

2013 ANNUAL REPORT



# OUR MISSION

That men and women may work in safety and that they, their families and their communities may live in health throughout the world.

## Our Vision

To be the world's leading provider of safety solutions that protect workers when life is on the line. We pursue this vision with an unsurpassed commitment to integrity, customer service and product innovation that creates exceptional value for all MSA stakeholders.

## Business of MSA

MSA is in the business of developing, manufacturing and selling innovative products that enhance the safety and health of workers and protect facility infrastructures throughout the world. Critical to MSA's mission is a clear understanding of customer processes and safety needs. MSA dedicates significant resources to research which allows the company to develop a keen understanding of customer safety requirements for a diverse range of markets, including the fire service, construction, public utilities, mining, the oil, gas and petrochemical industry, HVAC, hazardous materials remediation, military, and retail. MSA's principal products, each designed to serve the needs of these target markets, include respiratory protective equipment, portable gas detection instruments and sensors, fixed gas and flame detection systems, fall and head protection products, as well as products for eye, face and hearing protection, and thermal imaging cameras.

MSA was founded in 1914 by John T. Ryan and George H. Deike, two mining engineers who had firsthand knowledge of the terrible human loss that was occurring in underground coal mines at that time. Their knowledge of the mining industry provided the foundation for the development of safety equipment to better protect underground miners. While the range of markets served by MSA has expanded greatly over the years, the founding philosophy of understanding customer safety needs and designing innovative safety equipment solutions that addresses those needs remains unchanged.

MSA is headquartered in Cranberry Township, Pennsylvania, with operations employing 5,300 associates throughout the world. A publicly held company, MSA's stock is traded on the New York Stock Exchange under the symbol MSA.

## A New Century – A New Company Structure

On March 7, 2014, MSA completed a legal realignment of its company structure, thereby establishing a new holding company for MSA that now trades under the name **MSA Safety Incorporated**. As a newly formed Pennsylvania corporation, **MSA Safety Incorporated** now serves as the parent holding company for a group of sub-holding and operating companies covering various aspects of MSA's businesses throughout the world.

The company's charter, bylaws, board of directors, and officers, as well as the company's NYSE ticker symbol (MSA), however, all remain unchanged.

For our shareholders, it is important to note that at the time of the realignment, each share of Mine Safety Appliances Company's outstanding common and preferred stock was converted, on a share-for-share basis, to a share of common and preferred stock of **MSA Safety Incorporated**, respectively. As a result, each shareholder of Mine Safety Appliances Company became the owner of an identical number of shares of common and preferred stock of **MSA Safety Incorporated** and ceased to own any shares of Mine Safety Appliances Company.

As MSA embarks on its second century in business, this corporate realignment ensures MSA's legal structure models that of a modern international manufacturing organization. In turn, the company is better positioned to realize the excellent growth potential that exists around the world, without compromising the strong equity of the MSA name and brand that has been built over the past 100 years. Details about the realignment can be found by reviewing the company's current report on Form 8-K filed with the U.S. Securities and Exchange Commission on March 7, 2014.

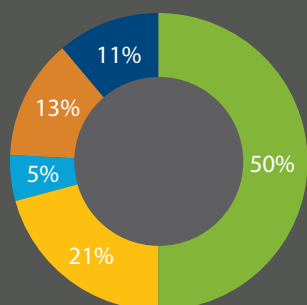


## FINANCIAL HIGHLIGHTS

A persistent focus on driving growth of core product sales, which increased by 6% in local currency terms and now comprise 73% of MSA's business, provided meaningful improvements in gross profit and operating margin in 2013.

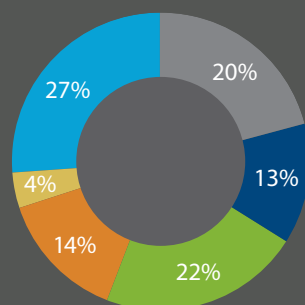
<i>(In thousands, except per-share amounts)</i>	2011	2012	2013
<b>Income statement data</b>			
Net sales	\$1,112,814	\$1,110,443	\$1,112,058
Income from continuing operations	67,518	87,557	85,858
Income from discontinued operations	2,334	3,080	2,389
Net income attributable to Mine Safety Appliances Company	69,852	90,637	88,247
Earnings per share attributable to MSA common shareholders			
<b>Basic per common share</b>			
Income from continuing operations	1.85	2.37	2.31
Income from discontinued operations	0.06	0.08	0.06
Net income	\$ 1.91	\$ 2.45	\$ 2.37
<b>Diluted per common share</b>			
Income from continuing operations	1.81	2.34	2.28
Income from discontinued operations	0.06	0.08	0.06
Net income	\$ 1.87	\$ 2.42	\$ 2.34
Dividends paid per common share	\$ 1.03	\$ 1.38	\$ 1.18
Weighted average common shares outstanding—basic	36,221	36,564	36,868
Weighted average common shares outstanding—diluted	36,831	37,042	37,450
<b>Balance sheet data</b>			
Total assets	\$1,115,052	\$1,111,746	\$1,234,270
Long-term debt	334,046	272,333	260,667
Shareholders' equity	433,666	462,955	566,452

ANNUAL SALES  
BY REGION



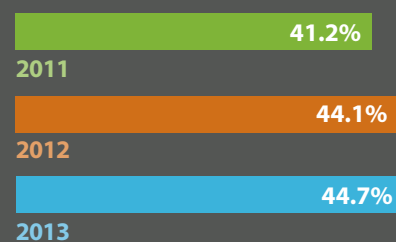
- North America
- Western Europe
- Emerging Europe
- South America and Africa
- Asia and Pacific Rim

ANNUAL SALES  
BY CORE PRODUCT GROUP

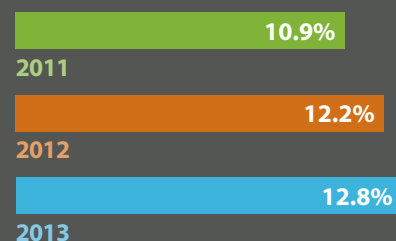


- Supplied-Air Respirators
- Industrial Head Protection
- Fixed Gas & Flame Detection
- Portable Gas Detection
- Fall Protection
- Other Products

GROSS PROFIT



OPERATING MARGIN



## TO OUR SHAREHOLDERS, CUSTOMERS, CHANNEL PARTNERS, AND ASSOCIATES:

Despite the exogenous challenges and hurdles we faced throughout the year, I am pleased to report that in 2013 MSA delivered an 11 percent increase in adjusted earnings, generating \$94 million of net income, or \$2.54 per share, on an adjusted basis. I say adjusted earnings, because during the fourth quarter, and in line with MSA's strategy to invest in core product lines and key markets, we initiated steps to divest of our South Africa distribution business and Zambian operations. More than 94 percent of sales from these businesses are comprised of non-core products, resulting in lower levels of profitability and a diffusion of our strategy implementation. By divesting these non-core assets, we can further increase our focus and resources on those product areas that truly drive value for our customers and shareholders.

Challenges, like those previously discussed throughout the year related to the U.S. government sequestration and regulatory related delays of product approvals, had to be dealt with. But dealing with challenges is nothing new to MSA. In 2014, we celebrate our 100th anniversary and a century of protecting people at work. And over that century, our great company has faced and overcome many challenges. The enduring value of MSA products, our passion for innovation, the trust our customers place in the MSA brand, and our commitment to 'staying the course' and executing our strategy, even in challenging times, remain the essence of our historic success.

Today our overall strategy is focused on two key platforms: **delivering profitable growth** and **achieving operational excellence**.

- **Driving profitable growth** places emphasis on introducing new "core products" that reflect the importance of "voice-of-the-customer" input and the value of having experienced, driven and highly skilled product design teams. It also means enforcing consistently high standards of performance in every emerging market where the MSA flag waves, as well as leveraging the product replacement cycle opportunity that exists right now in the U.S. fire service.
- **Achieving operational excellence** involves the realignment of our global corporate structure and the establishment of a new operating system to help drive cost-efficient manufacturing. It also means the implementation of new SAP IT systems to reduce costs and identify more



**William M. Lambert, President and Chief Executive Officer, stands next to the MSA Wall of History at the company's Corporate Center headquarters in Cranberry Township, Pa.**

shared and streamlined processes to enhance our overall performance, productivity and customer satisfaction.

Guided by these strategic pillars, MSA demonstrated solid performance in driving higher levels of shareholder value in 2013. Overall, we did well to turn obstacles into opportunities every place we could. And our focus on creating demand for core MSA products in developed and emerging markets throughout the world clearly provided a strong finish to the year.

If we exclude sales of self-contained breathing apparatus (SCBA) to the U.S. fire service, due to the aforementioned government regulatory and product approval issues, sales of MSA's core products increased six percent year-over-year, and now comprise almost three-fourths of MSA's total sales. Revenue across these same core product groups in emerging markets grew by nine percent for the year, with strong performances in Latin America, across Asia, and in Mexico.

For the year, MSA reported sales of \$1.1 billion. Excluding the impact of weakening foreign currencies across emerging markets and results from divested businesses in 2012, sales grew two percent in 2013 despite a sustained challenging global economic environment.

### Sequestration and Delays

Certainly one of the greatest challenges our company faced in 2013 was the impact of the U.S. government's budget sequestration and the eventual government shutdown that took place last October. This created ongoing product approval delays that temporarily set back our U.S. fire service business.

Specifically, these delays impacted the certification of two new SCBA models engineered to exceed new performance standards promulgated by the National Fire Protection Association (NFPA). In a situation that placed one obstacle upon another, the same certification process by NIOSH (the U.S. government agency that certifies respirators and SCBA) was pushed back even further due to a government misstep in SCBA testing which, for the record, did not involve MSA products. However, the retesting delayed NIOSH's ability to test and issue new SCBA certifications, including those for MSA products currently in the approval process pipeline.

During this interim period, we were and continue to be able to sell and ship SCBA products that are compliant to the earlier edition of the NFPA standard. However, many customers are understandably choosing to wait for new products that are compliant with the new standard. We believe these setbacks are only temporary and that MSA is well-positioned to capitalize on the U.S. fire service market when our new NFPA-compliant products are approved and introduced this year. But even in the face of these headwinds in North America, we delivered relatively solid performance in the global fire service market in 2013, a testament to our team's ability to perform well under adverse conditions.

### Growing the Core

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As *The Safety Company*, MSA is more focused than ever on investing in, building and selling our innovative core products that provide a sustainable competitive advantage. These product groups include:

- ▶ Portable gas detection instruments and sensors,
- ▶ Industrial head protection products,
- ▶ Fixed gas and flame detection (FGFD) systems,
- ▶ Supplied-air respirators, and
- ▶ Fall protection products.

Simply stated, our plan is to continue to drive demand for these products throughout our global footprint. At the close of 2013, our core products, many of which hold market leading positions, accounted for 73 percent of MSA's total sales, compared to 58 percent in 2009. This favorable mix has been driven by organic growth as well as strategic acquisitions, including General Monitors, which has established MSA as the leader in fixed gas and flame detection systems and technology and has provided extensive opportunities in the robust and growing global energy market.

Accordingly, our largest investments will continue to support the growth and development of these core products – which deliver profitable growth for our shareholders and offer the best return on capital.

At the same time, in order to better leverage the investments we made in 2013, MSA continued to pare back non-core assets and peripheral products. Our ongoing efforts to divest of and realize value from non-core assets ensure that we remain focused on those areas of our business that provide the most value for customers and shareholders, and that most clearly align with our strategy.

### Growth in Emerging Markets

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Growing MSA's presence in emerging markets is a key part of our corporate strategy, especially in the growing economies of Asia, Mexico and Latin America. Emerging markets were a significant contributor to our full-year results. In 2013, emerging market sales grew six percent, with core products growing nine percent, representing 71 percent of emerging market sales. This growth was largely driven by strong fixed gas and flame detection shipments to industrial customers in China and Latin America.

During the second half of 2013, we began to feel the effects of global economic sluggishness, including headwinds related to the global mining market slowdown, particularly in Australia. However, we continued to exercise cost discipline to mitigate these challenges, with operating costs decreasing 16 percent on the 13 percent revenue decline in this region in 2013.

