

Mistras Group, Inc.
Form 10-K
August 17, 2010

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

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, 2010
Commission File Number 001-34481

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

(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
Common Stock, par value \$.01 par value

Name of each exchange on which registered
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

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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

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, 2009, based upon the closing price of the common stock as reported by New York Stock Exchange on such date was approximately \$133.8 million.

As of August 1, 2010, a total of 26,663,528 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 2010 Annual Meeting of Stockholders (the "Proxy Statement"), which is expected to be filed not later than 120 days after the registrant's fiscal year ended May 31, 2010. Except as expressly incorporated by reference, the Proxy Statement shall not be deemed to be a part of this report on Form 10-K.

MISTRAS GROUP, INC.
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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. These forward-looking statements include statements about the following:

- our evaluation of the history and the dynamics supporting the demand and growth in the asset protection solutions market;
- estimates of market sizes and anticipated uses of our asset protection solutions;
- our business strategy and our underlying assumptions about data and trends in the markets for asset protection solutions;
- our ability to market, commercialize and achieve market acceptance for our asset protection solutions;
- our estimates regarding future revenues, expenses, capital requirements, liquidity, the sufficiency of our cash resources and our needs for additional financing;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others; and
- management's goals, expectations and objectives and other similar expressions concerning matters that are not historical facts.

Actual events, results and outcomes may differ materially from our expectations due to a variety of factors. Although it is not possible to identify all of these factors, they include, among others, the following:

- loss of or reduction in business with a significant customer;
- an accident or incident involving our asset protection solutions;
- our current dependence on customers in the oil and gas industry;
- our ability to attract and retain trained engineers, scientists and other highly skilled workers as well as members of senior management;
- strengths and actions of our competitors;
- the timing, size and integration success of potential future acquisitions;
- catastrophic events that cause disruptions to our business or the business of our customers; and
- the continuing uncertain economic environment.

In some cases, you can identify forward-looking statements by terminology, such as “goals,” or “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” or the negative of such terms or other similar expressions. You are urged to place undue reliance on any such forward-looking statements, any of which may turn out to be wrong due to inaccurate assumptions, unknown risks, uncertainties or other factors. Factors that could 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 urge you to carefully read and consider the disclosures found in these filings, all of which are available in the SEC EDGAR database at www.sec.gov. Except as otherwise required in our reports on Form 10-Q or Form 8-K as applicable, we undertake no obligation to (and expressly disclaim any such obligation to) revise or update the statements made herein or the risk factors that may relate thereto whether as a result of new information, future events or otherwise.

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 are a “one source” leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity of critical energy, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in mechanical integrity (MI) and non-destructive testing (NDT) services and proprietary data analysis and enterprise warehousing software to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity assessments and management. 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 services 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), fossil and nuclear power, public infrastructure, chemicals, aerospace and defense, transportation, primary metals and metalworking, pharmaceutical/biotechnology, food processing and research and engineering institutions. As of May 31, 2010, we had approximately 2,300 employees, including 30 Ph.D.’s and more than 100 other degreed engineers and highly-skilled, certified technicians, in 72 offices across 15 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 2010.

Mistras revenues by end market
(fiscal 2010)

Our asset protection solutions continuously evolve over time as we combine the disciplines of NDT, MI services and data analysis and data 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 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 solution under our “One Source” umbrella utilizing a proven systematic method that creates a closed loop life cycle for addressing continuous asset protection and improvement as illustrated below. Under this business model, customers outsource their 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 outsourced NDT services conducted by our technicians, mechanical integrity assessments, above-ground storage tank inspection and American Petroleum Institute (“API”) visual inspections and predictive maintenance (“PDM”) program development;

advanced asset protection solutions, in most cases involving proprietary acoustic emission (“AE”), digital radiography, infrared, wireless and/or automated ultrasonic 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 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; and

on-line monitoring systems that provide for 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.

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 our 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 \$272.1 million, \$209.1 million and \$152.3 million and adjusted EBITDA of \$39.5 million, \$31.1 million and \$28.1 million for fiscal 2010, 2009 and 2008, respectively. An explanation of adjusted EBITDA and a reconciliation of these amounts to net income are set forth on page 40. For fiscal 2010, we generated approximately 84% of our revenues from our Services segment. Our revenues are diversified, with our top 10 customers accounting for approximately 45%, 35% and 39% of our revenues during fiscal 2010, 2009 and 2008, respectively. We provide our asset protection solutions to multiple divisions, locations and business units of major oil and gas corporations and power generation companies across the globe. Our largest customer accounted for approximately 18%, 17%, and 17% of our revenues for fiscal 2010, 2009 and 2008, respectively. No other customer accounted for more than 7% of our revenues during fiscal 2010, 2009 or 2008.

Asset protection industry overview

Asset protection is a large and rapidly growing industry that consists of NDT inspection, MI services and inspection data warehousing and analysis. NDT plays a crucial role in assuring the operational and structural integrity 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 the I-35W Mississippi River bridge collapse in Minnesota have raised the level of safety 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 is 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 scientists. Today, we believe that customers are increasingly looking for a single vendor capable of providing a wider spectrum of asset protection solutions for their 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, only 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 ownership of customers’ data, develop a significant barrier to entry for competitors, and so develop the capability 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 & distribution. The Smart Grid initiative in the United States is causing increased loading on aging transformers that are more than 30 years old in most 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. While many of our customers have historically performed NDT services in-house, the increasing sophistication and automation of NDT programs, together with a decreasing supply of skilled professionals and stricter governmental regulations, has led many companies and public authorities to outsource NDT to 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, 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 feedstock's, such as low-grade coal or petroleum, used in refinery and power generation processes. These lower grade raw materials and feedstock's, especially in the case of the refining process, 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 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 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 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, and 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 Process Safety Management Regulation 29 CFR 1919.119. 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 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 only now aging to a point where significant maintenance is required.

