growing source for electricity generation. The outlook for coal could be altered substantially by additional constraints and any future legislation that would reduce or limit the release of greenhouse gas emissions related to fossil fuels. There is a progressive shift from traditional gas energy to unconventional gas energy sources.

*Oil and Gas*

Liquids including oil and gas remain the world's largest energy source given their importance in the transportation and industrial end-use sectors. World crude oil and liquid fuels consumption will increase by estimated 1.0 million barrels per day in 2013 to 90 million barrels per day and 91.3 million barrels per day in 2014. The United States Energy Information Administration (EIA) expects that world liquid fuels consumption from countries outside the Organization of Petroleum Exporting Countries will increase by 1.1 million

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barrels per day in 2013 and by 1.6 million barrels per day in 2014. With continued production growth from US tight-oil formations and Canadian oil sands, North America drives almost all the projected growth in non-OPEC supply over the next 2 years.

The EIA reports in its *International Energy Outlook 2013* that global energy demand will grow by 56 percent between 2010 and 2040. While nuclear and renewable energy are projected to be the fastest growing sources of supply, fossil fuels (coal, oil, and gas) are still expected to supply almost 80 percent of that demand in 2040. The International Energy Agency (IEA) is forecasting in its *World Energy Outlook 2012* that the shale oil and gas boom in this country will make the United States the top oil and natural gas producer in the world. According to the IEA, the United States will become the world's largest producer of oil by 2017 overtaking both Saudi Arabia and Russia. By 2030, North America will become a net exporter of oil and, by 2035, the United States becomes almost self-sufficient in energy. Globally, the IEA indicates that fossil fuels will dominate the world's energy picture as it has in the past.

Because oil, gas, and coal will continue to be the primary energy sources during this time, the energy industry will have to continue increasing the supply of these fuels to meet this increasing demand. In addition, there were approximately 700 crude oil refineries in the world, with 141 refineries operating in the United States. High energy prices are driving consistently high utilization rates at these facilities. With aging infrastructure and growing capacity constraints, asset protection continues to grow as an indispensable tool in maintenance planning, quality control and prevention of catastrophic failure in refineries and petrochemical plants. Recent high oil and fossil fuel input prices have placed additional pressure on industry participants to increase capacity, focus on production efficiency and cost reductions and shorten shut-down time or turnarounds. Asset protection solutions are used for both off-stream inspections or inspection when the tested infrastructure is shut-down, and increasingly, on-stream inspections, or inspection when the tested infrastructure is operating at normal levels. While we expect off-stream inspection of vessels and piping during a plant shut-down or turnaround to remain a routine practice by companies in these industries, we expect the areas of greatest future growth to occur as a result of on-stream inspections and monitoring of facilities, such as offshore platforms, transport systems and oil and gas pipeline transmission lines, because of the substantial opportunity costs of shutting them down. On-stream inspection enables companies to avoid the costs associated with shutdowns during testing while enabling the economic and safety advantages of advanced planning or predictive maintenance.

*Power Generation and Transmission*

Asset protection in the power industry has traditionally been associated with the inspection of high-energy, critical steam piping, boilers, rotating equipment, and various other plant components, utility aerial man-lift devices, large transformer testing and various other applications for nuclear and fossil-fuel based power plants. We believe that in recent years the use of asset protection solutions have grown rapidly in this industry due to the aging of critical power generation and transmission infrastructure. For instance, the average age of a nuclear power plant in the United States is over 30 years. Furthermore, global demand for power generation and transmission has grown rapidly and is expected to continue, primarily as a result of the energy needs of emerging economies such as China and India. The areas of traditional power generation and transmission that we focus our efforts on are natural gas, fossil, nuclear, alternative, renewable, and wind.

*Process Industries*

The process industries, or industries in which raw materials are treated or prepared in a series of stages, include chemicals, pharmaceuticals, food processing, paper and pulp and metals and mining, have a need for our products and services. As with oil and gas processing facilities, chemical processing facilities require significant spending on maintenance and monitoring. Given their aging infrastructure, growing capacity constraints and increasing capital costs, we believe asset protection solutions will continue to grow in importance in maintenance planning, quality and cost control and prevention of catastrophic failure in the chemicals industry. Although the pharmaceuticals and food processing

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industries have historically not employed asset protection solutions as much as other industries, we are now seeing these industries increase the use of asset protection solutions throughout their manufacturing and other processes.

### *Public Infrastructure, Research and Engineering*

We believe that high profile infrastructure catastrophes, such as the collapse of the I-35W Mississippi River Bridge in Minneapolis and others since, have caused public authorities to more actively seek ways to prevent similar events from occurring. Public authorities tasked with the construction of new, and maintenance of existing, public infrastructure, including bridges and highways, increasingly use asset protection solutions to test and inspect these assets. Importantly, these authorities now employ asset protection solutions throughout the life of these assets, from their original design and construction, with the use of embedded sensing devices to enable on-line monitoring, through ongoing maintenance requirements. With more than 151,000 bridges in the United States almost 25 percent classified as structurally deficient or functionally obsolete by the Federal Highway Agency (FHWA), the need for structural health monitoring has never been greater. An immediate cost-beneficial investment aimed at replacing or repairing deficient bridges may cost as much as \$70 billion, according to the U.S. Department of Transportation.



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This is a target market for our application technology and experience. Over the last ten years, we have provided testing and health monitoring on hundreds of bridges and structures worldwide, among which include some of the largest and well-known bridges in the United Kingdom, California, Pennsylvania and the greater New York metropolitan area. Commencing in fiscal 2011, we have been providing a continuous on-line Structural Health Monitoring System to the California Department of Transportation that is monitoring the San Francisco Oakland Bay Bridge. As a result of our continued efforts to offer cost-effective application technology to address the need for increased safety measures, we continue to develop products as a result of a \$6.9 million project awarded in 2009 under the National Institute of Standards and Technology (NIST) Innovation Program that is intended to bring a transformational impact in the area of civil infrastructure structural health monitoring using affordable self-powered wireless sensors.

The use of asset protection solutions within the transportation industry is primarily focused in the automotive and rail segments. Within the automotive segment, manufacturers use asset protection solutions throughout the entire design and development process, including the inspection of raw material inputs, during in-process manufacturing and, finally, during end-product testing and analysis. Although asset protection technologies have been utilized in the automobile industry for a number of decades, we believe growth in this market will increase as automobile manufacturers begin to outsource their asset protection requirements and take advantage of new technologies that enable them to more thoroughly inspect their products throughout the manufacturing process, reduce costs and shorten time to market. Within the rail subdivision, asset protection solutions are used primarily to test rails and passenger and tank cars.

*Aerospace and Defense*

The operational safety, reliability, structural integrity and maintenance of aircraft and associated products is critical to the aerospace and defense industries. Industry participants increasingly use asset protection solutions to perform inspections upon delivery, and also periodically employ asset protection solutions during the operational service of aircraft, using advanced ultrasonic immersion systems or digital radiography in order to precisely detect structural defects. Industry participants also use asset protection solutions for the inspection of advanced composites found in new classes of aircraft, x-ray of critical engine components, ultrasonic fatigue testing of complete aircraft structures, corrosion detection and on-board monitoring of landing gear and other critical components. We expect increased demand for our solutions including our destructive testing business from the aerospace industry to result from wider use of these advanced composites and distributed on-line sensor networks and other embedded analytical applications built into the structure of assets to enable real-time performance monitoring and condition-based maintenance. We serve this rapidly growing target market by providing our state of the art fully integrated inspection systems to original equipment manufacturers (OEMs). For the OEM that prefers to outsource this inspection we provide a full range of in-house services through our four regional facilities that combined have eighteen immersion inspection tank systems and two gantry systems. These facilities have obtained numerous accreditations and certifications required to meet the stringent inspection criteria that this industry demands.

*Industrial*

The quality control requirements driven by the low defect tolerance within automated, robotic intensive metalwork industries, such as screw machining, serve as key drivers for the recent growth of NDT technologies, such as ultrasonics and radiography. We expect that increasingly stringent quality control requirements and competitive forces will drive the demand for more costly finishing and polishing which, in turn, will promote greater use of NDT throughout the production lifecycle.

**Our Competitive Strengths**

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We believe the following competitive strengths contribute to our being a leading provider of asset protection solutions and will allow us to further capitalize on growth opportunities in our industry:

- *One Source Provider for Asset Protection Solutions® Worldwide.* We believe we have the most comprehensive portfolio of proprietary and integrated asset protection solutions, including services, products and systems worldwide, which positions us to be the leading single source provider for a customer's asset protection requirements. Through our network of approximately 100 offices and independent representatives in 16 countries around the world, we offer an extensive portfolio of solutions that enables our customers to consolidate all their inspection and maintenance requirements and the associated data storage and analytics on a single system that spans the customer's entire enterprise.
- *Long-Standing Trusted Provider to a Diversified and Growing Customer Base.* By providing critical and reliable NDT services, products and systems for more than 30 years and expanding our asset protection solutions, we have become a trusted partner to a large and growing customer base across numerous infrastructure-intensive industries globally. Our customers include some of the largest and most well-recognized firms in the oil and gas, chemicals, fossil and nuclear power, and aerospace and defense industries as well as some of the largest public authorities.

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- *Repository of Customer-Specific Inspection Data.* Our enterprise software solutions, PCMS, enable us to capture and warehouse our customers' testing and inspection data in a centralized database. As a result, we have accumulated large amounts of proprietary process data and information that allows us to provide our customers with value-added services, such as benchmarking, reliability centered maintenance solutions including predictive maintenance, inspection scheduling, data analytics and regulatory compliance.
- *Proprietary Products, Software and Technology Packages.* We have developed systems that have become the cornerstone of several high value-added unique NDT applications, such as those used for the testing of above-ground storage tanks (the TANKPAC technology package). These proprietary products allow us to efficiently and effectively provide highly valued solutions to our customers' complex applications, resulting in a significant competitive advantage. In addition to the proprietary products and systems that we sell to customers on a stand-alone basis, we also develop a range of proprietary sensors, instruments, systems and software used exclusively by our Services segment.
- *Deep Domain Knowledge and Extensive Industry Experience.* We are an industry leader in developing advanced asset protection solutions, including acoustic emission testing for non-intrusive on-line monitoring of storage tanks and pressure vessels, bridges and transformers, portable corrosion mapping, ultrasonic testing (UT) systems, on-line plant asset integrity management with sensor fusion, enterprise software solutions for plant-wide and fleet-wide inspection data archiving and management, advanced and thick composites inspection and ultrasonic phased array inspection of thick wall boilers.
- *Collaborating with Our Customers.* Our asset protection solutions have historically been designed in response to our customers' unique performance specifications and are supported by our proprietary technologies. Important technology packages, such as TANKPAC, and products, such as VPAC, were developed in close cooperation and partnership with key Mistras customers. Our sales and engineering teams work closely with our customers' research and design staff during the design phase in order to incorporate our products into specified infrastructure projects, as well as with facilities maintenance personnel to ensure that we are able to provide the asset protection solutions necessary to meet these customers' changing demands.
- *Experienced Management Team.* Our management team has a track record of leadership in NDT, averaging over 20 years' experience in the industry. These individuals also have extensive experience in growing businesses organically and in acquiring and integrating companies, which we believe is important to facilitate future growth in the fragmented asset protection industry. In addition, our senior managers are supported by highly experienced project managers who are responsible for delivering our solutions to customers.