### Operational Excellence

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Achieving Operational Excellence is an equally important pillar of our strategy, because it underpins our business and, ultimately, our relationship with customers. It is a major focus across the organization and one that is having a clear and positive impact on our results.

Last year we made great strides and continued on our path to transform our European business model, including the integration and alignment of our SAP IT systems throughout Europe. A vitally important element of our transformation is Europe 2.0, a business transformation initiative that is unifying our businesses across Europe. By year's end, MSA Spain and MSA Italy joined Germany and France in successfully "going live" on the new SAP platform, and our on-time delivery to customers is better than ever, with lower costs and improved margins as a result of this undertaking.

Europe 2.0 has given us a common IT platform, more standardized business processes, and consolidation of distribution facilities, all of which make us more agile and cost-efficient as we improve our responsiveness to customer needs. Through these and other changes, I believe MSA is well positioned to grow in Europe and in a better position to react to economic hurdles that may lie ahead.

Other operational improvements or process achievements from the past year include:

- The establishment of an internal Global Customer Loyalty Council (GCLC) whose focus is on identifying and prioritizing the actions and process improvements necessary – at the regional and global level – to enhance the overall MSA customer experience.
- Creating a Value Added/Value Engineering process that helps MSA deliver great product functionality while decreasing manufacturing costs and increasing value to the customer. Last year's efforts identified savings of \$2.2 million.
- Establishing a comprehensive 8D Quality Review Process as the global standard for ensuring MSA product quality. This new process focuses on identifying and addressing the root causes of product quality issues and, most importantly, the required actions that prevent them from occurring in the future.

With these and other operational excellence initiatives gaining traction, I continue to believe we are on track to reach our longer range operating margin goals, with 2013 finishing at 12.8 percent of sales – reflecting a 60 basis point improvement over 2012 and a 420 basis point improvement since 2009.

### Innovation with Transformation

Our healthy product development pipeline launched a number of new products into our markets during the past year.

- In 2013 we set a new industry benchmark with the V-Gard GREEN hard hat – the industry's first sustainable helmet sourced entirely from sugarcane. Developed by our team in Brazil, and originally launched in the Latin American market, the



V-Gard GREEN helmet was introduced in North America at the National Safety Congress last fall. As a breakthrough new offering from MSA, the V-Gard GREEN helmet was recognized with the prestigious Frost & Sullivan "New Product Innovation Leadership Award" in 2013.

- Late last year, we introduced the F1FX helmet, a new firefighter helmet platform that offers new levels of modularity, comfort and adjustability to a changing demographic in the fire service. We are experiencing early success with this new product in Europe where MSA is already the fire helmet market leader.
- In China we launched an exciting new SCBA platform, the model AG2100, which has been certified to meet China's current regulatory requirements for firefighting SCBA, and is designed to meet the anticipated requirements of the government's new SCBA standard, slated to be adopted later in 2014.



- A new suspension for the V-Gard helmet, the Fas-Trac III suspension, was also unveiled at the National Safety Congress last year. Based on initial shipments, I am pleased to report that the Fas-Trac III suspension is generating exceptional customer reviews in the categories of comfort and helmet stability.

- Lastly, we continue to launch innovative new Fixed Gas and Flame Detection systems to fuel growth in this highly profitable product line. In 2013 we introduced three exciting new products including the GasGard 100 model, a scalable, high-performance data acquisition/data-logging controller for the North American market; the PrimaXR Pro model, a mid-range combustible gas "Point Infrared" detector with display and relays ideal for the Chinese market; and the model DF-8500, an entry level toxic gas detector, also for the Chinese market.

These latter two models were designed in China, for China, as part of our growth strategy for the Asian oil and gas markets.

As you can see, we place significant emphasis on bringing innovative new technology to the marketplace for our customers. As a measure of this, for the full year 2013, sales of new core products introduced over the last five years account for 24 percent of MSA's revenue, a meaningful representation of the strength of our new product development process. Our pipeline of new products is robust and provides a sense of optimism and momentum as we look ahead.

### Enhancing Shareholder Value

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The company's total shareholder return (TSR) was 120 percent over the last four years compared with a TSR of 80 percent for the S&P 500 Index, reflecting the strong trend we have seen in profitability and product innovation. At the end of 2013, MSA's common stock closed at \$50.90, up nearly 23 percent from \$41.44 at the end of 2012.

Finally, over the past year, we continued to demonstrate our ability to successfully convert net income to cash flow, which ultimately allows us to return greater value to our shareholders. In 2013, free cash flow was \$74 million, enabling us to pay down \$11 million of debt and return \$44 million in the form of dividend payments. Needless to say, we are proud of our long history of strengthening dividend payments, returning increasing value to our shareholders for more than 50 years.

In summary, MSA continues to successfully execute on a long-term growth strategy that is driving stronger operating margins and operating income by focusing on our core portfolio, strengthening our position in developed markets, and expanding our presence in emerging markets – all of which is supported by our commitment to operational excellence in everything we do.

### MSA Safety Incorporated at 100

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As I noted at the outset, this is a very special time for our company as we celebrate our 100th year in the business of protecting the health and safety of workers and facility infrastructures across the globe. A century later, the MSA brand stands the test of time with a reputation for superior quality and reliability, durability, low cost of ownership, and an unparalleled customer experience. We are proud to have established this reputation over time, but at the same time we must never be fearful of change.

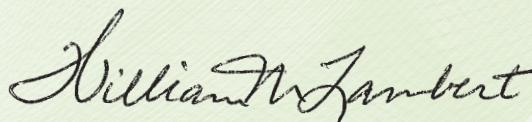
To that point, and to drive continued global growth, MSA's Board of Directors recently approved a new legal structure for the company that is comparable to other global manufacturers in that it allows us to facilitate more operating efficiencies while maintaining the strong equity of the century-old MSA brand. As a result, our legal name has changed to *MSA Safety Incorporated*, a holding company model that provides broader options to enhance the financial transparency of our numerous business units. Overall, we are making this change because we fully understand the importance of delivering a great customer experience and their expectations of us to consistently deliver the highest quality products, on time and at the lowest possible cost.

In closing, I want to thank our shareholders for your investment in MSA, and our distributors and customers around the world for your continued business, trust and loyalty to our company.

I greatly appreciate the work and dedication of our 5,300 associates, our company's most treasured asset, as well as our Board of Directors and our Executive Leadership Team, for their extraordinary efforts in making 2013 a year of transformation in so many respects.

Our 2013 results continue to reflect the sound success of our long-term strategy and how we manage our business each day. We will continue to focus on the core competencies that guide us, even in challenging times, fueling our growth and enhancing long-term value for our shareholders. I remain confident that our best years are at hand as we embark on the second century of MSA and our mission to safeguard lives around the world.

Sincerely,



**William M. Lambert**

*President and Chief Executive Officer*

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**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 December 31, 2013

Commission File No. 1-15579



**MINE SAFETY APPLIANCES COMPANY**

(Exact name of registrant as specified in its charter)

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

**25-0668780**  
(IRS Employer Identification No.)

**1000 Cranberry Woods Drive**  
**Cranberry Township, Pennsylvania**  
(Address of principal executive offices)

**16066-5207**  
(Zip code)

Registrant's telephone number, including area code: (724) 776-8600

(Title of each class)  
Common Stock, no par value

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

(Name of each exchange on which registered)  
New York Stock Exchange

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in the definitive proxy statement 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

(Do not check if a smaller reporting company)

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

As of February 17, 2014, there were outstanding 37,212,881 shares of common stock, no par value, not including 282,120 shares held by the Mine Safety Appliances Company Stock Compensation Trust. The aggregate market value of voting stock held by non-affiliates as of June 30, 2013 was approximately \$1.4 billion.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Proxy Statement for the May 6, 2014 Annual Meeting of Shareholders are incorporated by reference into Part III.

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## **Forward-Looking Statements**

This report may contain (and verbal statements made by Mine Safety Appliances Company (MSA) may contain) forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks and other factors include, but are not limited to, those listed in this report under “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere in this report. In some cases, you can identify forward-looking statements by words such as “may,” “will,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or other comparable words. Actual results, performance or outcomes may differ materially from those expressed or implied by these forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update publicly any of the forward-looking statements after the date of this report, whether as a result of new information, future events or otherwise.

## PART I

### Item 1. Business

**Overview**—Mine Safety Appliances Company was founded in Pennsylvania in 1914. We are a global leader in the development, manufacture and supply of products that protect people’s health and safety. Our safety products typically integrate a combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life threatening situations. Our comprehensive line of safety products is used by workers in many industries as well as the military around the world. Notably, we primarily serve the oil and gas, fire service, mining, and construction industries. Our broad product offering includes self-contained breathing apparatus, or SCBA, gas masks, gas detection instruments, head protection, respirators, thermal imaging cameras and fall protection. We also provide a broad offering of consumer and contractor safety products through retail channels.

We dedicate significant resources to research and development, which allows us to produce innovative safety products that are often first to market and exceed industry standards. Our global product development teams include cross-geographic and cross-functional members from various areas throughout the company, including research and development, marketing, sales, operations and quality management. Our engineers and technical associates work closely with the safety industry’s leading standards-setting groups and trade associations, such as the National Institute for Occupational Safety and Health, or NIOSH, and the National Fire Protection Association, or NFPA, and their overseas counterparts, to develop industry product requirements and standards and to anticipate their impact on our product lines.

**Segments**—We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into eleven geographic operating segments that are aggregated into three reportable geographic segments: North America, Europe and International. Segment information is presented in the note entitled “Segment Information” in Item 8—Financial Statements and Supplementary Data.

Because our financial statements are stated in U.S. dollars and much of our business is conducted outside the U.S., currency fluctuations may affect our results of operations and financial position and may affect the comparability of our results between financial periods.

**Principal Products**—We manufacture and sell a comprehensive line of safety products to protect workers around the world in the oil and gas, fire service, mining, construction and other industries, as well as the military. We also provide a broad offering of consumer and contractor safety products through retail channels. Our products protect people against a wide variety of hazardous or life-threatening situations.

The following is a brief description of each of our principal product categories:

**Core products.** MSA's strategy includes a focus on driving profitable core product sales. Core products include breathing apparatus, industrial head protection, fixed gas and flame detection, portable gas detection and fall protection products. These products receive the highest levels of investment and resources in alignment with our commitment to grow core products sales in both emerging and developed markets.

**Adjacent products.** MSA provides a series of adjacent product offerings to its customers that complement its core products. These products reinforce and extend the core, drawing upon our customer relationships, distribution channels, geographical presence and technical experience. These products tend to have their roots within the core product value chain, but receive a smaller allocation of corporate resources than core products. Adjacent product sales comprise approximately one fourth of consolidated sales.

**Peripheral products.** MSA provides a series of peripheral product offerings to its customers. MSA's competitive advantage in serving peripheral product customers tends to be related to our channels of distribution or customer access. These products are primarily sold to the mining industry and represent a small portion of consolidated sales.

The following is a brief description of our significant product offerings included in the above product categories:

**Respiratory protection.** We offer a broad and comprehensive line of respiratory protection products. These products are used to protect against the harmful effects of contamination caused by dust, gases, fumes, volatile chemicals, sprays, micro-organisms, fibers and other contaminants. These products include:

**Self Contained Breathing Apparatus.** SCBA are used by first responders, petrochemical plant workers and anyone entering an environment deemed immediately dangerous to life and health. SCBA are also used by first responders to protect against exposure to chemical, biological, radiological and nuclear agents, which are collectively referred to as CBRN.

*Air-purifying respirators.* Air-purifying respirators range from the simple filtering types to powered full-facepiece versions for many hazardous applications, including:

- full-face gas masks for industrial workers and first responders exposed to known concentrations of hazardous gases, chemicals, vapors and particulates, or for escape from unknown concentrations of these hazards;
- half-mask respirators for industrial workers, painters and construction workers exposed to known concentrations of gases, vapors and particulates;
- powered-air purifying respirators for industrial, hazmat and remediation workers who have longer term exposures to hazards in their work environment; and
- dust and pollen masks for maintenance workers, contractors and at-home consumers exposed to nuisance dusts, allergens and other particulates.

*Escape respirators.* Escape respirators are used by law enforcement personnel, government workers, chemical and pharmaceutical workers and anyone needing to escape from unknown concentrations of a chemical, biological or radiological release of toxic gases and vapors. Escape respirators give users respiratory protection to help them escape from threatening situations quickly and easily.