Expanding Addressable Geographies. We believe that a substantial driver of incremental demand will come from international markets, including 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 rapidly 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. According to the United States Energy Information Administration (“EIA”) international outlook published in May 2010, overall world marketed energy consumption is expected to increase by 49 percent from 2007 to 2035. The most rapid growth in energy demand from 2007 to 2035 is expected to occur in nations outside the Organization for Economic Cooperation and Development (“non-OECD nations”), where energy consumption increases by 84 percent compared with a 14 percent increase in energy use among OECD countries. The global economic recession that began in 2008 and has continued has had an impact on world energy demand in the near term. Total world marketed energy consumption contracted by approximately 1% in 2008 and by an estimated 2% in 2009, as manufacturing and consumer demand for goods and services declined. Although the recession appears to have ended, the pace of recovery has been uneven so far, however, it is anticipated as the economic situation improves, most nations return to the economic growth paths that were anticipated before the recession began. Despite the near term impacts on our overall market, the other drivers of growth (aging infrastructure, need for safety and compliance, trends toward outsourcing) have minimized a decline in our opportunities.

World marketed energy use by fuel type (quadrillion Btu)*

Source: EIA

An important subset of this energy market for our asset protection solutions is the world's electricity market where world net electricity generation is estimated by the EIA to increase by 87%, from 18.8 trillion kilowatt hours in 2007 to 25.0 trillion kilowatt hours in 2020 and 35.2 trillion kilowatt hours in 2035.

The rapid increase in world energy prices from 2003 to 2008, combined with concerns about the environmental consequences of greenhouse gas emissions, has led to renewed interest in alternatives to fossil fuels—particularly, nuclear power and renewable resources. As a result, long-term prospects continue to improve for generation from both nuclear and renewable energy sources—supported by government incentives and by higher fossil fuel prices.

Electricity from coal-fired generation is also expected to increase, making coal the second fastest-growing source for electricity generation. The outlook for coal could be altered substantially, however, by any future legislation that would reduce or limit the growth of greenhouse gas emissions.

The chart below is from the U.S. Government Energy Information Administration and is their latest estimate of this growth by kilowatt hours.

Within the broad energy sector, our key target markets include:

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. According to the EIA, world use of liquids and other petroleum based products will grow from 86.1 million barrels per day in 2007 to 92.1 million barrels per day in 2020, 103.9 million barrels per day in 2030, and 110.6 million barrels per day in 2035. On a global basis, liquids consumption remains flat in the buildings sector, increases modestly in the industrial sector, but declines in the electric power sector as electricity generators react to rising world oil prices by switching to alternative fuels whenever possible. In the transportation sector, despite rising prices, use of liquid fuels increases by an average of 1.3% per year, or 45% overall from 2007 to 2035.

According to the United States Energy Information Administration (EIA), in 2008 coal, oil and gas supplied approximately 80% of global primary energy demand. In addition, there were approximately 700 crude oil refineries in the world, with approximately 150 refineries 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 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.

Traditional 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, 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 as follows:

Nuclear. For the year ended December 31, 2009, U.S. commercial nuclear reactors operated at a capacity utilization rate of approximately 92% and provided 20% of the US electrical power generation. We believe that the need to sustain these high utilization rates, while also maintaining a high degree of safety, will result in increased spending on testing, on-line monitoring and maintenance of these assets. Industrial Information Resources projected that maintenance spending on the North American reactor fleet will exceed \$800 million in 2008. The current U.S. administration is proposing a reduction of CO₂ emissions to 1990 levels by 2020, with a further 80% reduction by 2050. Meeting these aggressive goals while gradually increasing the overall energy supply requires that all non-emitting technologies must be advanced. A December 2008 Electric Power Research Institute (EPRI) study called the PRISM analysis defines a possible technology mix within the electricity sector that would help achieve a comparable goal. In it, nuclear generation rises 20% from current levels by 2020 and nearly 200% by 2050. The EIA expects electricity generation from nuclear power to increase from about 2.6 trillion kilowatt hours in 2007 to a projected 3.6 trillion kilowatt hours in 2020 and then to 4.5 trillion kilowatt hours in 2035. Higher future prices for fossil fuels are likely to make nuclear power economically competitive with generation from coal, natural gas, and liquid fuels, despite the relatively high capital costs of nuclear power plants. Moreover, higher capacity utilization rates have been reported for many existing nuclear facilities, and the projection anticipates that most of the older nuclear power plants will be granted extensions to their operating lives.

Around the world, nuclear generation is attracting new interest as countries seek to increase the diversity of their energy supplies, improve energy security, and provide a low-carbon alternative to fossil fuels. Still, there is considerable uncertainty associated with nuclear power projections. Issues that could slow the expansion of nuclear power in the future include plant safety, radioactive waste disposal, rising construction costs and investment risk, and nuclear material proliferation concerns. Those issues continue to raise public concern in many countries and may hinder the development of new nuclear power reactors. Nevertheless, there is significant opportunity in existing facilities.