**Our Growth Strategy**

Our growth strategy emphasizes the following key elements:

- *Continue to Develop Technology-Enabled Asset Protection Services, Products, Software and Systems.* We intend to maintain and enhance our technological leadership by continuing to invest in the internal development of new services, products, software and systems. Our highly trained team of Ph.D. s, engineers, application software developers and certified technicians has been instrumental in developing numerous significant asset protection standards. We believe their knowledge base will continue to enable us to innovate a wide range of new asset protection solutions.

- *Increase Revenues from Our Existing Customers.* Many of our customers are multinational corporations with asset protection requirements from multiple divisions at multiple locations across the globe. Currently, we believe we capture a relatively small portion of their overall expenditures on these solutions. We believe our superior services, products and systems, combined with the trend of outsourcing asset protection solutions to a small number of trusted service providers, position us to significantly expand both the number of divisions and locations that we serve as well as the types of solutions we provide. We strive to be the preferred global partner for our customers and aim to become the single source provider for their asset protection solution requirements.

- *Add New Customers in Existing Target Markets.* Our current customer base represents a small fraction of the total number of companies in most of our target markets with asset protection requirements. Our scale, scope of products and services and expertise in creating technology-enabled solutions have allowed us to build a reputation for high-quality and have increased customer awareness about us and our asset protection solutions. We intend to leverage our reputation and solutions offerings to win new customers within our existing target markets, especially as asset protection solutions are adopted internationally. We intend to continue to leverage our competitive strengths to win new business as customers in our existing target markets continue to seek a single source and trusted provider of advanced asset protection solutions.

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- *Expand Our Customer Base into New End Markets.* We believe we have significant opportunities to rapidly expand our customer base in relatively new end markets, including the maritime shipping, nuclear, wind turbine and other alternative energy and natural gas transportation industries and the market for public infrastructure, such as highways and bridges. The expansion of our addressable markets is being driven by the increased recognition and adoption of asset protection services, products and systems, and new NDT technologies enabling further applications in industries such as healthcare and compressed and liquefied natural gas transportation, and the aging of infrastructure, such as construction and loading cranes and ports, to the point where visual inspection has proven inadequate and new asset protection solutions are required. We expect to continue to expand our global sales organization, grow our inspection data management and data mining services and find new high-value applications, such as embedding our sensor technology in assembly lines for electronics and distributed sensor networks for aerospace applications. As companies in these emerging end markets realize the benefits of our asset protection solutions, we expect to expand our leadership position by addressing customer needs and winning new business.
- *Continue to Capitalize on Acquisitions.* We intend to continue employing a disciplined acquisition strategy to broaden, complement and enhance our product and service offerings, add new customers and certified personnel, expand our sales channels, supplement our internal development efforts and accelerate our expected growth. We believe the market for asset protection solutions is highly fragmented with a large number of potential acquisition opportunities. We have a proven ability to integrate complementary businesses, as demonstrated by the success of our past acquisitions, which have often contributed entirely new products and services that have added significantly to our revenues and profitability. In addition, we have begun to offer and sell our advanced asset protection solutions to customers of companies we acquired that had previously relied on traditional NDT solutions. Importantly, we believe we have improved the operational performance and profitability of our acquired businesses by successfully integrating and selling a comprehensive suite of solutions to the customers of these acquired businesses.

**Our Segments**

The Company has three operating segments:

- *Services.* This segment provides asset protection solutions primarily in North America with the largest concentration in the United States and a rapidly expanding Canadian services business, consisting primarily of non-destructive testing and inspection services that are used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure.
- *Products and Systems.* This segment designs, manufactures, sells, installs and services our asset protection products and systems, including equipment and instrumentation, predominantly in the United States.
- *International.* This segment offers services, products and systems similar to those of our Services and Products and Systems segments to global markets, principally in Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by our Products and Systems segment. South America consists primarily of our Brazil operations.

For discussion of segment revenues, operating results and other financial information, including geographic areas in which we recorded revenues, see Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as Note 19 - *Segment Disclosure* in the consolidated financial statements.

## **Our Solutions**

We offer our customers one source for asset protection solutions and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in mechanical integrity (MI), Non-Destructive Testing (NDT), Destructive Testing (DT) and predictive maintenance (PdM) services, proprietary data analysis and enterprise inspection database management warehousing software to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity management and assessments. We deliver our solutions through a combination of services and products and systems.

## **Our Services**

Our Services segment provides a range of testing and inspection services to a diversified customer base across energy-related, industrial and public infrastructure industries. We either deploy our services directly at the customer's location or through our own extensive network of field testing facilities. Our global footprint allows us to provide asset protection solutions through local offices in close proximity to our customers, permitting us to keep response time and travel, living and per diem costs to a minimum, while maximizing our ability to develop meaningful, collaborative customer relationships. Examples of our comprehensive portfolio of

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services include: testing components of new construction as they are built or assembled; providing corrosion monitoring data to help customers determine whether to repair or retire infrastructure; providing material analysis to ensure the integrity of infrastructure components; and supplying non-invasive on-stream techniques that enable our customers to pinpoint potential problem areas prior to failure. In addition, we also provide services to assist in the planning and scheduling of resources for repairs and maintenance activities. Our experienced inspection professionals perform these services, supported by our advanced proprietary software and hardware products. Examples of our services are discussed below.

*Traditional NDT Services*

Our certified personnel provide a range of traditional inspection services. For example, our visual inspectors provide comprehensive assessments of the condition of our customers' plant equipment during capital construction projects and maintenance shutdowns. Of the broad set of traditional NDT techniques that we provide, several lend themselves to integration with our other offerings and often serve as the initial entry point to more advanced customer engagements. For example, we provide a comprehensive program for the inspection of above-ground storage tanks designed to meet stringent industry standards for the inspection, repair, alteration and reconstruction of oil and petrochemical storage tanks. This program includes magnetic flux exclusion for the rapid detection of floor plate corrosion, advanced ultrasonic systems and leak detection of floor defects, remote ultrasonic crawlers for shell and roof inspections and trained, certified inspectors for visual inspection and documentation.

*Advanced NDT Services*

In addition to traditional NDT services, we provide a broad range of proprietary advanced NDT services that we offer on a stand-alone basis or in combination with software solutions such as our proprietary enterprise inspection data warehousing and plant condition monitoring software and systems (PCMS). We also provide on-line monitoring capabilities and other solutions that enable the delivery of accurate and real-time information to our customers. Our advanced NDT services require more complex equipment and more skilled inspection professionals to operate this equipment and interpret test results. Some of the technologies and techniques we use include:

- Automated ultrasonic testing
- Guided Ultrasonic Long wave testing
- Infrared thermography and inspection
- Phased array ultrasonic testing
- Acoustic emission testing
- Automated Ultrasonic Phased Array Inspection
- Predictive Maintenance (PdM)
- Reliability centered maintenance services (RCM)

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- Fitness for Service (FFS) engineering services
- Internal Rotating Inspection System (IRIS)
- Wireless on-line data acquisition
- On-line plant asset integrity monitoring
- Risk-based inspection (RBI)
- Computed and Digital radiography
- Sensor fusion (multi-sensor data integration)
- Ground Penetrating Radar
- Line Scanning Thermography (LST)
- Professional Rope Access teams
- Large Structure Inspection (LSI)
- Wireless Ultrasonic Sensors

### *Mechanical Integrity Services*

We provide a broad range of MI services that enable our customers to meet stringent regulatory requirements. These services increase plant safety, minimize unscheduled downtime and allow our customers to plan for, repair and replace critical components and systems before failure occurs. Our services are designed to complement a comprehensive predictive and preventative inspection and maintenance program that we can provide for our customers in addition to the MI services. Customers of our MI services have, in many instances, also licensed our PCMS software, which allows for the storage and analysis of data captured by our testing and inspection products and services, and implemented this solution to complement our inspection services.

As a result of the information captured by PCMS and our risk-based inspection software module we are able to provide a professional service known as Mechanical Integrity Gap Analysis for process facilities. Our Mechanical Integrity Gap Analysis service offers insight into the level of plant readiness, how best to manage and monitor the integrity of process facility assets, and how to extend the useful lives of such assets. Our Mechanical Integrity Gap Analysis service also assists customers in benchmarking and managing their infrastructure through key performance indicators and other metrics.

### **Our Products and Systems**

#### *Acoustic Emission (AE) Products*



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We are a leader in the design and manufacture of AE sensors, instruments and turn-key systems used for the monitoring and testing of materials, pressure components, processes and structures. Though we principally sell our products as a system, which includes a

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combination of sensors, an amplifier, signal processing electronics, knowledge-based software and decision and feedback electronics, we can also sell these as individual components to certain customers that have the in-house expertise to perform their own services. Our sensors listen to structures and materials to detect real-time AE activity and to determine the presence of active corrosion or structural flaws in the inspected materials. Such components include pressure vessels, storage tanks, heat exchangers, piping, turbine blades and reactors.

In addition, we provide leak monitoring and detection systems used in diverse applications, including the detection and location of both gaseous and liquid leaks in valves, vessels, pipelines, boilers and tanks. AE leak monitoring and detection, when applied in a systematic preventive maintenance program, has proven to substantially reduce costs by eliminating the need for visual valve inspection and unscheduled down-time. In addition, the U.S. Environmental Protection Agency (EPA) requirements regarding fugitive emissions such as the new 40 CFR Part 98 Subpart W regulation for gas monitoring, helps drive the market for this leak detection equipment.

*Ultrasonic (UT) Systems*

We design, manufacture and market a complete line of ultrasonic equipment. While AE technology detects flaws and pinpoints their location, our UT technology has the ability to size defects in three-dimensional geometric representations. Our line of UT systems include our line of Automated UT scanners, our unique portable UT handheld system with motion control to run our many inspection scanners, and our immersion systems including small bench top units to large UT systems over 55 feet long and large production unit gantry systems.

*Vibration Sensors and Systems*

We design, manufacture and market a broad portfolio of vibration sensing products under our Vibra-Metrics brand name. These include a full line of accelerometers (vibration sensors), on-line condition-based management systems, data delivery systems and a comprehensive assortment of ancillary support products.