*Portable and fixed gas detection instruments.* Our portable and fixed gas detection instruments are used to detect the presence or absence of various gases in the air. These instruments can be either hand-held or permanently installed. Typical applications of these instruments include the detection of an oxygen deficiency in confined spaces or the presence of combustible or toxic gases. Products include:

*Single- and multi-gas hand-held detectors.* Our single- and multi-gas detectors provide portable solutions for detecting the presence of oxygen, combustible gases and various toxic gases, including hydrogen sulfide, carbon monoxide, ammonia and chlorine, either singularly or up to six gases at once. Our hand-held portable instruments are used by chemical workers, oil and gas workers and utility workers entering confined spaces, or anywhere a user needs to continuously monitor the quality of the atmosphere they are working in and around. Our ALTAIR® 4X and ALTAIR® 5X Multigas Detectors with XCell® sensor technology provide faster response times and unsurpassed durability in a tough, easy-to-operate package.

*Multi-point permanently installed gas detection systems.* Our comprehensive line of fixed gas detection systems, was greatly expanded with the acquisition of General Monitors in 2010. This line is used to monitor for combustible and toxic gases and oxygen deficiency in virtually any application where continuous monitoring is required. Our systems are used for gas detection in petrochemical, pulp and paper, wastewater, refrigerant monitoring, and general industrial applications. These systems utilize a wide array of sensing technologies including electrochemical, catalytic, infrared and ultrasonic.

*Flame detectors and open-path infrared gas detectors.* MSA's line of fixed flame and combustible gas detection was greatly expanded with the acquisition of General Monitors in 2010. These instruments are used for plant-wide monitoring of toxic gases for detecting the presence of flames. These systems use infrared optics to detect potentially hazardous conditions across long distances, making them suitable for use in such applications as offshore oil rigs, storage vessels, refineries, pipelines and ventilation ducts. First used in the oil and gas industry, our systems currently have broad applications in petrochemical facilities, the transportation industry and in pharmaceutical production.

*Thermal imaging cameras.* Our hand-held infrared thermal imaging cameras, or TICs, are used in the global fire service market. TICs detect sources of heat in order to locate downed firefighters and other people trapped inside burning or smoke-filled structures. TICs can also be used to detect the central source of the fire in order to direct hose streams in a structural fire attack, as well as to locate remaining embers during post-fire overhaul operations. Our Evolution® 6000 series TICs are unmatched for ease of use and durability and meet the stringent requirements of the National Fire Protection Association performance standard.

*Head, eye, face and hearing protection.* Head, eye, face and hearing protection is used in work environments where hazards present dangers such as dust, flying particles, metal fragments, chemicals, extreme glare, optical radiation and items dropped from above.

- Industrial hard hats. We have a complete line of industrial head protection that includes the flagship V-Gard® helmet brand. We offer customers a wide range of color choices and we are a world leader in the application of customized logos. Our industrial head protection has a wide user base including oil, gas and petrochemical workers, steel and construction workers, miners and industrial workers.
- Fire helmets. Our fire service products include leather, traditional, modern, jet-style and specialty helmets designed to satisfy the preferences of firefighters across geographic regions. We believe that our Cairns Helmet is the number one helmet in the North American fire service market. Similarly, we believe that our Gallet firefighting helmet has the number one market position in Europe.

- Ballistic helmets. These helmets provide ballistic head protection in combat and other high-risk environments and are sold in international markets outside of North America.
- Eye, face and hearing protection. Our broad line of hearing protection products, non-prescription protective eyewear and face shields is used by workers in a wide variety of industries.

*Fall protection.* Our broad line of fall protection equipment includes confined space equipment, harnesses, fall arrest equipment, lanyards and lifelines. Fall protection equipment is used by construction, oil and gas, utilities and plant workers and anyone working at height.

**Customers**—Our customers generally fall into three categories: industrial and military end-users, distributors and retail consumers. In North America, nearly all of our sales are made through our distributors. In our European and International segments, sales are made through both indirect and direct sales channels. For the year ended December 31, 2013, no individual customer represented 10% of our sales.

**Industrial and military end-users**—Examples of the primary industrial and military end-users of our core products are listed below:

<u>Products</u>	<u>Primary End-Users (in order of magnitude)</u>
Supplied Air Respirators	First Responders; General Industry Workers; Oil, Gas, and Petrochemical Workers; Military & Police Personnel; and Miners
Portable Gas Detection	Oil, Gas and Petrochemical Workers; General Industry Workers; Miners; and First Responders
Fixed Gas & Flame Detection	Oil, Gas and Petrochemical Workers; General Industry Workers; and Miners
Industrial Head Protection	General Industry Workers; Oil, Gas, and Petrochemical Workers; Construction Workers and Contractors; and Miners
Fall Protection	General Industry Workers; Construction Workers and Contractors; Miners; and Oil, Gas, and Petrochemical Workers

**Sales and Distribution**—Our sales and distribution team consists of distinct marketing, field sales and customer service organizations. We believe our sales and distribution team, totaling over 800 dedicated associates, is the largest in our industry. In most geographic areas, our field sales organizations work jointly with select distributors to call on end-users and educate them about hazards, exposure limits, safety requirements and product applications, as well as the specific performance attributes of our products. In our International segment and Eastern Europe where distributors are not as well established, our sales associates often work with and sell directly to end-users. We believe that understanding end-user requirements is critical to increasing MSA's market share.

The in-depth customer training and education provided by our sales associates to our customers are critical to ensuring proper use of many of our products, such as SCBA and gas detection instruments. As a result of our sales associates working closely with end-users, they gain valuable insight into customer preferences and needs. To better serve our customers and to ensure that our sales associates are among the most knowledgeable and professional in the industry, we place significant emphasis on training our sales associates in product application, industry standards and regulations.

We believe our sales and distribution strategy allows us to deliver a customer value proposition that differentiates our products and services from those of our competitors, resulting in increased customer loyalty and demand.

In areas where we use indirect selling, we promote, distribute and service our products to general industry through authorized national, regional and local distributors. Some of our key distributors include Airgas, W.W. Grainger Inc., Fastenal and Hagemeyer. In North America, we distribute fire service products primarily through specially trained local and regional distributors who provide advanced training and service capabilities to volunteer and paid municipal fire departments. In our European and International segments, we primarily sell to and service the fire service market directly. Because of our broad and diverse product line and our desire to reach as many markets and market segments as possible, we have over 4,000 authorized distributor locations worldwide.

Our Safety Works, LLC joint venture provides a broad range of safety products and gloves to the North American do-it-yourself and independent contractor market through various channels. These include distributors such as Orgill, hardware and equipment rental outlets such as United Rentals, and retail chains such as The Home Depot, TrueValue and Do-it Best.

**Competition**—We believe the worldwide personal protection equipment market, including the sophisticated safety products market in which we compete, generates annual sales in excess of \$20 billion. The industry supplying this market is broad and highly fragmented with few participants offering a comprehensive line of safety products. Over the long-term, we believe global demand for safety products will continue to grow. Purchases of these products are non-discretionary, protecting workers' health in hazardous and life-threatening work environments. Their use is often mandated by government and industry regulations, which are increasing on a global basis. Moreover, safety products industry revenues reflect the need to consistently replace many safety products that have limited life spans due to normal wear and tear or because they are one time use products by design.

The safety products market is highly competitive, with participants ranging in size from small companies focusing on a single type of personal protection equipment to a few large multinational corporations that manufacture and supply many types of sophisticated safety products. Our main competitors vary by region and product. We believe that participants in this industry compete primarily on the basis of product characteristics (such as functional performance, agency approvals, design and style), price, brand name recognition and support.

We believe we compete favorably within each of our operating segments as a result of our high quality and cost-efficient product offerings and strong brand trust and recognition.

**Research and Development**—To maintain our position at the forefront of safety equipment technology, we operate several sophisticated research and development facilities. We believe our dedication and commitment to innovation and research and development allows us to produce innovative safety products that are often first to market and exceed industry standards. In 2013, 2012 and 2011, on a global basis, we spent \$45.9 million, \$40.9 million and \$39.2 million, respectively, on research and development. Our primary engineering groups are located in the United States, Germany, China and France. Our global product development teams include cross-geographic and cross-functional members from various areas throughout the company, including research and development, marketing, sales, operations and quality management. These teams are responsible for setting product line strategy based on their understanding of customers' needs and available technology, as well as the opportunities and challenges they foresee in each product area. We believe our team-based, cross-geographic and cross-functional approach to new product development is a source of competitive advantage. Our approach to the new product development process allows us to tailor our product offerings and product line strategies to satisfy distinct customer preferences and industry regulations that vary across our operating segments.

We believe another important aspect of our approach to new product development is that our engineers and technical associates work closely with the safety industry's leading standards-setting groups and trade associations. These organizations include the National Institute for Occupational Safety and Health, or NIOSH, and the National Fire Protection Association, or NFPA, and their overseas counterparts. We work with these organizations to develop industry product requirements and standards and anticipate their impact on our product lines. Key members of our management team understand the impact that these standard-setting organizations have on our new product development pipeline. As such, management devotes significant time and attention to anticipating a new standard's impact on our sales and operating results. Because of our understanding of customer needs, membership on global standard-setting bodies, investment in research and development and our unique new product development process, we believe we are well-positioned to anticipate and adapt to the needs of changing product standards. We also believe that we are well positioned to gain the approvals and certifications necessary to meet new government and multinational product regulations.

**Patents and Intellectual Property**—We own significant intellectual property, including a number of domestic and foreign patents, patent applications and trademarks related to our products, processes and business. Although our intellectual property plays an important role in maintaining our competitive position in a number of markets that we serve, no single patent, or patent application, trademark or license is, in our opinion, of such value to us that our business would be materially affected by the expiration or termination thereof, other than the "MSA" trademark. Our patents expire at various times in the future not exceeding 20 years. Our general policy is to apply for patents on an ongoing basis in the United States and other countries, as appropriate, to perfect our patent development. In addition to our patents, we have also developed or acquired a substantial body of manufacturing know-how that we believe provides a significant competitive advantage over our competitors'.

**Raw Materials and Suppliers**—Many of the components of our products are formulated, machined, tooled or molded in-house from raw materials. For example, we rely on integrated manufacturing capabilities for breathing apparatus, gas masks, ballistic helmets, hard hats and circuit boards. The primary raw materials that we source from third parties include rubber, chemical filter media, eye and face protective lenses, air cylinders, certain metals, electronic components and ballistic resistant and non-ballistic fabrics. We purchase these materials both domestically and internationally, and we believe our supply sources are both well established and reliable. We have close vendor relationship programs with the majority of our key raw material suppliers. Although we generally do not have long-term supply contracts, thus far we have not experienced any significant problems in obtaining adequate raw materials.

**Associates**—At December 31, 2013, we had approximately 5,000 associates, approximately 2,900 of whom were employed by our European and International segments. None of our U.S. associates are subject to the provisions of a collective bargaining agreement. Some of our associates outside the United States are members of unions. We have not experienced a significant work stoppage in over 10 years and believe our relations with our associates are strong.

**Available Information**—Our internet address is [www.MSAafety.com](http://www.MSAafety.com). We post the following filings on the Investor Relations page on our website as soon as reasonably practicable after they have been electronically filed with or furnished to the Securities and Exchange Commission: our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as well as our proxy statement. Information contained on our website is not part of this annual report on Form 10-K or our other filings with the Securities and Exchange Commission. The SEC maintains an Internet site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers like us who file electronically with the SEC.

## **Item 1A. Risk Factors**

### **Unfavorable economic and market conditions could materially and adversely affect our business, results of operations and financial condition.**

We are subject to risks arising from adverse changes in global economic conditions. Although economic conditions generally improved in 2013, the global economy remains unstable and we expect economic conditions will continue to be challenging for the foreseeable future. Adverse changes in economic conditions could result in declines in revenue, profitability and cash flow due to reduced orders, payment delays, supply chain disruptions or other factors caused by the economic challenges faced by our customers and suppliers.

Over the past several years our sales have been positively impacted by the General Monitors acquisition and our organic growth within MSA's line of core products. The increase in sales, primarily to the oil, gas and petrochemical market, exposes MSA to the risks of doing business in that global market. It is possible that the volatility in this market, driven partly by geopolitical factors, could negatively impact our business and our results of operations and financial condition.