Globally, there were 438 nuclear reactors in operation as of June 30, 2010 with many additional reactors under construction. A majority of these reactors are more than 15 years old. As of August 2010, there are currently 104 sites licensed by the U.S. Nuclear Regulatory Commission and 32 companies that are licensed to operate nuclear reactors, and since 2007, there have been 22 applications for additional sites. We believe it will be increasingly important to provide asset protection solutions to the global nuclear power industry in order to prevent potentially catastrophic events and help the nuclear industry optimize availability and safety of their assets.

Fossil. The fossil fuel power generation market consists of facilities that burn coal, natural gas or oil to produce electricity. These facilities operate at high capacity levels and can incur productivity loss if a shutdown is required. As a result, there is a significant demand for continual testing and maintenance of these facilities and their assets. In addition, to meet growing electricity demand, fossil power generation companies are increasing capital spending for capacity expansions, emissions controls and new facility construction. In 2009, the EIA

reported that there are over 80 fossil power stations proposed for construction in the United States.

Wind. Wind power has reached critical mass, with total installed capacity reaching approximately 35,000 megawatts (MW), of which approximately 10,000 MW were installed in 2009 alone. It is estimated that growth will continue to accelerate in the near term. There is significant demand for on-line condition monitoring for wind turbines, because their three critical components, of the main bearing, gearbox and generator, need to be fully operational at all times for a turbine to work efficiently and safely. Failure of a gearbox on a single wind turbine rated at 1.5 MW can cost up to \$0.4 million to replace, which justifies the use of preventative maintenance monitoring and services for units both in and out of warranty. Our asset protection solutions are also being used in the research, design and development of the composite-based wind turbine blades to improve their structural integrity and efficiency and are being applied to inspect the structural integrity of the tower and base.

Other 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 and paper and pulp. Three process industries that we focus our efforts on are described below.

Chemicals. As with oil and gas processing facilities, chemical processing facilities require significant spending on maintenance and monitoring. The average cost of plant construction for chemical assets has increased substantially, which we believe creates a more concentrated focus on asset protection solutions to limit further capital costs. Additionally, growing chemical end-markets continue to put strain on existing plants. Given their aging infrastructure, growing capacity constraints and increasing capital costs, we believe asset protection solutions continue to grow in importance in maintenance planning, quality and cost control and prevention of catastrophic failure in the chemicals industry.

Pharmaceuticals and food processing. Although the pharmaceuticals and food processing 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. Because these industries use equipment, structures, facilities and other infrastructure similar to those of many of our other target markets, and these assets have reached an age where structural failures are becoming a significant risk we are seeing an increasing demand from those companies looking to protect their existing investments and avoid costly maintenance repairs and revenue losses due to process or manufacturing line shutdowns. In addition, advanced NDT is more effective than traditional NDT solutions when testing the principal alloys and materials used in these industries' infrastructure assets.

Public infrastructure

We believe that high profile infrastructure catastrophes, such as the collapse of the I-35W bridge in Minneapolis, 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. Nearly 25% of the approximately 600,000 public roads and bridges in the U.S. are classified as "deficient," according to the U.S. Federal Highway Administration. An immediate "cost-beneficial" investment aimed at replacing or repairing deficient bridges may cost as much as \$99 billion, according to the U.S. Department of Transportation.

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, Pennsylvania and the greater New York metropolitan areas. In July 2010, we were awarded a continuous on-line Structural Health Monitoring System contract by the California Department of Transportation to be installed on 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 received a \$6.9 million project awarded 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.

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, 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 from the aerospace industry to result from wider use of 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.

Primary metals and metalworking

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.

Transportation

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 the segment 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 segment, asset protection solutions are used primarily to test rails and passenger and tank cars.

Our competitive strengths

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 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 72 offices and independent representatives in 15 countries around the world, we offer an extensive portfolio of solutions that enables our customers to consolidate all their inspection requirements and the associated data storage and analytics on a single system that spans the customers’ entire enterprise. This allows our customers to more effectively manage their asset portfolio, plan asset maintenance based on predictive analytics rather than simple scheduled routines and track their assets globally, thereby enhancing asset productivity and utilization while minimizing the administrative costs of having multiple vendors. In addition, collaboration between our services teams and product design engineers generates enhancements to our services, products and systems, which provide a source of competitive advantage compared to companies that provide only NDT services or NDT products.

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, chemical, fossil and nuclear power, aerospace and defense industries as well as the largest public authorities. Approximately 90% of our top 20 customers by fiscal 2010 revenues have used our solutions for at least 5 years, with many of those customers using our solutions for over 10 years. We leverage our strong relationships to sell additional solutions to our existing customers while also attracting new customers. As asset protection is increasingly recognized by our customers as a strategic advantage, we believe our reputation and history of successful execution are key competitive differentiators.

Repository of Customer-Specific Inspection Data. Our enterprise software solutions 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. We believe our ability to provide these customized products and services, along with the high cost of switching to an alternative vendor, provide us with significant competitive advantages.

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 pressure vessels (the MONPAC technology package) or 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 (AE) 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. In addition, many of the members of our team have been instrumental in developing the testing standards followed by international standards-setting bodies, such as the American Society of Non-Destructive Testing and comparable associations in other countries. The scientists and engineers on our research and development team developed many of the advanced NDT technologies we use in our business, including portable corrosion mapping UT systems, enterprise software solutions for plant-wide and fleet-wide inspection data archiving and management, and non-intrusive above-ground tank testing.