*Radiography Systems*

We provide a wide array of digital radiographic systems to solve specific industrial problems, including Computed Radiography (CR), Real-Time Radiography (RTR), Direct Radiography (DR), and Computed Tomography (CT). Digital Radiography is one of the newest forms of radiographic imaging. Thickness profiles of piping systems, both insulated and un-insulated, are performed using computed radiography, while large production runs of smaller parts are inspected using direct radiography. Real time radiography is utilized for large real time inspections of insulated piping systems looking for areas of pipe degradation.

*Technology Solutions*

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In order to address some of the more common problems faced by our customers, we have developed a number of robust technology solutions. These packages generally allow more rapid and effective testing of infrastructure because they minimize the need for service professionals to customize and integrate asset protection solutions with the infrastructure and interpret test results. These packaged solutions use proprietary and specialized testing procedures and hardware, advanced pattern recognition, neural network software and databases to compare test results against our prior testing data or national and international structural integrity standards. One such package is our ACTMS (Acoustic Combustion Turbine Monitoring System), an on-line system to detect stator blade cracks in gas turbines. Others include TANKPAC for tank inspections and POWERPAC for monitoring discharges in critical power grid transformers.

### *Software Solutions*

Our software solutions are designed to meet the demands of our customers inspection data management, risk management, data analysis and asset integrity management requirements. We address these requirements using best in class relational database management systems and applying enterprise based inspection and data warehousing applications. We apply our comprehensive portfolio of customized Acoustic Emission and Ultrasonic application-specific software products to cover a broad range of materials testing and analysis methods, for neural networks, pattern recognition, wavelet analysis and moment tensor analysis. Some of the key software solutions we offer include:

- *PCMS enterprise software: asset protection and reliability*

Our PCMS application is an enterprise software system that allows for the warehousing and analysis of data as captured by our testing and inspection products and services and convert it to valuable information for our plant personnel and by plant

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management using our enterprise information dashboards. PCMS allows our customers to design and develop asset integrity management plans that include:

- optimal systematic testing schedules for their infrastructure based on real-time data captured by our sensors;
- alerts that notify customers when to perform special testing services on suspect areas, enabling them to identify and resolve flaws on a timely basis by using our PCMS risk-based inspection (RBI) software module; and
- schedules for the maintenance and retirement of assets.

PCMS also offers advantages by allowing the information it develops and stores to be organized, linked and synchronized with enterprise software systems such as SAP and IBM's Maximo. We believe PCMS is one of the more widely used process condition management software systems in the world. We estimate that approximately 40% of U.S. refineries, by capacity, currently use PCMS. This provides us not only with recurring maintenance and support fees, but also marketing opportunities for additional software, asset integrity management and other asset protection solutions. PCMS has also been chosen and installed by leading midstream pipeline energy companies.

- *Advanced Data Analysis Pattern Recognition and Neural Networks Software (NOESIS)*, which enables our AE experts to develop automated remote monitoring systems for our customers.
- *AE Software Platform (AEwin and AEwinPost)*, a Windows-based real time applications software for detection, processing and analysis, which locates the general location of flaws on or in our customers' structures.
- *Loose Parts Monitoring Software (LPMS)*, which is a software program for monitoring, detecting and evaluating metallic loose parts in nuclear reactor coolant systems in accordance with strict industry standards.
- *Automated UT and Imaging Analysis Software (UTwin and UTIA)*, which is a software platform for analyzing ultrasonic inspection data and visualizing and identifying the location and size of potential flaws.

*Engineering Services*

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In addition to software and advanced technologies, Mistras also provides professional engineering services that is organized under our Asset Integrity Management Services (AIMS) group. Asset Integrity Management refers to the management system that enables plant owners to maintain the integrity of its assets in a Fit for Service condition for the desired life of the assets. A sound AIMS program incorporates various aspects of equipment design, maintenance, inspection programs and operations in order to maximize the return generated from the assets based on their safe and efficient operation. The biggest benefit of a functional AIMS program is the ability to run your plant smoother and more efficiently. In short, the plant should see longer run times and shorter down time. This is easily equated to higher returns for the facility. Services include includes Engineering Fitness for Service, Finite Element Analysis and other fixed equipment mechanical engineering studies on an as needed basis. These studies provide critical data to plant operators in aiding in run, repair or replace decisions. In some cases, FFS studies are used to determine if a plant can operate the asset in a reduced capacity until the next shut down period. In this case, Mistras normally prescribes On-line Monitoring using Acoustic Emission technology to determine if the anomaly is propagating.

### *On-line Monitoring*

Our on-line monitoring offerings combine all of our asset protection services, products and systems. We provide temporary, periodic and continuous monitoring of static infrastructures such as bridges, pipes, and transformers, as well as dynamic or rotating assets such as pumps, motors, gearboxes, steam and gas turbines. Temporary monitoring is typically used when there is a known defect or problem and the condition needs to be monitored until repaired or new equipment can be placed in service. Periodic monitoring, or walk around monitoring, is used as a preventative maintenance tool to take machine and device readings, on a periodic basis, to observe any change in the assets condition such as increased vibration or unusual heat buildup and dissipation. Continuous monitoring is applied 24/7 on critical assets to observe the earliest onset of a defect and to track its progression to avoid catastrophic failure.

### **Customers**

During fiscal 2013, we provided our asset protection solutions to a broad group of customers. The following table lists some of our larger customers by revenues for fiscal 2013, in each of our target markets.

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<b>Oil &amp; Gas, including Petrochemicals</b> (50%)	<b>Industrial</b> (12%)	<b>Aerospace &amp; Defense</b> (11%)
BP	Alcan	Airbus
Chesapeake Midstream	ARGE Polimex/Ratingen	Carlton Forge Works
Chevron	BHR	Danner
Conoco Phillips	CHS Inc.	Electric Boat
Exxon	Kaiser	Hexcel
Hess Corporation	Remak S.A. - Opole	PAG
Marathon Oil	Rio Tinto Alcan	Saertex
Shell	Strike Construction	Schlosser Forge Company
Tesoro	Wooster Tool & Supply	Snecma
Valero	WorleyParsonsCord Ltd.	U.S. Navy

  

<b>Process Industries</b> (9%)	<b>Power Generation &amp; Transmission</b> (8%)	<b>Public Infrastructure, Research and Engineering</b> (6%)
Akzo Nobel	AGL Resources	Allseas
Bayer	Bechtel	Atkins
Daiken	Constellation Power Source Generation, Inc.	Carpenter Tech
Dow, Rohm, & Haas	Dominion	Construction Testing Services, Inc.
Dupont	EDF SA-SCAN	HDR Engineering
Hemlock Semiconductor	Entergy	Holdings GD Empreendimentos
INEOS	Exelon	Kuraray America, Inc.
LyondellBasel	PP&L	Ministère des Transports du Québec
Teknimont	Siemens	Samarco
Terra Mississippi Nitrogen	Stone & Webster, Inc.	Wiltonen

The percentage in each column heading represents the approximate percentage that each target market comprises of our total revenues. The companies listed under each target market above comprise, in total, the following percentages of the fiscal 2013 revenues for that target market:

Oil & Gas: 61%

Power Generation & Transmission: 39%

Process Industries: 75%

Industrial: 25%

Aerospace & Defense: 56%

Public Infrastructure, Research and Engineering: 32%

We have one customer, BP plc. (BP), which accounted for approximately 11%, 16%, and 18% of our total revenues for fiscal 2013, 2012 and 2011, respectively. Our relationship with BP is comprised of separate contracts for non-destructive testing and inspection services with multiple affiliated entities within the broad BP organization. We conduct business with various divisions or affiliates of the BP organization through numerous contracts covering many segments of BP's business including downstream (refinery), midstream (pipelines) and upstream (exploration). These contracts are typically negotiated locally with the specific location, are of varying lengths, have different start and end dates and differ in terms of the scope of work and nature of services provided. Most contracts are based on time and materials. No other customer accounted for more than 10% of our revenues in fiscal 2013, 2012, or 2011.

**Geographic Areas**

We conduct our business in approximately 16 different countries with our revenues primarily derived from our U.S. and European operations. Note 19 *Segment Disclosure* to the consolidated financial statements in this report sets forth our revenues, long-lived assets and other financial information regarding our international operations.

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### **Seasonality**

Our business is seasonal. This seasonality relates primarily to our Services segment. Our first and third fiscal quarter revenues for our Services segment are typically lower than our revenues in the second and fourth fiscal quarters because demand for our asset protection solutions from the oil and gas as well as the fossil and nuclear power industries increases during their non-peak production periods. Because we are increasing our work in the second and fourth fiscal quarters, our cash flows are lower in those quarters than in our first and third quarters, as collections of receivables lag behind revenues. For instance, U.S. refineries non-peak periods are generally in our second fiscal quarter, when they are retooling to produce more heating oil for winter, and in our fourth fiscal quarter, when they are retooling to produce more gasoline for summer. Our quarterly Services segment revenues for fiscal 2013, as a percentage of total Services revenues for fiscal 2013, were 21% (first quarter), 28% (second quarter), 24% (third quarter), and 27% (fourth quarter). We expect that the impact of seasonality on our first and third fiscal quarter revenues and profitability and second and fourth fiscal quarter cash flows will continue.

### **Competition**

We operate in a highly competitive, but fragmented, market. We are a pure play NDT company meaning that we provide only Services and Products & Systems for NDT supported applications and are not diluted with non core services which could create a conflict of interest. Our primary competitors are divisions of large companies, and many of our other competitors are small companies, limited to a specific product or technology and focused on a niche market or geographic region. We believe that none of our competitors currently provides the full range of asset protection and NDT products, enterprise software (PCMS) and the traditional and advanced services solutions that we offer. Our competition with respect to NDT services include the Acuren division of Rockwood Service Corporation, SGS Group, the TCM division of Team, Inc. and APPLUS RTD, which is majority-owned by The Carlyle Group. Our competition with respect to our PCMS software includes UltraPIPE, a division of Siemens, Lloyd's Register Capstone, Inc. and Meridium Systems. Our competition with respect to our ultrasonic and radiography products are GE Inspection Technologies and Olympus NDT. In the traditional NDT market, we believe the principal competitive factors are project management, availability of qualified personnel, execution, price, reputation and quality. In the advanced NDT market, reputation, quality and size are more significant competitive factors than price. We believe that the NDT market has significant barriers to entry which would make it difficult for new competitors to enter the market. These barriers include: (1) having to acquire or develop advanced NDT services, products and systems technologies, which in our case occurred over many years of customer engagements and at significant internal research and development expense, (2) complex regulations and safety codes that require significant industry experience, (3) license requirements and evolved quality and safety programs, (4) costly and time-consuming certification processes, (5) capital requirements and (6) emphasis by large customers on size and critical mass, length of relationship and past service record.