### **A reduction in the spending patterns of government agencies or delays in obtaining government approval for our products could materially and adversely affect our net sales, earnings and cash flow.**

The demand for our products sold to the fire service market, the homeland security market and other government agencies is, in large part, driven by available government funding. Government budgets are set annually and we cannot assure you that government funding will be sustained at the same level in the future. A significant reduction in available government funding could materially and adversely affect our net sales, earnings and cash flow.

### **Our ability to market and sell our products is subject to existing government regulations and standards. Changes in such regulations and standards or our failure to comply with them could materially and adversely affect our results of operations.**

Most of our products are required to meet performance and test standards designed to protect the health and safety of people around the world. Our inability to comply with these standards may materially and adversely affect our results of operations. Changes in regulations could reduce the demand for our products or require us to re-engineer our products, thereby creating opportunities for our competitors. Regulatory approvals for our products may be delayed or denied for a variety of reasons that are outside of our control. Additionally, market anticipation of significant new standards can cause customers to accelerate or delay buying decisions.

Our SCBA in North America must be approved by the National Institute for Occupational Safety and Health, or NIOSH. NIOSH has informed respirator manufacturers that CBRN Respirator Approval Testing, which was conducted from July 2012 to October 2013, is invalid due to the concentrations of agents used in testing being lower than the level required by NIOSH test procedures. NIOSH has informed MSA that the Company does not have any respiratory protective equipment in use which requires retesting. CBRN testing will restart in January 2014 and priority will be given to retest previously tested units. This retesting will further delay product approvals and will likely delay the launch of MSA's M7XT until second quarter 2014. In addition, the backlog of re-testing which resulted from this issue may negatively impact the approval timing of MSA's entirely new global platform SCBA product, the G1. This new product was to be submitted for CBRN testing in the first quarter of 2014. The issues noted above will now delay the launch of this new product until at least the second quarter of 2014. It is possible that the delays associated with this product launch could negatively impact our business and our results of operations and financial condition.



**We are subject to various federal, state and local laws and any violation of these laws could adversely affect our results of operations.**

We are subject to extensive regulation from federal, state, local and international governments. Failure to comply with these regulations could result in severe civil or criminal penalties, sanctions or significant changes to our operations. These actions could have a materially adverse effect on our business, results of operations and financial condition.

**We are subject to various environmental laws and any violation of these laws could adversely affect our results of operations.**

Included in the extensive federal, state and local laws, regulations and ordinances, to which we are subject, are those relating to the protection of the environment. Examples include those governing discharges to air and water, handling and disposal practices for solid and hazardous wastes and the maintenance of a safe workplace. These laws impose penalties for noncompliance and liability for response costs and certain damages resulting from past and current spills, disposals, or other releases of hazardous materials. We could incur substantial costs as a result of noncompliance with or liability for cleanup pursuant to these environmental laws. Environmental laws have changed rapidly in recent years, and we may be subject to more stringent environmental laws in the future. If more stringent environmental laws are enacted, these future laws could have a materially adverse effect on our results of operations.

**The markets in which we compete are highly competitive, and some of our competitors have greater financial and other resources than we do. The competitive pressures faced by us could materially and adversely affect our business, results of operations and financial condition.**

The safety products market is highly competitive, with participants ranging in size from small companies focusing on single types of safety products, to large multinational corporations that manufacture and supply many types of safety products. Our main competitors vary by region and product. We believe that participants in this industry compete primarily on the basis of product characteristics (such as functional performance, agency approvals, design and style), price, name trust and recognition and customer service. Some of our competitors have greater financial and other resources than we do and our business could be adversely affected by competitors' new product innovations, technological advances made to competing products and pricing changes made by us in response to competition from existing or new competitors. We may not be able to compete successfully against current and future competitors and the competitive pressures faced by us could materially and adversely affect our business, results of operations and financial condition.

**If we fail to introduce successful new products or extend our existing product lines, we may lose our market position and our financial performance may be materially and adversely affected.**

In the safety products market, there are frequent introductions of new products and product line extensions. If we are unable to identify emerging consumer and technological trends, maintain and improve the competitiveness of our products and introduce new products, we may lose our market position, which could have a materially adverse effect on our business, financial condition and results of operations. We continue to invest significant resources in research and development and market research. However, continued product development and marketing efforts are subject to the risks inherent in the development process. These risks include delays, the failure of new products and product line extensions to achieve anticipated levels of market acceptance and the risk of failed product introductions.

**Product liability claims and our inability to collect related insurance receivables could have a materially adverse effect on our business, operating results and financial condition.**

We face an inherent business risk of exposure to product liability claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. Although we have not experienced any material uninsured losses due to product liability claims, it is possible that we could experience material losses in the future. In the event any of our products prove to be defective, we could be required to recall or redesign such products. In addition, we may voluntarily recall or redesign certain products that could potentially be harmful to end users. A successful claim brought against us in excess of available insurance coverage, or any claim or product recall that results in significant expense or adverse publicity against us, could have a materially adverse effect on our business, operating results and financial condition.

In the normal course of business, we make payments to settle product liability claims and for related legal fees and we record receivables for the amounts covered by insurance. Our insurance receivables totaled \$124.8 million at December 31, 2013. Various factors could affect the timing and amount of recovery of insurance receivables, including: the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future. Amounts due from insurance carriers are subject to insolvency risk. Failure to recover amounts due from our insurance carriers could have a materially adverse effect on our business, operating results and financial condition.

**Damage to the reputation of MSA or to one or more of our product brands could adversely affect our business.**

Developing and maintaining our reputation, as well as the reputation of our brands, is a critical factor in our relationship with customers, distributors and others. Our inability to address adverse publicity or other issues, including concerns about product safety or quality, real or perceived, could negatively impact our business which could have a materially adverse effect on our business, operating results and financial condition.

**A failure of our information systems could materially and adversely affect our business, results of operations and financial condition.**

The proper functioning and security of our information systems is critical to the operation of our business. Our information systems may be vulnerable to damage or disruption from natural or man-made disasters, computer viruses, power losses or other system or network failures. In addition, hackers and cybercriminals could attempt to gain unauthorized access to our information systems with the intent of harming our company or obtaining sensitive information such as intellectual property, trade secrets, financial and business development information, and customer and vendor related information. If our information systems or security fail, our business, results of operations and financial condition could be materially and adversely affected.

Like many companies, from time to time, we have experienced attacks on our computer systems by unauthorized outside parties; however, we do not believe that such attacks have resulted in any material damage to us or our customers. Because the techniques used by computer hackers and others to access or sabotage networks constantly evolve and generally are not recognized until launched against a target, we may be unable to anticipate, prevent or detect these attacks. As a result, our technologies and processes may be misappropriated and the impact of any future incident cannot be predicted. Any loss of such information could harm our competitive position, or cause us to incur significant costs to remedy the damages caused by the incident. We routinely implement improvements to our network security safeguards and we expect to devote increasing resources to the security of our information technology systems. We cannot assure that such system improvements will be sufficient to prevent or limit the damage from any future cyber-attack or network disruptions.

**The Company's plans to continue to improve productivity and reduce complexity and costs associated with its European Segment may not be successful, which could adversely affect its ability to compete.**

The Company is currently engaged in an extensive European Transformation Project. Under the organization of a Principal Operating Company, this program will integrate our historically individually managed entities, into one that is a centrally managed organization. We plan to leverage the benefits of scale created from this approach and are in the process of implementing a more efficient and cost-effective enterprise resource planning system. The Company runs the risk that these and similar initiatives may not be completed substantially as planned, may be more costly to implement than expected, or may not have the positive effects anticipated. In addition, these various initiatives require the Company to implement a significant amount of organizational change which could divert management's attention from other concerns, and if not properly managed, could cause disruptions in the Company's day-to-day operations and have a negative impact on the Company's financial results. It is also possible that other major productivity and streamlining programs may be required in the future.

**We have significant international operations and are subject to the risks of doing business in foreign countries.**

We have business operations in over 40 foreign countries. In 2013, approximately half of our net sales were made by operations located outside the United States. Our international operations are subject to various political, economic and other risks and uncertainties, which could adversely affect our business. These risks include the following:

- unexpected changes in regulatory requirements;
- changes in trade policy or tariff regulations;
- changes in tax laws and regulations;
- changes to the company's legal structure could have unintended tax consequences;
- intellectual property protection difficulties;
- difficulty in collecting accounts receivable;
- complications in complying with a variety of foreign laws and regulations, some of which may conflict with U.S. laws;
- trade protection measures and price controls;
- trade sanctions and embargoes;

- nationalization and expropriation;
- increased international instability or potential instability of foreign governments;
- effectiveness of worldwide compliance with MSA's anti-bribery policy, local laws and the Foreign Corrupt Practices Act
- the need to take extra security precautions for our international operations; and
- costs and difficulties in managing culturally and geographically diverse international operations.

Any one or more of these risks could have a negative impact on the success of our international operations and, thereby, materially and adversely affect our business as a whole.

**Our future results are subject to availability of, and fluctuations in the costs of, purchased components and materials due to market demand, currency exchange risks, material shortages and other factors.**

We depend on various components and materials to manufacture our products. Although we have not experienced any difficulty in obtaining components and materials, it is possible that any of our supplier relationships could be terminated. Any sustained interruption in our receipt of adequate supplies could have a materially adverse effect on our business, results of operations and financial condition. We cannot assure you that we will be able to successfully manage price fluctuations due to market demand, currency risks or material shortages, or that future price fluctuations will not have a materially adverse effect on our business, results of operations and financial condition.

**Because we derive a significant portion of our sales from the operations of our foreign subsidiaries, future currency exchange rate fluctuations may adversely affect our results of operations and financial condition, and may affect the comparability of our results between financial periods.**

For the year ended December 31, 2013, the operations in our European and International segments accounted for approximately half of our net sales. The results of our foreign operations are reported in the local currency and then translated into U.S. dollars at the applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between some of these currencies and the U.S. dollar have fluctuated significantly in recent years, and may continue to do so in the future. In addition, because our financial statements are stated in U.S. dollars, such fluctuations may affect our results of operations and financial position, and may affect the comparability of our results between financial periods. We cannot assure you that we will be able to effectively manage our exchange rate risks or that any volatility in currency exchange rates will not have a materially adverse effect on our results of operations and financial condition.

**If we lose any of our key personnel or are unable to attract, train and retain qualified personnel, our ability to manage our business and continue our growth would be negatively impacted.**

Our success depends in large part on the continued contributions of our key management, engineering and sales and marketing personnel, many of whom are highly skilled and would be difficult to replace. Our success also depends on the abilities of new personnel to function effectively, both individually and as a group. If we are unable to attract, effectively integrate and retain management, engineering or sales and marketing personnel, then the execution of our growth strategy and our ability to react to changing market requirements may be impeded, and our business could suffer as a result. Competition for personnel is intense, and we cannot assure you that we will be successful in attracting and retaining qualified personnel. In addition, we do not currently maintain key person life insurance.

**Our inability to successfully identify, consummate and integrate future acquisitions or to realize anticipated cost savings and other benefits could adversely affect our business.**

One of our operating strategies is to selectively pursue acquisitions. Any future acquisitions will depend on our ability to identify suitable acquisition candidates and successfully consummate such acquisitions. Acquisitions involve a number of risks including:

- failure of the acquired businesses to achieve the results we expect;
- diversion of our management's attention from operational matters;
- our inability to retain key personnel of the acquired businesses;
- risks associated with unanticipated events or liabilities;
- potential disruption of our existing business; and
- customer dissatisfaction or performance problems at the acquired businesses.

If we are unable to integrate or successfully manage businesses that we have recently acquired or may acquire in the future, we may not realize anticipated cost savings, improved manufacturing efficiencies and increased revenue, which may result in materially adverse short- and long-term effects on our operating results, financial condition and liquidity. Even if we are able to integrate the operations of our acquired businesses into our operations, we may not realize the full benefits of the cost savings, revenue enhancements or other benefits that we may have expected at the time of acquisition. In addition, even if we achieve the expected benefits, we may not be able to achieve them within the anticipated time frame, and such benefits may be offset by costs incurred in integrating the acquired companies and increases in other expenses.