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. 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. As a result, we believe that our close, collaborative relationships with our customers provide us a significant competitive advantage.

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 and Systems. We intend to maintain and enhance our technological leadership by continuing to invest in the internal development of new services, products and systems. Our highly trained team of Ph.D.'s, engineers and highly-skilled, certified technicians has been instrumental in developing numerous significant asset protection standards, and we believe their knowledge base will enable us to innovate a wide range of new asset protection solutions more rapidly than our competition.

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 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, positions 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 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 has 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.

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, 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 solutions

We provide comprehensive asset protection solutions to a diverse customer base. We combine the strengths of our proprietary products, industry expertise, a suite of software solutions and our highly skilled and experienced technicians and engineers to deliver a broad set of inspection, engineering and information technology services that address the complex business challenges faced by our customers. Depending on the requirements of our customers, we can provide them our software and other products on a stand-alone basis or as a complete end-to-end solution consisting of sensor products, services and software. Importantly, as part of our solutions, we are increasingly providing on-line asset monitoring and management software enabling our customers to have real-time access to and assess the structural health of their infrastructure.

Our services

We provide 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 per diem costs to a minimum, while maximizing our ability to develop meaningful, collaborative customer relationships. Examples of our comprehensive portfolio of 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, which are supported by our advanced proprietary software and hardware products.

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 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 they use include:

Automated ultrasonic testing

Guided ultrasonic long wave testing

Wireless data acquisition

On-line plant asset integrity monitoring

Infrared thermography
Phased array ultrasonic testing
Acoustic emission testing

Risk-based inspection
Digital radiography
Sensor fusion (multi-sensor data integration)

Examples of our advanced NDT techniques include the following:

Automated Ultrasonic Phased Array Inspection. We primarily use this technique to inspect welded areas during large capital construction and maintenance projects to determine whether the welds can withstand anticipated operating conditions, such as high pressures or temperatures. This technique employs an automated mobile scanner to obtain structural ultrasonic inspection data from multiple angles and locations. The principal competing technique is radiographic inspection, which generally impedes or requires the construction or maintenance work to be halted during the inspection. By using ultrasonic phased array inspection, our customers can continue to weld while our inspections are taking place, which shortens downtime during maintenance projects and accelerates the completion of construction projects.

Guided Ultrasonic Long Wave Testing. We typically use this technique to locate corrosion or metal loss in large volumes of above ground or buried piping. It allows us to inspect a long continuous section of piping from one location and follow up with further inspections on problem areas, as compared to more costly and time-intensive methods which require inspections at multiple locations along the same section of pipe. It also allows us to inspect the entire pipe body, enabling us to identify a larger percentage of flaws as compared to traditional techniques that inspect only a small portion of pipe walls.

Advanced Infrared Inspection. We generally employ this technique in place of ultrasonic inspections of large operating systems, such as boilers in industrial power plants, which rely on scans of sample areas of the system to test their integrity rather than a scan of the entire system. Traditional infrared inspection locates unexpected temperature differences to alert inspection personnel to potential problems with insulation, process systems, electrical systems and proper operating parameters. Our proprietary advanced infrared system enables us to scan large areas using a robotic crawler and not only examine temperature differences but also precisely measure the thickness of objects or materials. Our proprietary infrared scanning system examines the entirety of the tested structure to supply more comprehensive inspection data to plant engineers, providing them a higher level of confidence when deciding whether to repair, replace or retire the structure.

Line Scanning Thermography (LST). LST is an inspection method that uses infrared thermal imaging developed to measure the thickness of boiler tubes. A unique characteristic of this system compared to other thermography methods is LST's ability to develop an image almost instantly as it scans a boiler tube, while the other methods are significantly slower. Boiler tube inspections are traditionally inspected for loss of wall thickness using ultrasonic contact thickness gauges, which is a very tedious and time consuming method. The LST system can test a large area faster than other NDT methods and record the inspection with a digital image. Another application for which LST has shown promise is the inspection of composite materials for porosity, delaminations and non-visible impact damage. Inspection speed, sensitivity to defects, and the capability to store digital images are the key selling points of LST.

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 (RBI) 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 metrics.

Our products and systems

Our software

Our software solutions are designed to meet the demands of our customers’ data analysis and asset integrity management requirements. Some of our key software solutions 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. 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.

These plans are based on information stored in PCMS, which include results based upon the rates of deterioration shown by existing test results, information based on our past experiences in the operation and testing of similar structures and standards and recommended practices of numerous industrial standards-setting bodies and regulators, such as the American Society of Mechanical Engineers, the American Petroleum Institute and the Occupational Safety and Health Administration. Using PCMS allows our customers to demonstrate compliance with these standards and practices, which typically helps them reduce their insurance premiums and ensure asset, product and employee safety. 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. We believe PCMS is one of the more widely used process condition management software systems in the world we estimate that approximately 37% of U.S. refineries, by capacity, currently use PCMS. This provides us not only with recurring software license fees, but also marketing opportunities for additional software, asset Integrity management and other asset protection solutions. With the addition of the RBI module, we expect the use of PCMS to expand in the future. In addition, our risk-based inspection (RBI) application enables PCMS users to test and analyze their assets operating conditions and other factors, such as operating temperature range and contact with highly flammable or corrosive products. This allows customers to classify or rank each asset according to the probability and consequences of its structural failure and schedule the appropriate frequency and types of testing for that asset. We believe our RBI program allows our customers to appropriately test their infrastructure in a more cost-effective manner while reducing their overall risk profile, which typically allows them to reduce their insurance premiums.