### **Centers of Excellence**

Another differentiator in our business model is the formation of our Centers of Excellence (COEs), which we consider to be incubators of inspection technology. The COEs are focused around target applications in our key market segments. They are supported by subject matter experts that will engage in strategic sales opportunities offering customers value-added solutions using advanced technologies and methods providing oversight, management and consultation. The COEs have a blueprint for their areas that can be replicated throughout the world by delivering procedures, equipment, reports, certifications, etc. insuring a standardized approach to implementation yielding higher margin business.

### **Sales and Marketing**



We sell our asset protection solutions through our experienced and highly trained direct sales and marketing teams within all of our offices worldwide. In addition, our project and laboratory managers as well as our management are trained on our solutions and often are the source of sales leads and customer contacts. Our direct sales and marketing teams work closely with our customers' research and design personnel, reliability engineers and facilities maintenance engineers to demonstrate the benefits and capabilities of our asset protection solutions, refine our asset protection solutions based on changing market and customer needs and identify potential sales opportunities. We divide our sales and marketing efforts into services sales, products and systems sales and marketing.

### **Manufacturing**

Most of our hardware products are manufactured in our Princeton Junction, New Jersey facility. Our Princeton Junction facility includes the capabilities and personnel to fully produce all of our AE products, NDT Automation Ultrasonic equipment and Vibra-Metrics vibration sensing products and systems. We recently expanded our manufacturing facilities to handle the assembly and manufacturing of our larger UT systems due to growth in this segment. Certain other hardware is manufactured by a third party and then loaded by us with our proprietary software.

We also design and manufacture automated ultrasonic systems and scanners as a result of the acquisition of Eurosonic in Vitrolles, France during fiscal 2012. This facility is the headquarters of our European Products and Systems division.

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**Intellectual Property**

Our success depends, in part, on our ability to maintain and protect our proprietary technology and to conduct our business without infringing on the proprietary rights of others. We utilize a combination of intellectual property safeguards, including patents, copyrights, trademarks and trade secrets, as well as employee and third-party confidentiality agreements, to protect our intellectual property.

As of May 31, 2013, we held 7 patents, all in the United States, which will expire at various times between fiscal 2014 and 2026, and license certain other patents. However, we currently do not principally rely on these patents or licenses to provide our proprietary asset protection solutions. Our trademarks and service marks provide us and our products and services with a certain amount of brand recognition in our markets. However, we do not consider any single patent, trademark or service mark material to our financial condition or results of operations.

As of May 31, 2013, the primary trademarks and service marks that we held in the United States included Mistras® and our stylized globe design. Other trademarks or service marks that we utilize in localized markets or product advertising include PCMS®, Physical Acoustics Corporation and the PAC logo, Ropeworks®, NOESIS, Pocket AE®, Pocket UT®, AEwin®, AEwinPost, UTwin®, UTIA, LST, Vibra-Metrics®, Field CAL®, MONPAC, PERFPAC, TANKPAC®, Valve-Squeak®, VPAC, POWERPAC, Sensor Highway, Quality Services Laboratories Inc. (QSL), NDT Automation, and One Source for Asset Projection Solutions®.

Many elements of our asset protection solutions involve proprietary know-how, technology or data that are not covered by patents or patent applications because they are not patentable, or patents covering them would be difficult to enforce, including technical processes, equipment designs, algorithms and procedures. We believe that this proprietary know-how, technology and data is the most important component of our intellectual property assets used in our asset protection solutions, and is a primary differentiator of our asset protection solutions from those of our competitors. We rely on various trade secret protection techniques and agreements with our customers, service providers and vendors to protect these assets. All of our employees in our Products and Systems segment and our other employees involved in the development of our intellectual property have entered into confidentiality and proprietary information agreements with us. These agreements require our employees not to use or disclose our confidential information, to assign to us all of the inventions, designs and technologies they develop during the course of employment with us, and otherwise address intellectual property protection issues. We also seek confidentiality agreements from our customers and business partners before we disclose any sensitive aspects of our asset protection solutions technology or business strategies. We are not currently involved in any material intellectual property claims.

**Research and Development**

Our research and development is principally conducted by engineers and scientists at our Princeton Junction, New Jersey headquarters, and supplemented by other employees in the United States and throughout the world, including France, Greece, Japan, Russia and the United Kingdom, who have other primary responsibilities. Our total professional staff includes approximately 30 employees who hold Ph.D. s and over 100 engineers and employees who hold Level III certification, the highest level of certification from the American Society of Non-Destructive Testing.

We work with many of our customers on developing new products or applications for our technology. Research and development expenses are reflected on our consolidated statements of operations as research and engineering expenses. Our company-sponsored research and engineering

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expenses were approximately \$2.4 million, \$2.1 million and \$2.2 million for fiscal 2013, 2012 and 2011, respectively. While we have historically funded most of our research and development expenditures, from time to time we also receive customer-sponsored research and development funding. For example, in February 2009, the National Institute of Standards and Technology (NIST) awarded us and our university partners a \$6.9 million research award under their new Technology Innovation Program (TIP) for the development and research of advanced technologies to enable monitoring and inspection of the structural health of bridges, roadways and water systems.

We have a number of other paid research contracts throughout the world, including Greece, Brazil, France, the United Kingdom, Japan and the Netherlands, for various industries and applications, including testing of new composites, detecting crack propagation, mapping discontinuities and carbon defect characterization, development of new sensor, actuator, signal processing, wireless and communications technologies, as well as the development of permanently embedded inspection systems using acoustic emission and acousto-ultrasonics to provide continuous on-line in-service full coverage monitoring of critical structural components. Most of the projects are in our target markets; however, a few of the projects could lead to other future market opportunities.

### **Employees**

Providing our asset protection solutions requires a highly-skilled and technically proficient employee base. As of May 31, 2013, we had approximately 4,400 employees worldwide and approximately 60% of our employees were based within the United States, of

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which approximately 95% were hourly. Less than 3% of our employees in the United States are unionized. We believe that we have good relations with our employees.

**Environmental Matters**

We are subject to numerous environmental, legal and regulatory requirements related to our operations worldwide. In the United States, these laws and regulations include, among others: the Comprehensive Environmental Response, Compensation, and Liability Act, the Resources Conservation and Recovery Act, the Clean Air Act, the Federal Water Pollution Control Act, the Toxic Substances Control Act, the Atomic Energy Act, the Energy Reorganization Act of 1974, as amended, and applicable state regulations. In addition to the federal laws and regulations, states and other countries where we do business often have numerous environmental, legal and regulatory requirements by which we must abide. We evaluate and address the environmental impact of our operations by assessing properties in order to avoid future liabilities and comply with environmental, legal and regulatory requirements.

In early 2012, we received notice of a governmental investigation concerning an environmental incident which occurred in February 2011, outside on the premises of our Cudahy, California facility. We acquired this facility as part of the acquisition in October 2010 of the assets and ongoing business operations of General Testing and Inspection, Inc. (GTI), a business which provides in-house or shop inspection and nondestructive testing at the Cudahy premises. On February 11, 2011, while liquid hazardous waste was being pumped into the tanker truck of an unaffiliated certified hazardous waste transporter at the Cudahy facility, a chemical reaction occurred that caused an emission of a vapor cloud. No human injury or property damage was reported or appears to have been caused as a result of the incident. The incident was investigated by the L.A. County Fire Department (the Fire Department) and the U.S. Environmental Protection Agency (EPA). At the conclusion of the Fire Department's investigation, the Fire Department imposed a fine on us in the amount of \$4,000 for alleged violations of the California Health and Safety Code in April 2011, which was paid shortly thereafter.

We had received no further governmental communications or notices concerning fines or sanctions related to the incident until January 13, 2012, when we received grand jury subpoenas from the U.S. Attorney's Office for the Central District of California addressed to us, GTI and one of our employees. These subpoenas were issued in connection with an EPA criminal investigation. The subpoena received by us requested documents and information relating to, among other things, our handling, identification, storage and disposal of hazardous waste, training records, corporate environmental policies, acquisition of GTI and any ongoing organizational relationship with GTI, and analytical results of the tests concerning the hazardous materials involved in the incident. We have been informed by the U.S. Attorney's Office for the Central District of California that we are a target of a criminal investigation into potential violations of the Resource Conservation and Recovery Act. The violations are purportedly related to alleged improper storage and labeling of hazardous waste at the Cudahy facility. The U.S. Attorney's Office also raised a concern about a possible obstruction of justice issue involving the conduct of one or more of our employees at this facility. Upon receiving the subpoenas, we engaged our outside legal counsel to assist us in conducting an investigation concerning the incident, including interviews with our current employees. To date, we have produced documents in response to the subpoena, and are aware that at least one of our employees testified before the grand jury.

While management cannot predict the ultimate outcome of this matter, based on our internal investigation to date, management does not believe the outcome will have a material effect on our financial condition or results of operations.

**Our Website and Available Information**

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Our website address is [www.mistrasgroup.com](http://www.mistrasgroup.com). We file reports with the SEC, including Quarterly Reports on Form 10-Q, Annual Reports on Form 10-K, Current Reports on Form 8-K and Proxy Statements. All of the materials we file with or furnish to the SEC are available on our website at <http://investors.mistrasgroup.com/sec.cfm>, as soon as reasonably practicable after having been electronically submitted to the SEC. Information contained on or connected to our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered part of this report or any other filing with the SEC. All of our SEC filings are also available at the SEC's website at [www.sec.gov](http://www.sec.gov). In addition, materials we file with the SEC may be read and copied at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

### Executive Officers

The following are our executive officers and other key employees as of May 31, 2013 and their background and experience:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Sotirios J. Vahaviolos	67	Chairman, President, Chief Executive Officer and Director
Dennis Bertolotti	53	President, Chief Operating Officer, Services

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Mark F. Carlos	61	Group Executive Vice President, Products and Systems
Ralph L. Genesi	58	Group Executive Vice President, Marketing and Sales
Francis T. Joyce	60	Executive Vice President, Chief Financial Officer and Treasurer
Michael C. Keefe	56	Executive Vice President, General Counsel and Secretary
Michael J. Lange	53	Group Executive Vice President, Services, and Director

*Sotirios J. Vahaviolos* has been our Chairman, President and Chief Executive Officer since he founded Mistras in 1978 under the name Physical Acoustics Corporation. Prior to joining Mistras, Dr. Vahaviolos worked at AT&T Bell Laboratories. Dr. Vahaviolos received a B.S. in Electrical Engineering and graduated first in his engineering class from Fairleigh Dickinson University and received Masters Degrees in Electrical Engineering and Philosophy and a Ph.D. (EE) from the Columbia University School of Engineering. During Dr. Vahaviolos' career in non-destructive testing, he has been elected Fellow of The Institute of Electrical and Electronics Engineers, a member of The American Society for Nondestructive Testing (ASNT) where he served as its President from 1992-1993 and its Chairman from 1993-1994, a member of Acoustic Emission Working Group (AEWG) and an honorary life member of the International Committee for Nondestructive Testing. Additionally, he was the recipient of ASNT's Gold Medal in 2001 and AEWG's Gold Medal in 2005. He was also one of the six founders of NDT Academia International in 2008 headquartered in Brescia, Italy.