**Our continued success depends on our ability to protect our intellectual property. If we are unable to protect our intellectual property, our business could be materially and adversely affected.**

Our success depends, in part, on our ability to obtain and enforce patents, maintain trade secret protection and operate without infringing on the proprietary rights of third parties. We have been issued patents and have registered trademarks with respect to many of our products, but our competitors could independently develop similar or superior products or technologies, duplicate any of our designs, trademarks, processes or other intellectual property or design around any processes or designs on which we have or may obtain patents or trademark protection. In addition, it is possible that third parties may have, or will acquire, licenses for patents or trademarks that we may use or desire to use, so that we may need to acquire licenses to, or to contest the validity of, such patents or trademarks of third parties. Such licenses may not be made available to us on acceptable terms, if at all, and we may not prevail in contesting the validity of third party rights.

We also protect trade secrets, know-how and other confidential information against unauthorized use by others or disclosure by persons who have access to them, such as our employees, through contractual arrangements. These agreements may not provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use, misappropriation or disclosure of such trade secrets, know-how or other proprietary information. If we are unable to maintain the proprietary nature of our technologies, our results of operations and financial condition could be materially and adversely affected.

**If we fail to meet our debt service requirements or the restrictive covenants in our debt agreements or if interest rates increase, our results of operations and financial condition could be materially and adversely affected.**

We have a substantial amount of debt upon which we are required to make scheduled interest and principal payments and we may incur additional debt in the future. A significant portion of our debt bears interest at variable rates that may increase in the future. Our debt agreements require us to comply with certain restrictive covenants. If we are unable to generate sufficient cash to service our debt or if interest rates increase, our results of operations and financial condition could be materially and adversely affected. Additionally, a failure to comply with the restrictive covenants contained in our debt agreements could result in a default, which if not waived by our lenders, could substantially increase borrowing costs and require accelerated repayment of our debt. Please refer to Note 11 of the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for commentary on our compliance with the restrictive covenants in our debt agreements as of December 31, 2013.

**Item 1B. Unresolved Staff Comments**

None.

## Item 2. Properties

Our principal executive offices are located at 1000 Cranberry Woods Drive, Cranberry Township, PA 16066 in a 212,000 square-foot building owned by us. We own or lease our primary facilities in the United States and in a number of other countries. We believe that all of our facilities, including the manufacturing facilities, are in good repair and in suitable condition for the purposes for which they are used.

The following table sets forth a list of our primary facilities:

Location	Function	Square Feet	Owned or Leased
<b>North America</b>			
Murrysville, PA	Manufacturing	295,000	Owned
Cranberry Twp., PA	Office, Research and Development and Manufacturing	212,000	Owned
New Galilee, PA	Distribution	120,000	Leased
Jacksonville, NC	Manufacturing	107,000	Owned
Queretaro, Mexico	Office, Manufacturing and Distribution	77,000	Leased
Cranberry Twp., PA	Research and Development	68,000	Owned
Lake Forest, CA	Office, Research and Development and Manufacturing	62,000	Leased
Corona, CA	Manufacturing	19,000	Leased
Torreon, Mexico	Office	15,000	Leased
Lake Forest, CA	Office	6,000	Owned
<b>Europe</b>			
Berlin, Germany	Office, Research and Development, Manufacturing and Distribution	340,000	Leased
Chatillon sur Chalaronne, France	Office, Research and Development, Manufacturing and Distribution	94,000	Owned
Milan, Italy	Office	43,000	Owned
Glasgow, Scotland	Office	25,000	Leased
Mohammedia, Morocco	Manufacturing	24,000	Owned
Barcelona, Spain	Office	23,000	Owned
Galway, Ireland	Office and Manufacturing	20,000	Owned
Varnamo, Sweden	Office, Manufacturing and Distribution	18,000	Leased
Hoorn, Netherlands	Office and Distribution	12,000	Owned
<b>International</b>			
Suzhou, China	Office, Research and Development, Manufacturing and Distribution	193,000	Owned
Sydney, Australia	Office, Manufacturing and Distribution	84,000	Owned
Johannesburg, South Africa	Office, Manufacturing and Distribution	74,000	Leased
Sao Paulo, Brazil	Office, Manufacturing and Distribution	74,000	Owned
Lima, Peru	Office and Distribution	34,000	Owned
Santiago, Chile	Office and Distribution	32,000	Leased
Rajarhat, India	Office and Distribution	10,000	Leased
Buenos Aires, Argentina	Office and Distribution	9,000	Owned

### Item 3. Legal Proceedings

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (*e.g.*, silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last five years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability lawsuits and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013	2012	2011
Balance January 1	\$ 130.0	\$ 112.1	\$ 89.0
Additions	34.0	29.7	35.6
Collections and settlements	(39.2)	(11.8)	(12.5)
Balance December 31	124.8	130.0	112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of our insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigations with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

#### **Item 4. Mine Safety Disclosures**

Not applicable.

#### **Executive Officers of the Registrant**

The following sets forth the names and ages of our executive officers as of February 24, 2014, indicating all positions held during the past five years:

<u>Name</u>	<u>Age</u>	<u>Title</u>
William M. Lambert	55	President and Chief Executive Officer since May 2008.
Joseph A. Bigler <sup>(a)</sup>	64	Vice President and Chief Customer Officer since August 2013.
Steven C. Blanco <sup>(b)</sup>	47	Vice President, Global Operational Excellence since April 2012.
Kerry M. Bove <sup>(c)</sup>	55	Vice President and President, MSA International, Asia-Pacific Zone and Africa/Latin America Zone since November 2011.
Ronald N. Herring, Jr. <sup>(d)</sup>	53	Vice President and President, MSA International, Western Europe Zone and Middle Eurasia Zone since November 2011.
Douglas K. McClaine	56	Vice President, Secretary and General Counsel since May 2005.
Stacy McMahan <sup>(e)</sup>	50	Senior Vice President, Chief Financial Officer and Treasurer since August 2013.
Thomas Muschter <sup>(f)</sup>	53	Vice President, Global Product Leadership since November 2011.
Paul R. Uhler	55	Vice President, Global Human Resources since May 2007.
Nishan Vartanian <sup>(g)</sup>	54	Vice President and President, MSA North America since August 2013.
Markus H. Weber <sup>(h)</sup>	49	Vice President and Chief Information Officer since April 2010.

- (a) Prior to his present position, Mr. Bigler served as Vice President and President, MSA North America.
- (b) Prior to joining MSA, Mr. Blanco served as Vice President of Manufacturing for the Electrical Sector of Eaton Corporation, a diversified power management company.
- (c) Prior to his present position, Mr. Bove was Vice President, Global Operational Excellence.
- (d) Prior to his present position, Mr. Herring was Vice President, Global Product Leadership.
- (e) Prior to her current position, Ms. McMahan served as Senior Vice President of Finance, MSA. Prior to joining MSA, Ms. McMahan served as Customer Channels Group Vice President, Finance, for Thermo Fisher Scientific, Inc., a global provider of laboratory equipment and supplies.
- (f) Prior to his present position, Dr. Muschter held the positions of Director, Research & Development, International; and Director, Research & Development, Europe.
- (g) Prior to his present position, Mr. Vartanian was Vice President, Fixed Gas and Flame Detection.
- (h) Prior to joining MSA, Mr. Weber served as Chief Information Officer of Berlin-Chemie AG, an international research-based pharmaceutical company.



## PART II

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

Our common stock is traded on the New York Stock Exchange under the symbol "MSA." Stock price ranges and dividends declared were as follows:

	Price Range of Our Common Stock		Dividends
	High	Low	
<b>Year ended December 31, 2012</b>			
First Quarter	\$ 42.47	\$ 32.65	\$ 0.26
Second Quarter	44.34	37.38	0.28
Third Quarter	40.81	32.93	0.28
Fourth Quarter	42.87	35.37	0.56
<b>Year ended December 31, 2013</b>			
First Quarter	\$ 51.07	\$ 43.04	\$ 0.28
Second Quarter	51.12	43.97	0.30
Third Quarter	55.38	46.60	0.30
Fourth Quarter	54.84	46.54	0.30

On February 17, 2014, there were 502 registered holders of our shares of common stock.

#### Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 — October 31, 2013	2,475	\$ 48.91	—	1,011,217
November 1 — November 30, 2013	6,934	44.91	—	977,523
December 1 — December 31, 2013	2,370	42.37	—	950,990

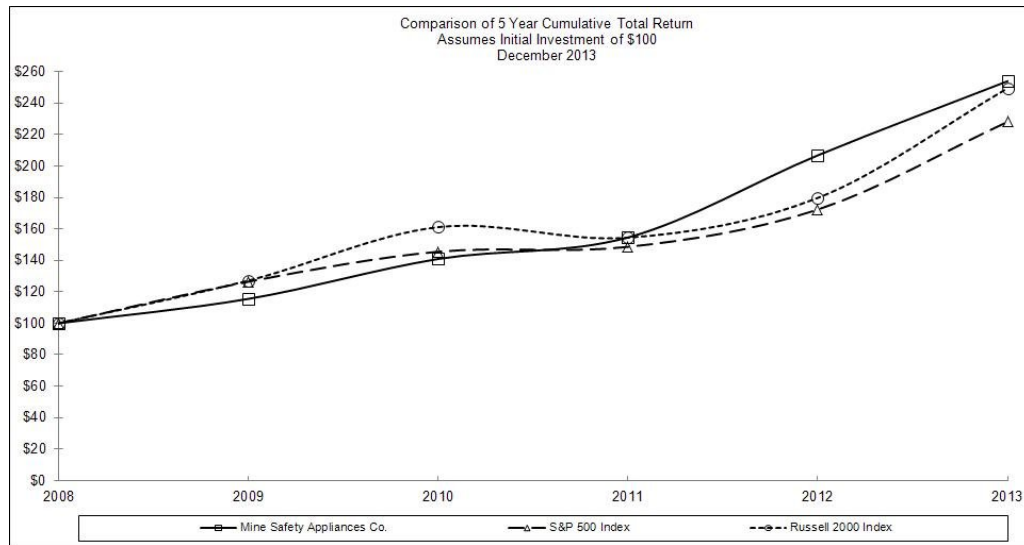
In November 2005, the Board of Directors authorized the purchase of up to \$100 million of MSA common stock either through private transactions or open market transactions. The share purchase program has no expiration date. The maximum shares that may yet be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. We do not have any other share purchase programs. The above share purchases are related to stock compensation transactions.

## Comparison of Five-Year Cumulative Total Return

The following paragraph compares the most recent five year performance of MSA stock with (1) the Standard & Poor's 500 Composite Index and (2) the Russell 2000 Index. Because our competitors are principally privately held concerns or subsidiaries or divisions of corporations engaged in multiple lines of business, we do not believe it feasible to construct a peer group comparison on an industry or line-of-business basis. The Russell 2000 Index, while including corporations both larger and smaller than MSA in terms of market capitalization, is composed of corporations with an average market capitalization similar to us.

### COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*

Among Mine Safety Appliance Company, the S&P 500 Index,  
and the Russell 2000 Index



\* \$100 invested on 12/31/08 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

	Value at December 31,					
	2008	2009	2010	2011	2012	2013
Mine Safety Appliances Co	\$ 100.00	\$ 115.55	\$ 140.90	\$ 154.61	\$ 206.83	\$ 254.02
S&P 500 Index	100.00	126.46	145.51	148.59	172.37	228.19
Russell 2000 Index	100.00	127.09	161.17	154.44	179.75	249.53

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Index Data: Copyright Standard and Poor's, Inc. Used with permission. All rights reserved.

Index Data: Copyright Russell Investments, Inc. Used with permission. All rights reserved.