Application-based software

We provide a comprehensive portfolio of application-specific software products that covers 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:

Advanced Data Analysis Pattern Recognition & Neural Networks Software (NOESIS): An advanced data analysis and pattern recognition software package for AE applications. NOESIS enables our AE experts to develop automated remote monitoring systems for our customers.

AE Software Platform (AEwin and AEwinPost): Windows-based real time applications software for detection, processing and analysis of AE data. This software locates the general location of flaws on or in our customers' structures.

Loose Parts Monitoring Software (LPMS): A software program for monitoring, detecting and evaluating metallic loose parts in nuclear reactor coolant systems in accordance with strict industry standards. LPMS alerts the operator on the plant floor and central control room about potential loose parts, provides a user-friendly interface for operators to differentiate between noise and loose parts and identifies the location of the problem.

Automated UT and Imaging Analysis Software (UTwin and UTIA): A complete software platform for analyzing ultrasonic inspection data and visualizing and identifying the location and size of potential flaws.

Technology packages

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. Some of our widely used technology packages in some of our target markets are:

Technology package	Type	Description	Benefits
TANKPAC	AE On-line Tank Floor Inspection	Tests to monitor for emissions resulting from active corrosion of the tested infrastructure	<ul style="list-style-type: none"> Ability to perform tests on-stream Non-intrusive testing Quickly identify tanks that need inspection and resolve associated problems Leave good tanks operational and save the shutdown and cleaning costs
MONPAC	AE Pressure Vessel Testing	An AE "expert system" that evaluates the condition of metal pressure systems and tanks	<ul style="list-style-type: none"> Ability to perform tests on-stream Rapid inspection capability Global monitoring (100% inspection, including welds, repairs, base metal) Reduction in inspection costs Reduction in downtime resulting from improved information about plant condition

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VPAC	Loss Control for Valves in Process Plants	Estimates valve leakage based on measurements made using our inspection products	<p>Cost savings from detection of valve leaks</p> <p>Cost savings are achieved in maintenance planning, troubleshooting plant operations and monitoring of losses for environmental purposes</p>
POWERPAC	AE On-line Power Transformer Monitoring	Through on-line monitoring, detects and locates partial discharge in power transformers by utilizing AE	<p>Non-intrusive testing</p> <p>On-line testing identifies problems characterizing defects</p> <p>Creates way to monitor problem transformers</p>
Wire Break	On-line monitoring of wire breaks in Bridge suspension cables	On-Line detection and location of wire breaks on suspension cable bridges	<p>Monitoring 24/7 for wire breaks</p> <p>Reports wire breaks and wire break locations over internet on secure web page</p> <p>Alerts bridge owners of area's needing repairs</p>
LeakTEC	AE Leak detection	On-Line monitoring and detection of gas and liquid leaks in pipes and vessels	<p>Continuous leak monitoring detects and reports leaks</p> <p>Used in Power and Petrochemical industry</p>

Our other products

AE products

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 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 structural flaws in the inspected materials. Such materials 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 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, EPA requirements regarding fugitive emissions helps drive the market for this leak detection equipment.

Our complete AE product line includes:

AE Sensors: We offer over 200 different types of proprietary sensors. Our latest innovation includes a proprietary dual function sensor that is a true accelerometer and an AE sensor that records low and high frequencies simultaneously in one sensor body.

Multi-channel AE Systems: Multi-sensor parallel processing systems capable of monitoring, detecting and locating defects in large structures, such as vessels, pipelines and off-shore platforms. These systems include our DiSP, SAMOS, PCI-2, and Sensor Highway II, which is designed for on-line remote monitoring of bridges and large transformers.

Hand-held Instruments: Portable AE systems easily programmable for OEM applications.

Wireless AE Systems: Our wireless sensors save considerable installation time over wired sensor networks and are remotely monitored and controlled through a basestation. Multiple AE wireless sensors can combine with other sensors in geographically dispersed “mesh” networks. Wireless capabilities are fully integrated into our Sensor Highway II and Asset Condition Monitoring (ACM) units.

Small AE systems: USB-AE node for low cost, small channel count, laboratory or university applications, expands the use of AE to beginners and potential future customers.

Intrinsically Safe Products: Certified sensors and AE systems to work in hazardous and potentially explosive environments such as the petrochemical industry.

Software Development Kits: We offer software development kits for all our products for customers to develop their own special applications for future OEM business.

UT technology

We design, manufacture and market a full 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. We manufacture a complete line of UT systems including our line of Automated UT scanners such as our LSI crawler and Mini-Scanner, 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 and Gantry systems over 50 feet long. We also design and fabricate custom scanners as requested by customers in the metals and aerospace industries.

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. Our patented Sensor Highway monitoring systems offer fully automated, unattended remote data acquisition and alarm reporting for rotating mechanical equipment and machines, which enable us to provide real-time predictive maintenance data to our customers.

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 track its progression to avoid catastrophic failure. Since 1988, we have provided these solutions to over eighty projects for a variety of industries and applications. Our monitoring systems can be accessed both on-site and remotely using state of the art wireless technology and can interface with customer data via the internet or other proprietary secured networks. These monitoring systems provide browser-based hierarchical displays of critical information and can include alarm and customer notification options using messaging and email services. By simultaneously using different sensing devices such as acoustic emission or sound, vibration, temperature, strain or corrosion gauges, often referred to as sensor fusion, we can monitor and correlate different sensor readiness to provide more accurate fault detection and location determination while reducing or eliminating false alarms. The information can also be used to correct operational procedures that contributed to the failures.