*Dennis Bertolotti* is the President and Chief Operating Officer, Services. Mr. Bertolotti has been with us since we acquired Conam Inspection Services in 2003, where Mr. Bertolotti was a Vice President at the time of the acquisition. Mr. Bertolotti has been in the NDT business for over 29 years, and previously held ASNT Level III certifications and various American Petroleum Institute, or API, certifications, and received his Associate of Science degree in NDT from Moraine Valley Community College in 1983. Mr. Bertolotti has also received a Bachelor of Science and MBA from Otterbein College.

*Mark F. Carlos* is our Group Executive Vice President, Products and Systems, having joined Mistras at its founding in 1978. Prior to joining Mistras, Mr. Carlos worked at AT&T Bell Laboratories. Mr. Carlos received a MBA from Rider University and a Masters in Electrical Engineering from Columbia University. Mr. Carlos is an elected Fellow of ASNT and AEWG, and currently serves as the Chairman of the American Society for Testing and Materials' NDT Standards Writing Committee E-07 and was the recipient of its prestigious Charles W. Briggs Award in 2007.

*Ralph L. Genesi* is Group Executive Vice President, Marketing and Sales. He joined Mistras in March of 2009 with more than 25 years of executive management experience in marketing and sales as well as corporate profit and loss responsibility. Prior to joining Mistras, Mr. Genesi was President of Swantech Inc., a division of the Curtiss Wright Corporation from 2005 until 2009. From 2001 until 2005, Mr. Genesi was with Siemens AG, where he was Vice President and General Manager for the Siemens Power Generation Information Technology Business, responsible for energy trading, fleet operations and control solutions worldwide. Prior to that Mr. Genesi held positions as President-Americas Operations for Spectris Technologies Inc., a European holding company and Director, Global Market & Sales Development for Honeywell's Industrial Automation & Controls business. Mr. Genesi has an Electrical Engineering degree from Fairleigh Dickinson University.

*Francis T. Joyce* joined us as our Executive Vice President, Chief Financial Officer and Treasurer in July 2010. Prior to joining Mistras, Mr. Joyce was the Chief Financial Officer from 2006 to 2008 of Macquarie Infrastructure Company LLC, a New York Stock Exchange infrastructure operation and investment company that provides services in the general aviation, bulk liquid storage, gas utility, district cooling and airport parking industries. Prior to his employment with Macquarie, Mr. Joyce served as Chief Financial Officer of IMAX Corporation, a New York Stock Exchange company, from 2001 until 2006 and he was the Chief Financial Officer and Treasurer of TheGlobe.com from 1998 to 2001. Mr. Joyce started his career in public accounting at KPMG in New York. Mr. Joyce graduated from the University of Scranton with a Bachelor of Science in Accounting and from Fordham University Graduate School of Business with an MBA in Finance. Mr. Joyce is a certified public accountant.

*Michael C. Keefe* is Executive Vice President, General Counsel and Secretary, joining Mistras in December 2009. Most recently before Mistras, Mr. Keefe worked at International Fight League, a publicly-traded sports promotion company, from 2007 until 2009, initially as Executive Vice President, General Counsel and Corporate Secretary, then becoming the Chief Financial Officer, and eventually its President. From 1990 until 2006, Mr. Keefe served in various legal roles with Lucent Technologies and AT&T, the last four years as Vice President, Corporate and Securities Law and Assistant Secretary, and prior to that was in private practice at McCarter & English, LLP. Before starting his legal career, Mr. Keefe was employed at PricewaterhouseCoopers LLP, and worked in accounting for seven years, becoming a certified public accountant. Mr. Keefe received a BS in Business Administration (Accounting) from Seton Hall University and a J.D. from Seton Hall University School of Law.

*Michael J. Lange* is Group Executive Vice President, Services having joined Mistras when we acquired Quality Services Laboratories in November 2000, and was elected a Director in 2003. Mr. Lange is a well-recognized authority in Radiography and has held an ASNT Level III Certificate for almost 20 years. Mr. Lange received an Associate of Science degree in NDT from the Spartan School of Aeronautics in 1979.

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Our executive officers are elected by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors or executive officers.

**ITEM 1A. RISK FACTORS**

This section describes the major risks to us, our business and our common stock. You should carefully read and consider the risks described below, together with the other information contained in this Annual Report, including our financial statements and the notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations, before making an investment decision. The statements contained in this section constitute cautionary statements under the Private Securities Litigation Reform Act of 1995. If any of these risks actually occur, our business, financial condition, results of operations and future growth prospects may be adversely affected. As a result, the trading price of our common stock would likely decline, and you may lose all or part of your investment. You should understand that it is not possible to predict or identify all risk factors that could impact us. Accordingly, you should not consider the following to be a complete discussion of all risks and uncertainties.

**Risks Related to Our Business**

*Our operating results could be adversely affected by a reduction in business with our significant customers.*

We derive a significant amount of revenues from a few customers. For instance, various divisions or business units of our largest customer, BP, were responsible for approximately 11%, 16% and 18% of our revenues for fiscal 2013, 2012 and 2011, respectively. Taken as a group, our top ten customers were responsible for approximately 34%, 39% and 44% of our revenues for fiscal 2013, 2012 and 2011, respectively. This concentration pertains almost exclusively to our Services segment, which accounted for more than 70% of our revenues for the last three fiscal years. Generally, our customers do not have an obligation to make purchases from us and may stop ordering our products and services or may terminate existing orders or contracts at any time with little or no financial penalty. The loss of any of our significant customers, any substantial decline in sales to these customers or any significant change in the timing or volume of purchases by our customers could result in lower revenues and could harm our business, financial condition or results of operations.

*Our growth strategy includes acquisitions. We may not be able to identify suitable acquisition candidates or integrate acquired businesses successfully, which may inhibit our growth, and any acquisitions that we do complete may expose us to a number of unanticipated operational and financial risks.*

Our growth has and will likely continue to be dependent upon, to a certain extent, our ability to make acquisitions and successfully integrate these acquired businesses. We intend to continue to seek additional acquisition opportunities, both to expand into new markets and to enhance our position in existing markets globally. We may not be able to successfully identify suitable candidates, negotiate appropriate acquisition terms, obtain necessary financing on acceptable terms, complete proposed acquisitions, successfully integrate acquired businesses into our current operations or expand into new markets. Once integrated, acquired operations may not achieve levels of revenues, profitability or productivity comparable with those achieved by our current operations, or otherwise perform as expected.



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Some of the risks associated with our acquisition strategy include:

- unexpected loss of key personnel and customers of the acquired company;
- making the acquired company's financial and accounting standards consistent with our standards;
- assumption of liability for risks and exposures (including environmental-related costs), some of which we may not discover during our due diligence; and
- potential disruption of our ongoing business and distraction of management.

Our ability to undertake acquisitions is limited by our financial resources, including available cash and borrowing capacity. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of substantial additional indebtedness and other expenses, impairment expenses related to goodwill and impairment or amortization expenses related to other intangible assets, any of which could harm our financial condition and results of operations. Although management intends to: (i) evaluate the risks inherent in any particular transaction, (ii) assume only risks it believes to be acceptable, and (iii) develop plans to mitigate such risks, there are no assurances that we will properly ascertain or accurately assess the extent of all such risks. Difficulties encountered with acquisitions may harm our business, financial condition and results of operations. For example, as described under Environmental

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Matters and Legal Proceedings in Item 1 and Item 3, respectively, in Part I of this report, we are currently a target of a criminal investigation for an incident that occurred at our Cudahy, California facility four months after we acquired the assets and ongoing business operations of General Testing and Inspection Inc., which operated that facility.

In addition, we have a significant amount of goodwill and other intangible assets on our balance sheet as a result of our acquisitions. If our acquisitions do not perform as planned and we do not realize the benefits and profitability we expect, we could incur significant write-downs and impairment charges to our earnings due to the impairment of the goodwill and other intangible assets we have acquired.

*Our international operations are subject to risks relating to non-U.S. operations.*

In fiscal 2013, 2012 and 2011, we generated approximately 31%, 19% and 15% of our revenues outside the United States, respectively. We expect to increase our international presence over time. In addition, we expect our international business to become much more service oriented than in the past, resulting in many more employees outside the United States. Our primary operations outside the United States are in Canada, Germany, Brazil, the United Kingdom, and France. We also have operations in Russia, the Netherlands, India and Japan. There are numerous risks inherent in doing business in international markets, including:

- fluctuations in currency exchange rates and interest rates;
  
- varying regional and geopolitical business and economic conditions and demands;
  
- compliance with applicable foreign regulations and licensing requirements, and U.S. regulation with respect to our business in other countries, including the Foreign Corrupt Practices Act;
  
- the cost and uncertainty of obtaining data and creating solutions that are relevant to particular geographic markets;
  
- the need to provide sufficient levels of technical support in different locations;
  
- the complexity of maintaining effective policies and procedures in locations around the world;
  
- the risks of divergent business expectations or difficulties in establishing joint ventures with foreign partners;

- political instability and civil unrest;
- restrictions or limitations on outsourcing contracts or services abroad;
- restrictions or limitations on the repatriation of funds; and
- potentially adverse tax consequences.

We are expanding our sales and marketing efforts in certain emerging markets, such as Brazil, Russia, India and China. Expanding our business into emerging markets may present additional risks beyond those associated with more developed international markets. For example, in China and Russia, we may encounter risks associated with the ongoing transition from state business ownership to privatization. In any emerging market, we may face the risks of working in cash-based economies, dealing with inconsistent government policies and encountering sudden currency revaluations.

***Due to our dependency on customers in the oil and gas industry, we are susceptible to prolonged negative trends relating to this industry that could adversely affect our operating results.***

Our customers in the oil and gas industry (including the petrochemical market) have accounted for a substantial portion of our historical revenues. Specifically, they accounted for approximately 50%, 54% and 61% of our revenues for fiscal 2013, 2012 and 2011, respectively. We have expanded our customer base into industries other than the oil and gas industry, but we still receive a majority of our revenues from this industry. While our services are vital to the operators of plants and refineries, economic slowdowns or reduction in prices in the oil and gas industry can result in cut backs in contracts for our services. If the oil and gas industry were to suffer a prolonged or significant downturn, our revenues, profits and cash flows may be reduced. While we continue to expand our market presence in the power generation and transmission, and chemical processing industries, among others, these markets too are cyclical in nature and as such, are subject to economic downturns.