## Item 6. Selected Financial Data

(In thousands, except as noted)	2013	2012	2011	2010	2009
<b>Statement of Income Data:</b>					
Net sales	\$ 1,112,058	\$ 1,110,443	\$ 1,112,814	\$ 922,552	\$ 865,718
Income from continuing operations	85,858	87,557	67,518	35,886	42,072
Income from discontinued operations	2,389	3,080	2,334	2,218	1,223
Net income attributable to Mine Safety Appliances Company	88,247	90,637	69,852	38,104	43,295
<b>Earnings per share attributable to MSA common shareholders:</b>					
Basic per common share (in dollars):					
Income from continuing operations	\$ 2.31	\$ 2.37	\$ 1.85	\$ 1.00	\$ 1.18
Income from discontinued operations	0.06	0.08	0.06	0.06	0.03
Net income	2.37	2.45	1.91	1.06	1.21
Diluted per common share (in dollars):					
Income from continuing operations	\$ 2.28	\$ 2.34	\$ 1.81	\$ 0.99	\$ 1.18
Income from discontinued operations	0.06	0.08	0.06	0.06	0.03
Net income	2.34	2.42	1.87	1.05	1.21
Dividends paid per common share (in dollars)	1.18	1.38	1.03	0.99	0.96
Weighted average common shares outstanding—basic	36,868	36,564	36,221	35,880	35,668
Weighted average common shares outstanding—diluted	37,450	37,042	36,831	36,422	35,879
<b>Balance Sheet Data:</b>					
Total assets	\$ 1,234,270	\$ 1,111,746	\$ 1,115,052	\$ 1,197,188	\$ 875,228
Long-term debt	260,667	272,333	334,046	367,094	82,114
Shareholders' Equity	566,452	462,955	433,666	451,368	436,616

The data presented in the Selected Financial Data table should be read in conjunction with comments provided in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7 and the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

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

*The following discussion and analysis should be read in conjunction with the historical financial statements and other financial information included elsewhere in this annual report on Form 10-K. This discussion may contain forward-looking statements that involve risks and uncertainties. The forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about our industry, business and future financial results. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in the sections of this annual report entitled "Forward-Looking Statements" and "Risk Factors."*

*MSA's South African personal protective equipment distribution business and MSA's Zambian operations had historically been part of the International reportable segment. In accordance with generally accepted accounting principles, these results are excluded from continuing operations and are presented as discontinued operations in all periods presented. Please refer to Note 19 Assets Held for Sale and Discontinued Operations, which is included in Part II Item 8 of this form 10-K for further commentary on these discontinued operations.*

## BUSINESS OVERVIEW

We are a global leader in the development, manufacture and supply of products that protect people's health and safety. Our safety products typically integrate any combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life threatening situations. Our comprehensive lines of safety products are used by workers around the world in the oil and gas, fire service, mining, construction and other industries, as well as the military. We are committed to providing our customers with service unmatched in the safety industry and, in the process, enhancing our ability to provide a growing line of safety solutions for customers in key global markets.

We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into eleven geographical operating segments that are aggregated into three reportable geographic segments: North America, Europe and International. Each segment includes a number of operating segments. In 2013, 50%, 26% and 24% of our net sales were made by our North American, European and International segments, respectively.

*North America.* Our largest manufacturing and research and development facilities are located in the United States. We serve our North American markets with sales and distribution functions in the U.S., Canada and Mexico.

*Europe.* Our European segment includes companies in most Western European countries, and a number of Eastern European countries along with locations in the Middle East and Russia. Our largest European companies, based in Germany and France, develop, manufacture and sell a wide variety of products. Operations in other European segment countries focus primarily on sales and distribution in their respective home country markets. While some of these companies may perform limited production, most of their sales are of products that are manufactured in our plants in Germany, France, the U.S. and China, or are purchased from third party vendors.

*International.* Our International segment includes companies in South America, Africa and the Asia Pacific region, some of which are in developing regions of the world. Principal International segment manufacturing operations are located in Australia, Brazil, China and South Africa. These companies manufacture products that are sold primarily in each company's home country and regional markets. The other companies in the International segment focus primarily on sales and distribution in their respective home country markets. While some of these companies may perform limited production, most of their sales are of products that are manufactured in our plants in China, Germany, France and the U.S., or are purchased from third party vendors.

## RESULTS OF OPERATIONS

### Year Ended December 31, 2013 Compared to Year Ended December 31, 2012

*Net sales from continuing operations.* Net sales for the year ended December 31, 2013 were \$1,112.1 million, an increase of \$1.7 million, from \$1,110.4 million for the year ended December 31, 2012.

For the year ended December 31, 2013, local currency core product sales increased by 6%, now comprising 73% of our total business, up from 70% for the year ended December 31, 2012. By product group, portable instruments increased 11%, fixed gas & flame detection instruments and fall protection each increased 6%, breathing apparatus increased 4%, and head protection increased 3% on a local currency basis. The remaining 27% of sales decreased 10% on a lower level of mining related business in the International segment, lower gas mask sales in the United States, and the absence of ballistic helmet sales in North America due to the divestiture of this business in the first half of 2012.

The unfavorable translation effects of weaker foreign currencies decreased net sales from continuing operations, when stated in U.S. dollars, by \$9.5 million. Excluding the impact of weakening foreign currencies and the divestiture of our North American ballistic helmet business of \$9.6 million, net sales from continuing operations increased \$20.8 million or 2%.

(Dollars in millions)	2013	2012	Dollar Increase (Decrease)	Percent Increase (Decrease)
North America	\$ 559.2	\$ 551.9	\$ 7.3	1 %
Europe	289.8	289.5	0.3	—
International	263.1	269.0	(5.9)	(2)%
Total	1,112.1	1,110.4	1.7	— %

Net sales by the North American segment were \$559.2 million for the year ended December 31, 2013, an increase of \$7.3 million, or 1%, compared to \$551.9 million for the year ended December 31, 2012. Excluding the effects of the divestiture of the North American ballistic helmet business, North American segment sales increased \$16.9 million, or 3%, when compared to 2012. North American ballistic helmet sales were \$9.6 million lower in the current year, reflecting the divestiture. During the year ended December 31, 2013, we continued to see growth in the fire service and industrial markets. Shipments of instruments, self-contained breathing apparatus (SCBA) and head, eye and face protection were up \$21.3 million, \$3.2 million and \$2.9 million, respectively. These increases were partially offset by a \$7.6 million decrease in shipments of gas masks to military markets and other small decreases across a broad range of product lines.

Net sales for the European segment were \$289.8 million for the year ended December 31, 2013, an increase of \$0.3 million from \$289.5 million for the year ended December 31, 2012. Local currency sales in Europe decreased \$5.6 million. Shipments of fixed gas & flame detection decreased \$3.2 million on a local currency basis, while the remaining decrease in local currency sales was primarily due to lower adjacent product shipments to military markets. The favorable translation effects of a stronger euro in the current year increased European segment sales, when stated in U.S. dollars, by \$5.9 million.

Net sales for the International segment were \$263.1 million for the year ended December 31, 2013, a decrease of \$5.9 million, or 2%, compared to \$269.0 million for the year ended December 31, 2012. Currency translation effects decreased International segment sales, when stated in U.S. dollars, by \$16.1 million, primarily related to a weaker Australian dollar and Brazilian real. Local currency sales in the International segment increased \$10.2 million, as strength in the industrial markets was partially offset by weakness in the fire service and military markets. Shipments of instruments, self-contained breathing apparatus (SCBA) and fall protection, up \$9.1 million, \$5.7 million and \$2.0 million, respectively, were partially offset by lower shipments of head, eye, and face protection and circuit breathing apparatus, down \$3.1 million and \$2.7 million, respectively.

**Other (loss) income.** Other loss for the year ended December 31, 2013 was \$0.2 million. A \$1.6 million land impairment loss in the North American segment was partially offset by interest income of \$1.1 million and small gains from asset dispositions. The 2013 loss compares with income of \$10.9 million for the year ended December 31, 2012. In 2012, we recognized gains totaling \$8.4 million on property sales in our Cranberry Woods office park. In December 2012, we sold the last available parcel in Cranberry Woods. Other income for 2012 also included a \$4.8 million gain on an escrow settlement related to our October 2010 acquisition of the General Monitors group of companies. These improvements were partially offset by impairment losses on intangible assets and tooling related to our firefighter location project of \$4.3 million and \$0.5 million, respectively.

**Cost of products sold.** Cost of products sold was \$615.2 million for the year ended December 31, 2013, a decrease of \$5.7 million, or 1%, from \$620.9 million for the year ended December 31, 2012. Cost of products sold as a percentage of net sales was 55.3% in the year ended December 31, 2013 compared to 55.9% in 2012. The effect of LIFO liquidations during 2013 reduced cost of sales by \$2.1 million. The decrease in cost of products sold in relation to sales was also due to a more favorable product mix, lower manufacturing costs, and improved pricing.

**Gross profit.** Gross profit for the year ended December 31, 2013 was \$496.8 million, an increase of \$7.3 million, or 1%, from \$489.5 million for the year ended December 31, 2012. The ratio of gross profit to net sales was 44.7% for 2013 compared to 44.1% in 2012. The higher gross profit ratio in 2013 was primarily related to a more favorable proportion of core product sales, lower manufacturing costs including the effect of LIFO liquidations, and improved pricing.

**Selling, general and administrative expenses.** Selling, general and administrative expenses for the year ended December 31, 2013 were \$309.2 million, a decrease of \$3.7 million, or 1%, from \$312.9 million for the year ended December 31, 2012. Selling, general and administrative expenses were 27.8% of net sales in 2013 compared to 28.2% of net sales in 2012. Local currency selling, general and administrative expenses decreased \$0.9 million in the current period. The decrease reflects reduced administrative expense in our International and European segments and lower legal expense associated with the product liability matters, partially offset by higher pension expense. Currency translation effects decreased selling, general and administrative expenses for the year ended December 31, 2013, when stated in U.S. dollars, by \$2.8 million. The decrease was primarily related to a Australian dollar, Brazilian real and South African rand, partially offset by a stronger euro.

**Research and development expenses.** Research and development expenses were \$45.9 million for the year ended December 31, 2013, an increase of \$5.0 million, or 12%, from \$40.9 million for the year ended December 31, 2012. The increase reflects our ongoing focus on developing innovative new core products, including the G1 SCBA and FAS-Trac III Industrial Helmet Suspension.

**Restructuring and other charges.** For the year ended December 31, 2013, we recorded non-recurring charges of \$5.3 million. European segment charges of \$3.0 million related primarily to staff reductions in Germany and the Netherlands. International segment charges of \$2.3 million were primarily related to staff reductions in Australia and South Africa.

Charges for the year ended December 31, 2012 were related to severance costs associated with staff reductions in our North American, European and International segments of \$1.5 million, \$1.1 million and \$0.2 million, respectively.

**Interest expense.** Interest expense for the year ended December 31, 2013 was \$10.7 million, a decrease of \$0.6 million, or 5%, from \$11.3 million for the year ended December 31, 2012. The decrease in interest expense reflects lower borrowing levels in the current year.

**Currency exchange.** Currency exchange losses were \$5.5 million during the twelve months ended December 31, 2013, compared to losses of \$3.2 million during the same period in 2012. Currency exchange losses in both periods were mostly unrealized and relate primarily to the effect of the strengthening U.S. dollar on intercompany balances.

**Income tax provision.** Our effective tax rate from continuing operations for the year ended December 31, 2013 was 29.3% compared to 32.0% for the year ended December 31, 2012. The lower effective tax rate for the year was primarily related to a tax benefit recognized for the research and development tax credit, including the benefit related to the recognition of the 2012 credit in January 2013. A favorable mix of income sourced from lower tax jurisdictions also contributed to the lower effective tax rate in 2013.

**Net income from continuing operations.** Net income from continuing operations for the year ended December 31, 2013 was \$85.9 million, a decrease of \$1.7 million, or 2%, from net income from continuing operations for the year ended December 31, 2012 of \$87.6 million. Local currency net income decreased by \$0.9 million. Currency translation effects decreased current period net income when stated in U.S. dollars, by \$0.8 million. Basic earnings per share from continuing operations was \$2.31 in 2013 compared to \$2.37 in 2012, a decrease of 6 cents per share, or 3%.

North American segment net income for the year ended December 31, 2013 was \$70.6 million, an improvement of \$6.3 million, or 10%, from \$64.3 million for the year ended December 31, 2012. The increase in North American segment net income reflects higher sales and gross profits and decreased restructuring expense, partially offset by increased selling, general and administrative expenses from higher payroll, legal fees, and other professional services fees.