We provide a range of custom outsourced monitoring services for customers that do not have the resources to monitor their assets or interpret sensor data. An example of a continuous monitoring engagement involving static infrastructure is our monitoring of aging bridges for factors of degradation. Wire breakage in suspension bridges is usually the result of corrosion fatigue which slowly degrades the integrity of the bridge. Since wire breakage events are occasional and unpredictable, the most effective way to track the extent of deterioration is by continuous monitoring. Another example is offshore drilling platforms, which often develop slight flaws in high stress locations that can quickly and unpredictably expand into catastrophic failures. In many circumstances, such flaws cannot be reliably detected using conventional inspection techniques. An example and prime candidate for our temporary on-line monitoring solutions is a pressure vessel, such as a tank, in which a crack has been identified, but that can still be safely operated. In such cases, we are engaged to monitor the vessel until the crack grows dangerous or until a planned maintenance or shutdown occurs.

An example of continuous monitoring of dynamic or rotating assets is the monitoring of wind turbines. Each wind turbine is made up of a main bearing, gearbox and generator that combines to form the drive train. A typical wind park engagement will include around 50 wind turbines, each requiring drive train monitoring for early detection of potential mechanical faults, which in turn will allow for scheduling of maintenance prior to the catastrophic failure of a component, and isolating it to avoid damage to the other components in the drive train. These components are difficult to replace since they are usually installed on towers over 250 feet high, and replacement components are costly and have long lead times.

Customers

During fiscal 2010, we provided our asset protection solutions to approximately 4,800 different customers. The following table lists some of our larger customers by revenues for fiscal 2010, in each of our target markets.

Oil and gas, including		Composite and part testing,	
petrochemical	Nuclear and fossil power	including aerospace	Chemicals
BP	American Electric Power	Alcan	Air Products
Chevron	Bechtel	ATC Manufacturing	Aux Sable Liquid Products
Conoco Phillips	Constellation Power	Boeing	Bayers
ExxonMobil	Dominion	Chinataly Aviation	Dow, Rohn & Haas
Hess	Duke	Composite Solutions	Dupont
Lyondell	Entergy	Hitco	Ferro Corporation
Marathon Oil	Exelon	Jaxa	INEOS
Petrobras	Florida Power & Light (FPL)	Kaiser Aluminum	Lyondell
Shell	PP&L	Precision	Newmont Gold Corporation
Tesoro	Progress Energy	Rolls Royce	Occidental Chemical Corp.
Valero	PSE&G	Tyee Aircraft, Inc.	Solutia
Primary metals and		Pharmaceuticals and food	
metalworking	Transportation	processing	Public infrastructure
Cameron Value	BRC Rail Car Services	Anheuser-Busch	Various governmental
Eden Cryogenics, LLC	Dana Corporation	Dole	transportation agencies
High Steel Structures	Emergency One, Inc.	Merrick & Company	(worldwide)
Mercon	Global Links	Monsanto	Federal Highway
Metal Tech	Sutphen Corp.	Pilgrim's Pride	Administration (U.S.)
Mid-State Machine		Sanofi Aventis	Parsons Engineering
Products, Inc.		USDA	Amey (U.K.)
Rovanco Corp.			B E & K Construction
Sunshine Scientific			
Verwater			
Wollostan Alloy			

During the last three fiscal years, we derived our revenues from providing our asset protection solutions to customers in the United States and over 60 countries around the world. Foreign countries where we provided asset protection solutions and were responsible for approximately 1% or more of our revenues in fiscal 2010, listed in descending order of revenues, were: the United Kingdom, Brazil, Canada, France and the Netherlands.

Competition

We operate in a highly competitive, but fragmented, market. 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 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 products are GE Inspection Technologies and Olympus NDT. In the traditional NDT market, we believe the principal competitive factors are project management, execution, price, reputation and quality. In the advanced NDT market, reputation, quality and size are more significant competitive factors than price. In light of several characteristics of the NDT industry and obstacles facing competitors, only a few of our existing competitors can compete with us on a global basis, and we believe few new companies are likely to enter the market. Some of the most significant of such characteristics and obstacles 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, that are listed below. 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.

API Turnaround Management	Tube Inspection	Rope Access
Storage Tanks & Vessels	Long Range Guided Wave UT	Transportation & Fire Apparatus
PCMS Inspection IT & RBI	Acoustic Emission	Asset Integrity Management Services (AIMS)
Pipeline Integrity	Pipeline Construction	Infrastructure
Refractory Inspection	Automated Ultrasonics	24/7 On-Line Remote Monitoring
Transformers & Distribution	Mechanical Integrity	Predictive Maintenance

Sales and marketing

We sell our asset protection solutions through all of our 72 offices worldwide. As of May 31, 2010, our world-wide sales and marketing team, together with our “center of excellence” managers, consisted of 63 employees. 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 customer needs and identify potential sales opportunities. We provide our asset protection solutions under well known, industry-recognized brand names including Physical Acoustics Corporation and Vibra-Metrics, as well as lesser-known regional, local or product specific brand names. We have started to promote the name Mistras using the tag line of “Delivering Asset Protection Solutions.” We divide our sales and marketing efforts into services sales, software and other products sales and marketing.