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***An accident or incident involving our asset protection solutions could expose us to claims, harm our reputation and adversely affect our ability to compete for business and, as a result, harm our operating performance.***

We could be exposed to liabilities arising out of the solutions we provide. For instance, we furnish the results of our testing and inspections for use by our customers in their assessment of their assets, facilities, plants and other structures. If such results were to be incorrect or incomplete, as a result of, for instance, poorly designed inspections, malfunctioning testing equipment or our employees' failure to adequately test or properly record data, we could be subject to claims. Further, if an accident or incident involving a structure we are testing or have tested occurs and causes personal injuries to our personnel or third parties, or property damage, such as the collapse of a bridge or an explosion in a plant or facility, and particularly if these injuries or damages could have been prevented by our customers had we provided them with correct or complete results, we may face significant claims by injured persons or related parties and claims relating to any property damage or loss. Even if our results are correct and complete, we may face claims for such injuries or damage simply because we tested the structure or facility in question. While we do have insurance, our insurance coverage may not be adequate to cover the damages from any such claims, forcing us to bear these uninsured damages directly, which could harm our operating results and may result in additional expenses and possible loss of revenues. An accident or incident for which we are found partially or fully responsible, even if fully insured, may also result in negative publicity, which would harm our reputation among our customers and the public, cause us to lose existing and future contracts or make it more difficult for us to compete effectively, thereby significantly harming our operating performance.

Many of our customers, particularly in the oil and gas and chemical industries, require their inspectors and other contractors working at their facilities to have good safety records. Safety records are impacted by the number and amount of workplace incidents involving a contractor's employees. If our safety record is not within the levels required by our customers, or compares unfavorably to our competitors, we could lose business, be prevented from working at certain facilities or suffer other adverse consequences, all of which could negatively impact our business, revenues, reputation and profitability.

***If we are unable to attract and retain a sufficient number of trained engineers, scientists and certified technicians at competitive wages, our operational performance may be harmed and our costs may increase.***

We believe that our success depends, in part, upon our ability to attract, develop and retain a sufficient number of trained engineers, scientists and certified technicians at competitive wages. The demand for such employees is currently high, and we project that it will continue in the future. Accordingly, we have experienced increases in our labor costs, particularly in our Services segment, but also, to a lesser extent, in our International segment. Some of the companies with which we compete for experienced personnel have comparatively greater name recognition and resources. The markets for our products and services also require us to use personnel trained and certified in accordance with standards set by domestic or international standard-setting bodies, such as the American Society of Non-Destructive Testing or the American Petroleum Institute. Because of the limited supply of these certified technicians, we expend substantial resources maintaining in-house training and certification programs. If we fail to attract sufficient new personnel or fail to motivate and retain our current personnel, our ability to perform under existing contracts and orders or to pursue new business may be harmed, preventing us from growing our business or causing us to lose customers and revenues, and the costs of performing such contracts and orders may increase, which would likely reduce our margins.

***If we lose members of our senior management team upon whom we are dependent, we may be less effective in managing our operations and may have more difficulty achieving our strategic objectives.***

Our future success depends to a considerable degree upon the availability, contributions, vision, skills, experience and effort of our senior management team. We do not maintain key person insurance on any of our employees other than Dr. Sotirios J. Vahaviolos, our Chairman,

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President and Chief Executive Officer. We currently have no employment agreements with members of our senior management team other than with Dr. Vahaviolos. Although we may enter into employment agreements with certain executive officers in the future, these agreements will likely not guarantee the services of the individual for a specified period of time. Although we do not have any reason to believe that we may lose the services of any of these persons in the foreseeable future, the loss of the services of any of these persons might impede our operations or the achievement of our strategic and financial objectives. The loss or interruption of the service of any of the members of our senior management team could harm our business, financial condition and results of operations and could significantly reduce our ability to manage our operations and implement our strategy.

***We operate in highly competitive markets and if we are unable to compete successfully, we could lose market share and revenues and our margins could decline.***

We face strong competition from NDT and a variety of niche asset protection providers, both larger and smaller than we are. Some of our competitors have greater financial resources than we do and could focus their substantial financial resources to develop a competing business model or develop products or services that are more attractive to potential customers than what we offer. Some of our competitors are business units of companies substantially larger than us and have the ability to combine asset protection solutions

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into an integrated offering to customers who already purchase other types of products or services from them. Our competitors may offer asset protection solutions at prices below or without cost in order to improve their competitive positions. Smaller niche competitors with small customer bases may be very aggressive in their pricing in order to retain customers. These competitive factors could have and could continue to make it more difficult for us to attract and retain customers, or can cause us to lower our prices and accept lower margins in order to compete, the impact of any of which can reduce our market share, revenues and profits.

***Catastrophic events, such as natural disasters, industrial accidents, epidemics, war and acts of terrorism, could disrupt our business or the business of our customers, which could significantly harm our operations, financial results and cash flow.***

Our operations and those of our customers are susceptible to the occurrence of catastrophic events outside our control, ranging from severe weather conditions to acts of war and terrorism. Any such events could cause a serious business disruption that reduces our customers' ability to or interest in purchasing our asset protection solutions, and have in the past resulted in order cancellations and delays because customer equipment, facilities or operations have been damaged, or are not operational or available. A large portion of our customer base has operations in the Gulf of Mexico, which is subject to hurricanes in the first and second quarters of our fiscal year. Hurricane-related disruptions to our customers' operations have adversely affected our revenues in the past. Such events in the future may result in substantial delays in the provision of solutions to our customers and the loss of valuable equipment. Any cancellations, delays or losses due to a catastrophic event may significantly reduce our revenues and harm our operating performance.

***We expect to continue expanding and our success depends on how effectively we manage our growth.***

We expect to experience significant growth in the number of our employees and the scope of our operations. To effectively manage our anticipated future growth, we must continue to implement and improve our managerial, operational, financial and reporting systems, expand our facilities and continue to recruit and train additional qualified personnel. We expect that all of these measures will require significant expenditures and will demand the attention of management. Failure to manage our growth effectively could lead us to over or under-invest in technology and operations, result in weaknesses in our infrastructure, systems or controls, give rise to operational mistakes, loss of business opportunities, the loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of new solutions. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our profit margins may suffer, our revenues could decline or may grow more slowly than expected and we may be unable to implement our business strategy.

***Deteriorations in economic trends or other factors may cause us to recognize further impairment charges for our goodwill.***

As of May 31, 2013, the carrying amount of our goodwill was approximately \$115.3 million, of which approximately \$40.8 million relates to our International segment. A significant portion of our international operations are concentrated in Europe and Brazil. The economic environments in Europe and Brazil were difficult in 2013. As a result of a contraction in the Brazilian economy (specifically in the oil and gas industry), we recognized goodwill impairment in our Brazil reporting unit of approximately \$9.9 million. Significant deterioration in industry or economic trends, disruptions to our business, inability to effectively integrate acquired businesses, or other factors, may cause further impairment charges to goodwill in future periods.

***Substantially all of our computer and communications hardware is located at a single facility, the failure of which would harm our business and results of operations.***

Substantially all of our computer and communications hardware is located at a single facility in Princeton Junction, New Jersey. We are presently working on plans and taking action to upgrade our back-up recovery and business continuity plans, should a disaster strike our primary data center or some other significant event occurs, so that we can continue operating without a material interruption of business or loss of key functions such as information processing, customer billing and financial reporting. However, until we complete these improvements, should a natural disaster or some other event occur that damages our data center or significantly disrupts its operation, such as human error, fire, flood, power loss, telecommunications failure, break-ins, terrorist attacks, acts of war and similar events, we could suffer loss of business and interruption of key functions and capabilities that could materially reduce our revenues or profitability and harm our business performance.

***The success of our businesses depends, in part, on our ability to develop new asset protection solutions and increase the functionality of our current offerings.***

The market for asset protection solutions is impacted by technological change, uncertain product lifecycles, shifts in customer demands and evolving industry standards and regulations. We may not be able to successfully develop and market new asset

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protection solutions that comply with present or emerging industry regulations and technology standards. Also, new regulations or technology standards could increase our cost of doing business.

From time to time, our customers have requested greater functionality in our solutions. As part of our strategy to enhance our asset protection solutions and grow our business, we continue to make substantial investments in the research and development of new technologies. We believe our future success will depend, in part, on our ability to continue to design new, competitive asset protection solutions, enhance our current solutions and provide new, value-added services. Developing new solutions will require continued investment, and we may experience unforeseen technological or operational challenges. In addition, our asset protection software is complex and can be expensive to develop, and new software and software enhancements can require long development and testing periods. Our competitors, many of whom have greater financial resources than us, could develop technologies earlier than we do, putting us at a competitive disadvantage. If we are unable to develop new asset protection solutions or enhancements that meet our customers' needs on a timely basis, we may experience a loss of customers or otherwise be likely to lose opportunities to earn revenues and to gain customers or access to markets, and our business and results of operations will be adversely affected.

*If our software or system produces inaccurate information or are incompatible with the systems used by our customers and make us unable to successfully provide our solutions, it could lead to a loss of revenues and customers.*

Our software and systems are complex and, accordingly, may contain undetected errors or failures. Software or system defects or inaccurate data may cause incorrect recording, reporting or display of information related to our asset protection solutions. Any such failures, defects and inaccurate data may prevent us from successfully providing our asset protection solutions, which would result in lost revenues. Software or system defects or inaccurate data may lead to customer dissatisfaction and our customers may seek to hold us liable for any damages incurred. As a result, we could lose customers, our reputation may be harmed and our financial condition and results of operations could be materially adversely affected.

We currently serve a commercial, industrial and governmental customer base that uses a wide variety of constantly changing hardware, software solutions and operating systems. Our asset protection solutions need to interface with these non-standard systems in order to gather and assess data. Our business depends on the following factors, among others:

- our ability to integrate our technology with new and existing hardware and software systems;
- our ability to anticipate and support new standards, especially Internet-based standards; and
- our ability to integrate additional software modules under development with our existing technology and operational processes.

If we are unable to adequately address any of these factors, our results of operations and prospects for growth and profitability would be harmed.



*If we fail to successfully educate current and potential customers regarding the benefits of our asset protection solutions or the market for these solutions otherwise fails to develop, the profitability or growth of our business could be adversely impacted.*

Our future success depends on continued and growing commercial acceptance of our asset protection solutions and our ability to obtain additional contracts. We anticipate that revenues related to our asset protection solutions will constitute a substantial portion of our revenues for the foreseeable future. If we are unable to educate our potential customers about the advantages our solutions have over competing products and services, or our current customers stop purchasing our asset protection solutions, our operating results could be significantly harmed. In addition, because the asset protection solutions industry is rapidly evolving, we could lose insight into trends that may be emerging, which would further harm our competitive position by making it difficult to predict and respond to customer needs. If the market for our asset protection solutions does not continue to develop, our ability to grow our business would be limited and we might not be able to maintain profitability. In addition, larger service customers are making pricing for traditional NDT services less profitable. Therefore, if we cannot convince our customers of the advantages and value of our advanced NDT services we could lose large contracts or suffer lower profit margin.