European segment net income for the year ended December 31, 2013 was \$18.4 million, a decrease of \$2.0 million, or 10%, from \$20.4 million for the year ended December 31, 2012. Local currency net income decreased by \$3.1 million, reflecting lower gross profits on lower sales and increased restructuring expense, partially offset by lower selling, general and administrative expense. The favorable translation effects of a stronger euro in the current year increased European segment net income, when stated in U.S. dollars, by \$1.1 million.

International segment net income for the year ended December 31, 2013 was \$20.4 million, an increase of \$1.2 million, or 6%, from \$19.2 million for the year ended December 31, 2012. Currency translation effects decreased current period International segment net income when stated in U.S. dollars, by \$1.2 million, primarily due to a weaker Australian dollar and Brazilian real. Higher local currency net income was primarily related to increased gross profits from increased sales, lower selling, general and administrative expenses, partially offset by increased restructuring expense.

The net loss reported in reconciling items for the year ended December 31, 2013 was \$23.5 million, compared to a net loss of \$16.4 million for the year ended December 31, 2012. The higher loss during the year ended December 31, 2013 reflects higher currency exchange losses. Additionally, the year ended December 31, 2012 benefited from the previously-discussed one-time gain on the sale of land in our Cranberry Woods office park.

#### Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

**Net sales.** Net sales for the year ended December 31, 2012 were \$1,110.4 million, a decrease of \$2.4 million, from \$1,112.8 million for the year ended December 31, 2011. Excluding the effects of weakening currencies and the divestitures of our ballistic vest and North American ballistic helmet businesses, sales increased \$67.4 million, or 6%. Sales of ballistic vests and helmets were \$36.0 million lower in 2012, reflecting the divestiture of those businesses. The unfavorable translation effects of weaker foreign currencies decreased sales, when stated in U.S. dollars, by \$33.8 million.

<u>Net Sales</u> (Dollars in millions)	<u>2012</u>	<u>2011</u>	<u>Dollar</u> <u>Increase</u> <u>(Decrease)</u>	<u>Percent</u> <u>Increase</u> <u>(Decrease)</u>
North America	\$ 551.9	\$ 561.1	\$ (9.2)	(2)%
Europe	289.5	286.8	2.7	1 %
International	269.0	264.9	4.1	2 %
Total	1,110.4	1,112.8	(2.4)	— %

Net sales by the North American segment were \$551.9 million for the year ended December 31, 2012, a decrease of \$9.2 million, or 2%, compared to \$561.1 million for the year ended December 31, 2011. During the year ended December 31, 2012, we continued to see growth in the fire service and industrial markets. Shipments of instruments, head, eye and face protection and self-contained breathing apparatus (SCBA) were up \$25.1 million, \$4.7 million and \$2.2 million, respectively. These increases were offset by a \$4.7 million decrease in shipments of communication devices and a \$36.0 million decrease in shipments of ballistic helmets and vests to military markets. We divested our ballistic vest and North American ballistic helmet businesses during the fourth quarter of 2011 and the second quarter of 2012, respectively.

Net sales for the European segment were \$289.5 million for the year ended December 31, 2012, an increase of \$2.7 million, or 1%, from \$286.8 million for the year ended December 31, 2011. Local currency sales increased \$22.4 million, reflecting higher shipments of instruments, SCBA, ballistic helmets, and respirators, up \$10.8 million, \$4.8 million, \$4.2 million, and \$3.3 million, respectively. The increase was partially offset by a \$2.1 million decrease in shipments of gas masks to military markets. Currency translation effects decreased European segment sales, when stated in U.S. dollars, by \$19.7 million, primarily related to a weaker euro.

Net sales of our International segment were \$269.0 million for the year ended December 31, 2012, an increase of \$4.1 million, or 2%, compared to \$264.9 million for the year ended December 31, 2011. Local currency sales in the International segment increased \$16.6 million during the year ended December 31, 2012. Growth in fire service markets in China and Latin America led to increases in sales of SCBA and fire helmets of \$10.0 million and \$3.9 million, respectively. In addition, sales of head, eye and face protection to industrial markets improved by \$7.6 million, offset by decreased shipments of circuit breathing apparatus and gas masks of \$4.5 million and \$0.4 million, respectively. Currency translation effects decreased International segment sales, when stated in U.S. dollars, by \$12.5 million, primarily related to a weaker Brazilian real and South African rand.

**Other income.** Other income for the year ended December 31, 2012 was \$10.9 million, an increase of \$5.4 million, from \$5.5 million for the year ended December 31, 2011. During the year ended December 31, 2012, we recognized gains on the sale of assets totaling \$8.4 million compared to gains of \$3.3 million in 2011. These gains in both years were primarily related to property sales in our Cranberry Woods office park. In December 2012, we sold the last available parcel in Cranberry Woods. Other income for the year ended December 31, 2012 also includes a \$4.8 million gain on an escrow settlement related to our October 2010 acquisition of the General Monitors group of companies. These improvements were partially offset by impairment losses on intangible assets and tooling related to our firefighter location project of \$4.3 million and \$0.5 million, respectively.

**Cost of products sold.** Cost of products sold was \$620.9 million for the year ended December 31, 2012, a decrease of \$33.5 million, or 5%, from \$654.4 million for the year ended December 31, 2011. Cost of products sold as a percentage of sales was 55.9% in the year ended December 31, 2012 compared to 58.8% in 2011. The decrease in cost of products sold in relation to sales was primarily due to lower manufacturing costs, a more favorable product mix, and improved pricing.

**Gross profit.** Gross profit for the year ended December 31, 2012 was \$489.5 million, an increase of \$31.1 million, or 7%, from \$458.4 million for the year ended December 31, 2011. The ratio of gross profit to sales was 44.1% for 2012 compared to 41.2% in 2011. The higher gross profit ratio in 2012 was primarily related to lower manufacturing costs, a more favorable product mix, and improved pricing.

**Selling, general and administrative expenses.** Selling, general and administrative expenses for the year ended December 31, 2012 were \$312.9 million, an increase of \$15.1 million, or 5%, from \$297.8 million for the year ended December 31, 2011. Selling, general and administrative expenses were 28.2% of sales in 2012 compared to 26.8% of sales in 2011. Local currency selling, general and administrative expenses increased \$24.2 million across all segments, reflecting higher selling costs, an increase in due diligence and consulting expense related to special projects and an increase in product liability related legal and administrative expenses. Currency translation effects decreased selling, general and administrative expenses for the year ended December 31, 2012, when stated in U.S. dollars, by \$9.1 million, primarily related to a weaker euro, Brazilian real and South African rand.

**Research and development expenses.** Research and development expenses were \$40.9 million for the year ended December 31, 2012, an increase of \$1.7 million, or 4%, from \$39.2 million for the year ended December 31, 2011. The increase reflected our ongoing focus on developing innovative new core products.

**Restructuring and other charges.** For the year ended December 31, 2012, we recorded charges of \$2.8 million. Charges for the year ended December 31, 2012 were related to severance costs associated with staff reductions in our North American, European and International segments of \$1.5 million, \$1.1 million and \$0.2 million, respectively.

For the year ended December 31, 2011, we recorded charges of \$8.6 million. European segment charges of \$5.8 million for the year ended December 31, 2011, related primarily to staff reductions and the transfer of certain production activities to China. North American segment charges for the year ended December 31, 2011 of \$1.7 million included costs associated with the relocation of certain administrative and production activities. International segment charges for the year ended December 31, 2011 of \$1.1 million were related primarily to severance costs associated with the relocation of our Wuxi, China operations to Suzhou, China.

**Interest expense.** Interest expense for the year ended December 31, 2012 was \$11.3 million, a decrease of \$2.8 million, or 20%, from \$14.1 million for the year ended December 31, 2011. The decrease in interest expense reflects lower borrowing on our revolving credit line and lower interest rates.

**Income tax provision.** Our effective tax rate for the year ended December 31, 2012 was 32.0% compared to 33.4% for the year ended December 31, 2011. The lower effective tax rate for the year was primarily related to a tax benefit associated with a non cash charitable contribution of land at our Cranberry Woods office park and a higher manufacturing deduction credit. These gains were partially offset by the expiration of the research and development tax credit at the end of 2011. In January 2013, the research and development tax credit was reinstated retroactively to the beginning of 2012.

**Net income from continuing operations.** Net income from continuing operations for the year ended December 31, 2012 was \$87.6 million, an increase of \$20.1 million, or 30%, from net income for the year ended December 31, 2011 of \$67.5 million. Local currency net income increased by \$23.0 million. Currency translation effects decreased current period net income when stated in U.S. dollars, by \$2.9 million, primarily due to a weaker Australian dollar, Brazilian real, and euro. Basic earnings per share from continuing operations was \$2.37 in 2012 compared to \$1.85 in 2011, an increase of 52 cents per share, or 28%.

North American segment net income for the year ended December 31, 2012 was \$64.3 million, an improvement of \$10.6 million, or 20%, from \$53.7 million for the year ended December 31, 2011. The increase in North American segment net income reflects higher gross profits driven by controlled manufacturing costs, a more favorable sales mix and improved pricing, partially offset by an increase in selling, general and administrative expenses.

European segment net income for the year ended December 31, 2012 was \$20.4 million, an increase of \$8.7 million, or 74%, from \$11.7 million for the year ended December 31, 2011. Local currency net income increased by \$9.4 million, reflecting improved gross profits and lower restructuring charges. Currency translation effects decreased European segment net income, when stated in U.S. dollars, by \$0.7 million, mainly due to a weaker euro.

International segment net income for the year ended December 31, 2012 was \$19.2 million, a decrease of \$5.6 million, or 23%, from \$24.8 million for the year ended December 31, 2011. Currency translation effects decreased current period International segment net income when stated in U.S. dollars, by \$2.4 million, primarily due to a weaker Australian dollar and Brazilian real. Lower local currency net income decreased \$3.2 million reflecting higher selling, general and administrative expenses and higher income taxes, partially offset by improved gross profits.

The net loss reported in reconciling items for the year ended December 31, 2012 was \$16.4 million, compared to a net loss of \$22.7 million for the year ended December 31, 2011. The lower loss during the year ended December 31, 2012 reflects the one-time gain on the sale of land in our Cranberry Woods office park.

## **LIQUIDITY AND CAPITAL RESOURCES**

Our main source of liquidity is operating cash flows, supplemented by borrowings. Our principal liquidity requirements are for working capital, capital expenditures, principal and interest payments on debt, dividend payments, and acquisitions. Approximately half of our long-term debt is at fixed interest rates with repayment schedules through 2021. The remainder of our long-term debt is at variable rates on an unsecured revolving credit facility that is due in 2016. Substantially all of our borrowings originate in the U.S., which has limited our exposure to non-U.S. credit markets and to currency exchange rate fluctuations.

At December 31, 2013, we had cash and cash equivalents totaling \$96.3 million, of which \$87.2 million was held by our foreign subsidiaries. The \$87.2 million of cash and cash equivalents are held by our foreign subsidiaries whose earnings are considered indefinitely reinvested at December 31, 2013. These funds could be subject to additional income taxes if repatriated. It is not practical to determine the potential income tax liability that we would incur if these funds were repatriated to the U.S. because the time and manner of repatriation is uncertain. We believe that domestic cash and cash equivalents, domestic cash flows from operations, annual repatriation of a portion of the current period's foreign earnings, and the availability of our domestic line of credit are sufficient to fund our domestic liquidity requirements.



Our unsecured senior revolving credit facility provides for borrowings up to \$300.0 million through 2016 and is subject to certain commitment fees. Loans made under the senior revolving credit facility bear interest at a variable rate. Loan proceeds may be used for general corporate purposes, including working capital, permitted acquisitions, capital expenditures and repayment of existing indebtedness. The credit agreement also provides for an uncommitted incremental facility that permits us, subject to certain conditions, to request an increase in the senior credit facility of up to \$50.0 million. At December 31, 2013, \$184.0 million of the \$300.0 million senior revolving credit facility was unused.

In January 2014 the Company determined that it was in technical violation of one loan covenant related to the threshold for priority indebtedness in its 2006 Senior Note Purchase Agreement dated December 20, 2006 which resulted in cross default violations in two other loan agreements. The Company obtained the appropriate waivers from its lenders which were fully executed on February 12, 2014. The underlying financial covenants of the Note Purchase Agreement were amended at the same time. We are currently in compliance with all of our debt covenants.