Services sales

In addition to our general and center of excellence managers and executives, our dedicated Services sales group employs 15 regional and business development managers and professionals, each of whom is responsible for educating our existing and potential customers about our asset protection solutions for a specific geographic region. The sales cycle for some of our larger services engagements is typically three to six months. We generally provide our services under one-to three-year contracts, but none of our services contracts legally obligate our customers to purchase from us on a going-forward basis. Historically, a majority of our total services revenues have been recurring because of the length of certain of our client relationships and the number of our technicians who work for extended and predictable periods at our customer locations.

Products & systems sales

Our Products and Systems sales group employs 10 corporate level sales managers and professionals, each of whom is responsible for educating our existing and potential customers about our diverse portfolio of asset protection solutions in a geographic region. This team is supported by experts and scientists who work globally to provide design,

installation and other sales support for more specialized niche applications, as well as customer support after purchase. The sales cycle for our software and other products is typically three to 12 months. We generally provide our software under one-year renewable license agreements.

International sales

Our International sales group employs 14 sales managers and professionals, each of whom is responsible for educating our existing and potential customers about our asset protection solutions in the geographical areas outside the United States other than China and South Korea. The sales cycle for our asset protection solutions and the agreements under which we provide them in these areas are substantially similar to those of our other segments.

Marketing

Our marketing communication group focuses primarily on supporting our corporate, global sales and operations centers. with industry trade shows, seminars, graphic design, print and E–advertising, development of product data sheets, brochures, website maintenance, development and support, internal communications, research, and customer and internal newsletters.

Manufacturing

Our hardware products are manufactured in our Princeton Junction, New Jersey facility. This manufacturing facility is equipped with the latest surface mount manufacturing equipment and automated test equipment. 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.

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 August 1, 2010, we held eight patents in the United States, which will expire at various times between fiscal 2011 and 2023, and had no outstanding patent applications. Although we believe our existing patents have significant value, we currently do not principally rely on our patented technologies to provide our proprietary asset protection solutions. We periodically assess appropriate circumstances for seeking patent protection for those aspects of our technologies, designs, methodologies and processes that we believe provide significant competitive advantages. We have also licensed certain patent rights from third parties for new NDT technologies involving thermography and a method to measure wall thinning and geometric changes in boiler tubes. However, we do not significantly rely upon these licensed technologies in providing our asset protection solutions and the royalties we pay for these licenses are not material.

As of August 1, 2010, the primary trademarks and service marks that we held in the United States included Mistras, Physical Acoustics Corporation (PAC), and Controlled Vibrations Inc. Other trademarks or service marks that we utilize in localized markets or product advertising include PCMS, NOESIS, AEwin, AEwinPost, UTwin, UTIA, LST, Vibra-Metrics, MONPAC, PERFPAC, TANKPAC, VPAC, POWERPAC, Sensor Highway, Quality Services Laboratories Inc. (QSL) and NDT Automation.

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 certain of 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 30 employees who hold Ph.D.'s, and a significant number of 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 expenses in the United States were approximately \$2.4 million, \$1.9 million, and \$1.7 million for fiscal 2010, 2009 and 2008, respectively. While we have historically funded most of our research and development expenditures, 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.

The Company also has 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 the Company's 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, 2010, we had approximately 2,300 employees worldwide and approximately 2,000 of our employees were based within the United States, of which approximately 85% were hourly. Less than 10% 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. Thus far, we are not involved in specific environmental litigation or claims, including the remediation of properties we own or have operated, as well as efforts to meet or correct compliance-related matters. We do not expect costs related to environmental matters to have a material adverse effect on our consolidated cash flows, financial position or results of operations.

ITEM 1A. RISK FACTORS

An investment in our common stock involves risk. You should carefully read and consider the risks described below which represent the major risks to our business, 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 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.

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 one of our customers were responsible for approximately 18%, 17% and 17% of our revenues for fiscal 2010, 2009 and 2008, respectively. Taken as a group, our top 10 customers were responsible for approximately 45%, 36% and

35% of our revenues for fiscal 2010, 2009 and 2008, respectively. 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.

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, whether as a result of poorly designed inspections, malfunctioning testing equipment or our employees' failure to adequately test or properly record data, we could be subject to subject to claims. For example, one of our clients claimed one of our x-ray inspection crews had improperly recorded inspection data about a portion of its infrastructure, requiring us to provide a new team to inspect that infrastructure over a period of three months at our expense. 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. For instance, we recently inspected a subset of welds made in a liquid storage tank farm under construction for a customer in order to determine if the welds were being made in accordance with applicable regulations. The welds we tested were specified by the contractor that made them. Weeks after our inspections were completed a weld in a tank cracked, resulting in the spill of hazardous material. The customer made a claim on its insurer, which in turn made claims against us, among others, for the clean-up costs, which in this case are not significant. Though we believe we did not test the weld that failed, if we are unable to prove this fact we may decide to or be compelled by a court to pay some of the clean-up costs. 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. Such an accident or incident might also make it more expensive or impossible for us to insure against similar events in the future. Even unsuccessful claims relating to accidents could result in substantial costs, including litigation expenses, and diversion of our management resources.