*The seasonal nature of our business reduces our revenues and profitability in our first and third fiscal quarters.*

Our business, primarily in our Services segment, is seasonal. Our first and third fiscal quarter revenues for our Services segment are typically lower than our revenues in the second and fourth fiscal quarters because demand for our asset protection solutions from the oil and gas as well as the fossil and nuclear power industries increases during their non-peak production periods. For instance, U.S. refineries non-peak periods are generally in our second fiscal quarter, when they are retooling to produce more heating oil for winter, and in our fourth fiscal quarter, when they are retooling to produce more gasoline for summer. As a result of these trends, we generally

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have reduced cash flows in our second and fourth fiscal quarters, as collections of receivables lag behind revenues, possibly requiring us to borrow under our credit agreement. In addition, most of our operating expenses, such as employee compensation and property rental expense, are relatively fixed over the short term. Moreover, our spending levels are based in part on our expectations regarding future revenues. As a result, if revenues for a particular quarter are below expectations, we may not be able to proportionately reduce operating expenses for that quarter. We expect that the impact of seasonality on our first and third fiscal quarter revenues and profitability and second and fourth fiscal quarter cash flows will continue.

***Growth in revenues from our service offerings, particularly traditional NDT services, relative to revenues from the sale of our products and systems may reduce our overall gross profit margin.***

Our gross profit margin on revenues from our services offerings, particularly traditional NDT services, has historically been lower than our gross profit margin on revenues from our products and systems for numerous reasons. For instance, the gross profit margin in our Services segment for fiscal 2013 was approximately 26%, while our gross profit margin in our Products and Systems segment was approximately 51%. Our overall gross profit margin was approximately 28% during the same period. We expect to continue our efforts to increase the number of evergreen or run and maintain contracts at oil refineries. Often times, the services we provide at the beginning of these contracts are traditional NDT services. Until such time as we can understand the needs of each new evergreen plant and we can then make recommendations to provide our advanced NDT services, and thus improve our service mix, our margins may be negatively impacted. As a result, we expect our overall gross profit margin will be lower in periods when revenues from our services, and particularly from traditional NDT services, has increased as a percentage of total revenues and will be higher in periods when revenues from our advanced NDT services and our products and systems have increased as a percentage of total revenues. We expect this trend to continue and to the extent it does, our margins may decrease or remain flat. In addition, service offerings have become a larger portion of our International segment revenues than in the past, a trend we expect to continue, and this increased service revenue will be lower margin traditional NDT services. As a result, the gross profit margin in our International segment has decreased from 35% in 2011 to 32% in 2012 and 25% in 2013. These factors will create more pressure on margins. Fluctuations in our gross profit margin may affect our level of profitability in any period, which may negatively affect the price of our common stock.

***Our business, and the industries we currently serve, are currently subject to governmental regulation, and may become subject to modified or new government regulation that may negatively impact our ability to market our asset protection solutions.***

We incur substantial costs in complying with various government regulations and licensing requirements. For example, the transportation and overnight storage of radioactive materials used in providing certain of our asset protection solutions such as radiography are subject to regulation under federal and state laws and licensing requirements. Our Services segment is currently licensed to handle radioactive materials by the U.S. Nuclear Regulatory Commission (NRC) and over 20 state regulatory agencies. If we allegedly fail to comply with these regulations, we may be investigated and incur significant legal expenses associated with such investigations, and if we are found to have violated these regulations, we may be fined or lose one or more of our licenses or permits, which would prevent or restrict our ability to provide radiography services. In addition, while we are investigated, we may be required to suspend work on the projects associated with our alleged noncompliance, resulting in loss of profits or customers, and damage to our reputation. Many of our customers have strict requirements concerning safety or loss time occurrences and if we are unable to meet these requirements it could result in lost revenues. In the future, federal, state, provincial or local governmental agencies may seek to change current regulations or impose additional regulations on our business. Any modified or new government regulation applicable to our current or future asset protection solutions may negatively impact the marketing and provision of those solutions and increase our costs and the price of our solutions.

Additionally, greenhouse gases that result from human activities, including burning of fossil fuels, have been the focus of increased scientific and political scrutiny and are being subjected to various legal requirements. International agreements, national laws, state laws and various regulatory schemes limit or otherwise regulate emissions of greenhouse gases, and additional restrictions are under consideration by different

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governmental entities. We derive a significant amount of revenues and profits from such industries, including oil and gas, power generation and transmission, and chemicals processing. Such regulations could negatively impact our customers, which could negatively impact the market for the services and products we provide. This could materially adversely affect our business, financial condition, results of operations and cash flows.

We rely on certification of our NDT solutions by industry standards-setting bodies. We and/or our subsidiaries currently have International Organization for Standardization (ISO) 9001:2008 certification, ISO 14001:2004 certification and OHSAS 18001:2007 certification. In addition, we currently have Nadcap and similar (formerly National Aerospace and Defense Contractors Accreditation Program) certifications for certain of our locations. We continually review our NDT solutions for compliance with the requirements of industry specification standards and the Nadcap special processes quality requirements. However, if we fail to maintain our ISO, Nadcap or other certifications, our business may be harmed because our customers generally require that we have these certification before they purchase our NDT solutions.

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***Protecting our intellectual property is important to our business and results of operations.***

Our ability to compete effectively depends in part upon the maintenance and protection of the intellectual property related to our asset protection solutions. Patent protection is unavailable for certain aspects of the technology and operational processes important to our business. Any patent held by us or to be issued to us, or any of our pending patent applications, could be unenforceable, challenged, invalidated or circumvented. Some of our trademarks that are not in use may become available to others. To date, we have relied principally on copyright, trademark and trade secrecy laws, as well as confidentiality agreements and licensing arrangements, to establish and protect our intellectual property. However, we have not obtained confidentiality agreements from all of our customers and vendors. Although we have entered into confidentiality agreements with all of our employees in our Products and Systems segment and certain of our other employees involved in the development of our intellectual property, we cannot be certain that these agreements will be honored or enforceable. Some of our confidentiality agreements are not in writing, and some customers are subject to laws and regulations that require them to disclose information that we would otherwise seek to keep confidential. We do not transfer ownership of some of our more advanced asset protection products and systems and, instead, sell to our customers services using these products and systems. We do this, in part, to protect the intellectual property upon which these products and systems are based, but this strategy may not be successful and our customers or third parties may reverse engineer or otherwise derive this intellectual property and use it without our authorization. Policing unauthorized use of our intellectual property is difficult and expensive. The steps that we have taken or may take might not prevent misappropriation of the intellectual property on which we rely. In addition, effective protection may be unavailable or limited in jurisdictions outside the United States, as the intellectual property laws of foreign countries sometimes offer less protection or have onerous filing requirements. From time to time, third parties may infringe our intellectual property rights. Litigation may be necessary to enforce or protect our rights or to determine the validity and scope of the rights of others. Any litigation could be unsuccessful, cause us to incur substantial costs, divert resources away from our daily operations and result in the impairment of our intellectual property. Failure to adequately enforce our rights could cause us to lose valuable rights in our intellectual property and may negatively affect our business.

***We may be subject to damaging and disruptive intellectual property litigation related to allegations that our asset protection solutions infringe on the intellectual property of others, which could prevent us from offering those solutions.***

Third-party patent applications, patents, copyrights and trademarks may be applicable to our asset protection solutions. As a result, third parties may in the future make infringement claims and other allegations that could subject us to intellectual property litigation relating to our solutions. Such litigation would be time consuming and expensive, divert attention and resources away from our daily operations, impede or prevent delivery of our solutions and require us to pay significant royalties, licensing fees and damages. In addition, parties making infringement and other claims may be able to obtain injunctive or other equitable relief that could effectively block our ability to provide our solutions and could cause us to pay substantial damages if we are found to be infringing on others' intellectual property rights. If a third party has a successful claim of infringement, we may need to seek one or more licenses from third parties in order to continue to offer the related solution, which may not be available at a reasonable cost, or at all.

For example, we were sued for trademark infringement by Sentinel Integrity Solutions. While we successfully defended the claim and had Sentinel's trademark invalidated, we expended considerable time, effort and attorney fees to defend this case.

***We may require additional capital to support business growth, which might not be available.***

We intend to continue making investments to support our business growth and may require additional funds to respond to business challenges or opportunities, including the need to develop new, or enhance our current, asset protection solutions, enhance our operating infrastructure or

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acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through further issuances of equity or convertible debt securities, our current stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock. Any debt financing secured by us in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In addition, no assurance can be given that adequate or acceptable financing will be available to us, in which case we may not be able to grow our business or respond to business challenges.

*Our credit agreement contains financial and operating restrictions that may limit our access to credit. If we fail to comply with financial or other covenants in our credit agreement, we may be required to repay indebtedness to our existing lenders, which may harm our liquidity.*

Provisions in our current credit agreement impose restrictions on our ability to, among other things:

- create liens;

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- make investments;
  
- incur more debt;
  
- merge or consolidate;
  
- make dispositions of property;
  
- pay dividends and make distributions;
  
- enter into a new line of business;
  
- enter into transactions with affiliates; and
  
- enter into burdensome agreements.

Our credit agreement also contains financial covenants that require us to maintain compliance with specified financial ratios. If we fail to comply with these covenants, the lenders could prevent us from borrowing under our credit agreement, require us to pay all amounts outstanding, require that we cash collateralize letters of credit issued under the credit agreement and restrict us from making acquisitions. If the maturity of our indebtedness is accelerated, we then may not have sufficient funds available for repayment or the ability to borrow or obtain sufficient funds to replace the accelerated indebtedness on terms acceptable to us, or at all.

***Our revenue cycle can be lengthy, unpredictable and require significant employee time and financial resources with no assurances that we will realize revenues.***

Our sales cycles are often long and unpredictable. Many of our current and potential customers have extended budgeting and procurement processes. We believe that they also tend to be risk averse and follow industry trends rather than be the first to purchase new products or services, which can extend the lead time for or prevent acceptance of new products or services. Accordingly, they may take longer to reach a decision to purchase our solutions. This extended sales process, which often lasts between three and six months and sometimes longer, requires the dedication of significant time and financial resources, with no certainty of success or recovery of our related expenses. It is not unusual for

our current and potential customers to go through the entire sales process and not make any purchases.

***Any real or perceived internal or external electronic security breaches in connection with the use of our asset protection solutions could harm our reputation, inhibit market acceptance of our solutions and cause us to lose customers.***

We and our customers use our asset protection solutions to compile and analyze sensitive or confidential customer-related information. In addition, some of our asset protection solutions allow us to remotely control and store data from equipment at commercial, institutional and industrial locations. Our asset protection solutions rely on the secure electronic transmission of proprietary data over the Internet or other networks. The occurrence or perception of security breaches in connection with our asset protection solutions or our customers' concerns about Internet security or the security of our solutions, whether warranted or not, would likely harm our reputation or business, inhibit market acceptance of our asset protection solutions and cause us to lose customers, any of which would harm our financial condition and results of operations.

We may come into contact with sensitive information or data when we perform installation, maintenance or testing functions for our customers. Even the perception that we have improperly handled sensitive, confidential information would have a negative effect on our business. If, in handling this information, we fail to comply with privacy or security laws, we could incur civil liability to government agencies, customers and individuals whose privacy is compromised. In addition, third parties may attempt to breach our security or inappropriately harm our asset protection solutions through computer viruses, electronic break-ins and other disruptions. If a breach is successful, confidential information may be improperly obtained, for which we may be subject to lawsuits and other liabilities.

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**Risks Related to Our Common Stock**

*We expect our quarterly revenues and operating results to fluctuate. If we fail to meet the expectations of market analysts or investors, the market price of our common stock could decline substantially.*

Our quarterly operating results have fluctuated in the past and may do so in the future. Accordingly, we believe that period-to-period comparisons of our results of operations may be the best indicators of our business. You should not rely upon the results of one quarter as an indication of future performance. Our revenues and operating results may fall below the expectations of securities analysts or investors in any future period. Our failure to meet these expectations may cause the market price of our common stock to decline, perhaps substantially.

Our quarterly revenues and operating results may vary depending on a number of factors, including those listed previously under Risks Related to Our Business.

In addition to the effect our operating results may have on the market price of our common stock, the market price of our common stock may also be influenced by many other factors, some of which are beyond our control, including:

- announcements by us or our competitors of significant contracts or acquisitions;
- liquidity of the market for our common stock;
- changes in financial estimates or recommendations by analysts;
- general economic and stock market conditions;
- quarterly or annual earnings of other companies in our industry;
- future sales of our common stock;



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- changes in accounting standards, policies, guidance, interpretations or principles; and
- the other factors described in this Risk Factors section.

The stock markets have generally experienced extreme price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including those in our industry. These changes frequently appear to occur without regard to the operating performance of these companies. The price of our common stock could fluctuate for reasons that have little or nothing to do with our company, and these fluctuations could materially reduce our stock price.

In the past, some companies that have had volatile market prices for their securities have been subject to class action or derivative lawsuits. The filing of a lawsuit against us, regardless of the outcome, could have a material adverse effect on our business, financial condition and results of operations, as it could result in substantial legal costs and a diversion of our management's attention and resources.

***A significant stockholder controls the direction of our business. The concentrated ownership of our common stock may prevent other stockholders from influencing significant corporate decisions.***

Dr. Sotirios J. Vahaviolos, our Chairman, President and Chief Executive Officer, owns approximately 40% of our outstanding common stock. As a result, Dr. Vahaviolos effectively controls our Company and has the ability to exert substantial influence over all matters requiring approval by our shareholders, including the election and removal of directors, amendments to our certificate of incorporation, and any proposed merger, consolidation or sale of all or substantially all of our assets and other corporate transactions. This concentration of ownership could be disadvantageous to other shareholders with differing interests from Dr. Vahaviolos.

***We currently have no plans to pay dividends on our common stock.***

We have not declared or paid any cash dividends on our common stock to date, and we do not anticipate declaring or paying any dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings for use in the development, operation and growth of our business. In addition, our credit agreement limits our ability to pay cash dividends and future loan agreements may also limit the payment of dividends. Any future determination relating to our dividend policy will be at the discretion of our board of directors and will depend on our results of operations, financial condition, capital requirements, business opportunities, contractual restrictions and other factors deemed relevant. To the extent we do not pay dividends on our common stock, investors must look solely to stock appreciation for a return on their investment.

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*Shares eligible for future sale may cause the market price for our common stock to decline even if our business is doing well.*

Future sales by us or by our existing shareholders of substantial amounts of our common stock in the public market, or the perception that these sales may occur, could cause the market price of our common stock to decline. This could also impair our ability to raise additional capital in the future through the sale of our equity securities. Under our second amended and restated certificate of incorporation, we are authorized to issue up to 200,000,000 shares of common stock, of which approximately 28,211,000 shares of common stock are outstanding as of August 1, 2013. In addition, we have approximately 3,018,000 shares of common stock reserved for issuance related to stock options and restricted stock units that are outstanding as of August 1, 2013. We cannot predict the size of future issuances of our common stock or the effect, if any, that future sales and issuances of shares of our common stock, or the perception of such sales or issuances, would have on the market price of our common stock.

*Provisions of our charter, bylaws and of Delaware law could discourage, delay or prevent a change of control of our company, which may adversely affect the market price of our common stock.*

Certain provisions of our second amended and restated certificate of incorporation and amended and restated bylaws could discourage, delay or prevent a merger, acquisition, or other change of control that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
  
- require that vacancies on the board of directors, including newly created directorships, be filled only by a majority vote of directors then in office;
  
- authorize our board of directors to issue, without stockholder approval, preferred stock that, if issued, could operate as a poison pill to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
  
- require that stockholder actions must be effected at a duly called stockholder meeting by prohibiting stockholder action by written consent;
  
- prohibit cumulative voting in the election of directors, which would otherwise allow holders of less than a plurality of stock to elect some directors; and

- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings and limit the right to call special meetings of stockholders to the Chairman of the Board, the Chief Executive Officer, the board of directors acting pursuant to a resolution adopted by a majority of directors or the Secretary upon the written request of stockholders entitled to cast not less than 35% of all the votes entitled to be cast at such meeting.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

As of May 31, 2013, we operated approximately 100 offices in 16 countries, with our corporate headquarters located in Princeton Junction, New Jersey. Our headquarters in Princeton Junction is our primary location, where most of our manufacturing and research and development is conducted. While we lease most of our facilities, as of May 31, 2013, we owned properties located in Olds, Alberta; Monroe, North Carolina; Trainer, Pennsylvania; LaPonte, Texas; Burlington, Washington; Gillette, Wyoming; and Jonquiere, Quebec. These properties, as well as approximately 65 offices throughout North America (including Canada), are utilized by our Services segment. Our Products and Systems segment's primary location is in our Princeton Junction, NJ facility. Our International

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segment has approximately 35 offices including locations in Brazil, United Kingdom, the Netherlands, France, Germany, Greece, Russia, Japan and India. We believe that all of our facilities are well maintained and are suitable and adequate for our current needs.

**ITEM 3. LEGAL PROCEEDINGS**

We are subject to periodic lawsuits, investigations and claims that arise in the ordinary course of business. See *Litigation* in Note 13 *Commitment and Contingencies* to our audited consolidated financial statements contained in Item 8 of this report for a description of legal proceedings involving us and our business, which is incorporated herein by reference.

In early 2012, we received notice of a governmental investigation concerning an environmental incident which occurred in February 2011, outside on the premises of our Cudahy, California facility. We acquired this facility as part of the acquisition in October 2010 of the assets and ongoing business operations of General Testing and Inspection, Inc. (GTI), a business which provides in-house or shop inspection and nondestructive testing at the Cudahy premises. On February 11, 2011, while liquid hazardous waste was being pumped into the tanker truck of an unaffiliated certified hazardous waste transporter at the Cudahy facility, a chemical reaction occurred that caused an emission of a vapor cloud. No human injury or property damage was reported or appears to have been caused as a result of the incident. The incident was investigated by the L.A. County Fire Department (the Fire Department) and the U.S. Environmental Protection Agency (EPA). At the conclusion of the Fire Department's investigation, the Fire Department imposed a fine on us in the amount of \$4,000 for alleged violations of the California Health and Safety Code in April 2011, which was paid shortly thereafter.

We had received no further governmental communications or notices concerning fines or sanctions related to the incident until January 13, 2012, when we received grand jury subpoenas from the U.S. Attorney's Office for the Central District of California addressed to us, GTI and one of our employees. These subpoenas were issued in connection with an EPA criminal investigation. The subpoena received by us requested documents and information relating to, among other things, our handling, identification, storage and disposal of hazardous waste, training records, corporate environmental policies, acquisition of GTI and any ongoing organization relationship with GTI, and analytical results of the tests concerning the hazardous materials involved in the incident. We have been informed by the U.S. Attorney's Office for the Central District of California that we are a target of a criminal investigation into potential violations of the Resource Conservation and Recovery Act. The violations are alleged to be related to purportedly improper storage and labeling of hazardous waste at the Cudahy facility. This U.S. Attorney's Office also raised a concern about a possible obstruction of justice issue involving the conduct of one or more of our employees at this facility. Upon receiving the subpoenas, we engaged our outside legal counsel to assist us in conducting an investigation concerning the incident, including interviews with our current employees. To date, we have produced documents in response to the subpoena, and are aware that at least one of our employees testified before the grand jury.

While management cannot predict the ultimate outcome of this matter, based on our internal investigation to date, management does not believe the outcome will have a material effect on our financial condition or results of operations.

**ITEM 4. MINE SAFETY DISCLOSURES**

None.

**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASE OF EQUITY SECURITIES**

**Market for Common Stock**

Our common stock currently trades on the New York Stock Exchange (NYSE) under the ticker symbol **MG**. The following table sets forth for the periods indicated the range of high and low sales prices of our common stock.

	Year ended May 31, 2013		Year ended May 31, 2012	
	High	Low	High	Low
Quarter ended August 31,	\$ 26.98	\$ 19.28	\$ 20.82	\$ 14.83
Quarter ended November 30,	\$ 24.26	\$ 19.05	\$ 24.01	\$ 17.50
Quarter ended February 29,	\$ 25.35	\$ 19.97	\$ 26.24	\$ 20.63
Quarter ended May 31,	\$ 24.50	\$ 18.15	\$ 25.49	\$ 22.11

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**Holders of Record**

As of August 1, 2013, there were approximately 15 holders of record of our Common Stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock is American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219.

**Dividends**

No cash dividends have been paid on our Common Stock to date. We currently intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future.

**Purchases of Equity Securities**

The following sets forth the shares of our common stock we acquired during the fourth quarter of fiscal 2013 pursuant to the surrender of shares by employees to satisfy tax withholding obligations in connection with the vesting of restricted stock units.

<b>Fiscal Quarter Ending</b>	<b>Total Number of Shares (or Units) Purchased</b>	<b>Average Price Paid per Share (or Unit)</b>
May 31, 2013	106	\$ 20.95

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**ITEM 6.       SELECTED FINANCIAL DATA**

The following tables set forth our selected historical consolidated financial data for the periods indicated. The selected statement of income and cash flow data for fiscal 2013, 2012 and 2011 and the selected balance sheet data as of May 31, 2013 and 2012 have been derived from our audited financial statements and related notes thereto included elsewhere in this Annual Report. The statement of income and cash flow data for fiscal 2010 and fiscal 2009 and the selected balance sheet data as of May 31, 2011, 2010 and 2009 have been derived from our audited financial statements not included in this Annual Report. The information presented below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 and the audited consolidated financial statements and the notes thereto in Item 8 in this Annual Report.

**For the year ended May 31,**