If we are unable to attract and retain a sufficient number of trained engineers, scientists and other highly-skilled 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 other highly-skilled, certified technicians at competitive wages. The demand for such employees is currently high, and we project that it may increase substantially 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. Many of the companies with which we compete for experienced personnel have comparatively greater name recognition and resources. In addition, in making employment decisions, job candidates often consider the value of the equity compensation they are to receive in connection with their employment. Volatility in the future market price of our stock may, therefore, adversely affect our ability to attract or retain key employees. Furthermore, the requirement to expense stock-based awards may discourage us from granting the size or type of stock-based awards that job candidates require to join our company. The markets for our products and services also require us to field 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. 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, 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 not be able to manage our operations and achieve 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, 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. All of the future agreements with members of our senior management team are expected to provide that their employment is at-will and may be terminated by either us or the employee at any time and without notice. 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 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. Many 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 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 make it more difficult for us to attract and retain customers, can cause us to lower our prices and accept lower margins in order to compete, the impact of which can reduce our market share, revenues and profits.

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 63%, 58% and 50% of our revenues for fiscal 2010, 2009 and 2008, respectively. While we make efforts to expand our customer base into industries other than the oil and gas industry, we may not be successful in doing so. Our services are vital to the operators of plants and refineries, however economic slow downs 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 seek 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.

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

Our historical growth has depended, and our future growth is likely to continue to depend, to a certain extent, on our ability to make acquisitions and successfully integrate 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.

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 covenants in our credit agreement and 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.

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. In April 2010, our largest customer suffered a catastrophic industrial accident in the Gulf of Mexico. Due to the scope of the accident, the possibility exists that this customer could exit some of its refining operations or suffer liquidity problems, either of which could adversely affect our business. 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 face risks related to the current economic conditions.

The global economy continues to be fragile. Global financial markets continue to experience disruptions, including diminished liquidity and credit availability, declines in consumer confidence, modest economic growth, persistently high unemployment rates, volatility in interest and currency exchange rates and continued uncertainty about economic stability. There may be further deterioration and volatility in the global economy, the global financial markets and consumer confidence. We are unable to predict the likely duration and severity of the current global economic uncertainties or disruptions in the financial markets. The downturn has already resulted in certain of our customers canceling and delaying orders for our solutions, as well as some customers delaying payment for items billed, which reduced our gross margins and operating income in fiscal 2010. Although less frequent, we continue to experience pricing pressure on new contracts and renewals of existing contracts. We have also experienced a decline in our customers' capital spending. In addition, current economic conditions have resulted in the reduced creditworthiness, inability to obtain sufficient financing, and bankruptcies of certain customers, increasing our potential exposure to bad debt. Further, with the recent uncertainty in the European financial markets, European governments have begun to consider significant austerity measures, which could lead to cancellations or delays of orders and thus, may reduce revenues and profitability.

If economic conditions deteriorate further, our business, financial condition and results of operations could be adversely affected. Although we believe we have adequate liquidity and capital resources to fund our operations as planned, in light of current market conditions, our inability to access the capital markets on favorable terms, or at all, may harm our financial performance. The inability to obtain adequate financing from debt or capital sources could force us to self-fund strategic initiatives or even forgo certain opportunities, which in turn could potentially harm our 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 revenues could decline or may grow more slowly than expected and we may be unable to implement our business strategy.

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 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. If we are unable to develop new asset protection solutions or enhancements that meet our customers' needs on a timely basis, we will likely 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 produces inaccurate information or is incompatible with the systems used by our customers and makes us unable to successfully provide our solutions, it could lead to a loss of revenues and customers.

Our software is complex and, accordingly, may contain undetected errors or failures. Software 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 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 would 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, our ability to grow 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.

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

Our business is seasonal. Our first and third fiscal quarter revenues 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 have reduced cash flows in our second and fourth fiscal quarters, which may require us to borrow under our credit agreement or otherwise, to discontinue planned operations, or to curtail our operations. 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 would not be able to proportionately reduce operating expenses for that quarter without a substantial disruption to our business. We expect that the negative 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 Services segment or traditional NDT services relative to revenues from our Products and Systems and International segments, may reduce our overall gross profit margin.

Our gross profit margin on revenues from our Services segment has historically been lower than our gross profit margin on revenues from our other segments because our services have higher labor-related costs. For instance, the gross profit margin in our Services segment for fiscal 2010 was approximately 27%, while our gross profit margin in our Products and Systems segment and in our International segment was approximately 53% and 38%, respectively. Our overall gross profit margin was 31% 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 sales product mix, our margins may continue to decline. Our gross profit margin on traditional NDT services has historically been lower than our gross profit margin in our Services segment as a whole. 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 International or Products and Systems segments has increased as a percentage of total revenues. In fiscal 2010, the Service segment revenue growth was approximately 36% as compared to fiscal 2009, and approximately 84% of total revenues. Segment revenue growth for the Products and Systems segment and International segment was 9% and 6%, respectively. We expect this trend to continue and to the extent it does, our margins may decrease. 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 is 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 18 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 to perform further projects. 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. 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 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 currently have International Organization for Standardization (ISO) 9001-2000 certifications for each of Mistras Services, Physical Acoustics Corporation (PAC), Physical Acoustics Limited, and Envirocoustics S.A. and we have ISO 14001:2004 certification for Mistras Services and Physical Acoustics South America. Physical Acoustics South America also has an OHSAS 18001 certification. In addition, we currently have Nadcap (formerly National Aerospace and Defense Contractors Accreditation Program) certification for certain of our locations in Massachusetts, Ohio and Washington. 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 or Nadcap certifications, our business may be harmed because our customers generally require that we have ISO and Nadcap certification before they purchase our NDT solutions.

An inability to protect our intellectual property could negatively affect 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. Although 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, in part, in an effort to protect the intellectual property upon which they are based, 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