During 2013 and 2012, we reduced borrowings on the senior revolving credit facility by \$5.0 million and \$55.0 million, respectively.

Management has filed to redeem the \$4.0 million of Industrial development debt on February 28, 2014.

Cash and cash equivalents increased \$13.5 million during the year ended December 31, 2013, compared to an increase of \$22.8 million during 2012 and an increase of \$0.2 million during 2011.

**Operating activities.** Operating activities provided cash of \$110.8 million in 2013, compared to providing cash of \$150.5 million in 2012. Lower operating cash flow in 2013 is primarily related to changes in working capital, higher notes receivables from insurance companies, and lower net income. Insurance receivables related to cumulative trauma product liability losses were \$124.8 million at December 31, 2013 compared to \$130.0 million at December 31, 2012. Trade receivables were \$200.4 million at December 31, 2013 compared to \$191.3 million at December 31, 2012, reflecting a local currency increase of \$13.2 million on strong sales results in December, partially offset by unfavorable currency translation effects of \$4.1 million. Inventories were \$136.8 million at December 31, 2013, compared to \$136.3 million at December 31, 2012. Local currency inventory increased \$6.3 million, partially due to anticipated demand for new products. Local currency increases were offset by unfavorable currency translation effects of \$5.8 million. Accounts payable were \$66.9 million at December 31, 2013 compared to \$59.5 million at December 31, 2012. Local currency accounts payable increased \$8.8 million, primarily in International and North America reflecting our ongoing initiative to improve operating cash flow, partially offset by favorable currency translation effects of \$1.4 million.

Operating activities provided cash of \$150.5 million in 2012, compared to providing cash of \$85.3 million in 2011. Significantly higher cash from operating activities in 2012 was primarily related to working capital improvements and higher net income. Trade receivables were \$191.3 million at December 31, 2012, a decrease of \$1.3 million, compared to \$192.6 million at December 31, 2011. The \$1.3 million decrease in trade receivables reflects a \$2.3 million decrease in local currency balances, partially offset by a \$1.0 million increase due to currency translation effects. LIFO inventories were \$136.3 million at December 31, 2012, a decrease of \$5.2 million, compared to \$141.5 million at December 31, 2011. The \$5.2 million decrease in inventories reflects a \$6.1 million decrease in local currency inventories, partially offset by a \$0.9 million increase due to currency translation effects. The decrease in local currency inventories reflects the divestiture of the ACH business, as well as our ongoing initiative to manage inventory levels. Accounts payable were \$59.5 million at December 31, 2012, an increase of \$9.3 million, compared to \$50.2 million at December 31, 2011. The \$9.3 million increase in accounts payable reflects our focus on extending payments by negotiating favorable terms with our vendors. Currency translation effects on accounts payable were negligible.

**Investing activities.** Investing activities used cash of \$35.2 million for the year ended December 31, 2013, compared to using \$17.3 million in 2012. The increase in cash used by investing activities in 2013 was due to lower cash generated by property disposals. Cash generated from property disposals was \$1.4 million in 2013 compared to \$20.2 million in 2012. The cash received from property disposals in 2012 include proceeds from the sale of land in our Cranberry Woods office park. Capital expenditures were \$36.5 million compared to \$32.2 million in 2012. The \$4.3 million increase in expenditures was driven primarily from higher investment in manufacturing in the International segment.

Investing activities used cash of \$17.3 million for the year ended December 31, 2012, compared to using \$11.7 million in 2012. The higher use of cash in 2012 relates to a \$5.3 million short-term investment in the International segment. This investment was liquidated in 2013.

**Financing activities.** Financing activities used cash of \$58.2 million for the year ended December 31, 2013, compared to using cash of \$110.5 million in 2012. During 2013, we paid down \$11.7 million of long-term debt compared to paying down \$63.0 million in 2012. We made dividend payments of \$44.0 million during 2013, compared to \$51.0 million during 2012. Dividends paid on our common stock during 2013 (our 97<sup>th</sup> consecutive year of dividend payment) were \$1.18 per share. Dividends paid on our common stock in 2012 and 2011 were \$1.38 and \$1.03 per share, respectively. The 2012 dividend included a special one-time dividend of \$0.28 per share that was paid on December 28, 2012. Restricted cash balances were \$2.8 million at December 31, 2013 and were primarily used to support letter of credit balances.

Financing activities used cash of \$110.5 million in 2012 compared to using cash of \$71.3 million in 2011. During 2012, we paid down \$63.0 million of long-term debt compared to paying down \$35.0 million in 2011. We made dividend payments of \$51.0 million during 2012, compared to \$37.7 million during 2011.

## CUMULATIVE TRANSLATION ADJUSTMENTS

The year-end position of the U.S. dollar relative to international currencies resulted in a translation loss of \$6.1 million being credited to cumulative translation adjustments for the year ended December 31, 2013. This compares to a translation gain of \$4.1 million in 2012 and a translation loss of \$14.7 million in 2011. The translation loss in 2013 was primarily related to the weakening of the Australian Dollar, Brazilian Real and the Argentine Peso. The translation gain in 2012 was primarily related to the strengthening of the euro. The translation loss in 2011 was primarily related to the weakening of the euro and South African rand.

## COMMITMENTS AND CONTINGENCIES

We are obligated to make future payments under various contracts, including debt and lease agreements. Our significant cash obligations as of December 31, 2013 were as follows:

(In millions)	Total	2014	2015	2016	2017	2018	Thereafter
Long-term debt	\$ 267.3	\$ 6.7	\$ 6.7	\$ 116.7	\$ 26.7	\$ 26.7	\$ 83.8
Operating leases	32.9	11.9	9.8	4.2	2.4	1.8	2.8
Totals	300.2	18.6	16.5	120.9	29.1	28.5	86.6

The significant obligations table does not include obligations to taxing authorities due to uncertainty surrounding the ultimate settlement of amounts and timing of these obligations.

We expect to meet our 2014, 2015, and 2017 debt service obligations through cash provided by operations. Approximately \$110.0 million of debt payable in 2016 relates to our unsecured senior revolving credit facility. We expect to generate sufficient operating cash flow to make payments against this amount each year. To the extent that a balance remains when the facility matures in 2016, we expect to refinance the remaining balance through new borrowing facilities.

The Company had outstanding bank guarantees and standby letters of credit with banks as of December 31, 2013 totaling \$9.0 million, of which \$6.0 million relate to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders, insurance companies and the Company's industrial development debt. No amounts were drawn on these arrangements at December 31, 2013. The Company is also required to provide cash collateral in connection with certain arrangements. At December 31, 2013, the Company has \$2.2 million of restricted cash in support of these arrangements. At December 31, 2013, the Company also has a \$4.1 million guarantee relating to voluntary retirement payments for its unionized workers in Germany.

We expect to make net contributions of \$4.5 million to our pension plans in 2014.

We have purchase commitments for materials, supplies, services and property, plant and equipment as part of our ordinary conduct of business. In addition to these commitments, we also have contingencies related to product liability losses.

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during the year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (*e.g.*, silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last five years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013	2012	2011
Balance January 1	\$ 130.0	\$ 112.1	\$ 89.0
Additions	34.0	29.7	35.6
Collections and settlements	(39.2)	(11.8)	(12.5)
Balance December 31	124.8	130.0	112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of the insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations on a quarter-to-quarter basis, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigations with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We prepare our consolidated financial statements in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosures. We evaluate these estimates and judgments on an on-going basis based on historical experience and various assumptions that we believe to be reasonable under the circumstances. However, different amounts could be reported if we had used different assumptions and in light of different facts and circumstances. Actual amounts could differ from the estimates and judgments reflected in our financial statements. A summary of the Company's significant accounting policies is included in Note 1 to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

We believe that the following are the more critical judgments and estimates used in the preparation of our financial statements.

**Accounting for contingencies.** We accrue for contingencies when we believe that it is probable that a liability or loss has been incurred and the amount can be reasonably estimated. Contingencies relate to uncertainties that require our judgment both in assessing whether or not a liability or loss has been incurred and in estimating the amount of the probable loss. Significant contingencies affecting our financial statements include pending or threatened litigation, including product liability claims and product warranties.

**Product liability.** We face an inherent business risk of exposure to product liability claims arising from the alleged failure of our products to prevent the types of personal injury or death against which they are designed to protect. We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. We maintain a reserve for single incident product liability claims, based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, or coal worker's pneumoconiosis. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit. Therefore, we do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability claims that we may face because of the factors described above. As new information about cumulative trauma product liability claims and future developments becomes available, we reassess our potential exposures.

We record expenses for defense costs associated with open product liability lawsuits as incurred.

With some common contract exclusions, we maintain insurance for single incident and pre-1986 cumulative trauma product liability claims and related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance.

Due to uncertainty as to the ultimate outcome of pending and threatened claims, as well as the incidence of future claims, it is possible that future results could be materially affected by changes in our assumptions and estimates related to product liability matters, including our estimates of amounts receivable from insurance carriers. Our product liability expense averaged less than 1% of net sales during the three years ended December 31, 2013.

**Product warranties.** We accrue for the estimated probable cost of product warranties at the time that sales are recognized. Our estimates are principally based on historical experience. We also accrue for our estimates of the probable costs of corrective action when significant product quality issues are identified. These estimates are principally based on our assumptions regarding the cost of corrective action and the probable number of units to be repaired or replaced. Our product warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Due to the uncertainty and potential volatility of these factors, it is possible that future results could be materially affected by changes in our assumptions or the effectiveness of our strategies related to these matters. Our product warranty expense averaged approximately 1% of net sales during the three years ended December 31, 2013.

**Income taxes.** We recognize deferred tax assets and liabilities using enacted tax rates to record the tax effect of temporary differences between the book and tax basis of recorded assets and liabilities. We record valuation allowances to reduce deferred tax assets to the amounts that we estimate are probable to be realized. When assessing the need for valuation allowances, we consider projected future taxable income and prudent and feasible tax planning strategies. Should a change in circumstances lead to a change in our judgments about the realizability of deferred tax assets in future years, we adjust the related valuation allowances in the period that the change in circumstances occurs. We had valuation allowances of \$4.9 million and \$4.0 million at December 31, 2013 and 2012, respectively.

We record an estimated income tax liability based on our best judgment of the amounts likely to be paid in the various tax jurisdictions in which we operate. We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more likely than not threshold. We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. The tax liabilities ultimately paid are dependent on a number of factors, including the resolution of tax audits, and may differ from the amounts recorded. Tax liabilities are adjusted through income when it becomes probable that the actual liability differs from the amount recorded.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$290.5 million as of December 31, 2013. These earnings are considered to be reinvested for an indefinite period of time. Because we currently do not have any plans to repatriate these funds, we cannot determine the impact of local taxes, withholding taxes and foreign tax credits associated with the future repatriation of such earnings and, therefore, cannot reasonably estimate the associated tax liability. In cases where we intend to repatriate a portion of the undistributed earnings of our foreign subsidiaries, we provide U.S. income taxes on such earnings.

**Pensions and other postretirement benefits.** We sponsor certain pension and other postretirement benefit plans. Accounting for the net periodic benefit costs and credits for these plans requires us to estimate the cost of benefits to be provided well into the future and to attribute these costs over the expected work life of the employees participating in these plans. These estimates require our judgment about discount rates used to determine these obligations, expected returns on plan assets, rates of future compensation increases, rates of increase in future health care costs, participant withdrawal and mortality rates and participant retirement ages. Differences between our estimates and actual results may significantly affect the cost of our obligations under these plans and could cause net periodic benefit costs and credits to change materially from year-to-year. The discount rate assumptions used in determining projected benefit obligations are based on published long-term bond indices or a company-specific yield curve model.

**Goodwill.** In the third quarter of each year, or more frequently if indicators of impairment exist or if a decision is made to sell a business, we evaluate goodwill for impairment. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include a decline in expected cash flows, a significant adverse change in the business climate, unanticipated competition, slower growth rates, or negative developments in equity and credit markets, among others.

All goodwill is assigned to reporting units. For goodwill impairment testing purposes, we consider our operating segments to be our reporting units. We test goodwill for impairment by either performing a qualitative evaluation or a two-step quantitative test. The qualitative evaluation is an assessment of factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value, including goodwill. Factors considered as part of the qualitative assessment include entity-specific industry, market and general economic conditions. In 2013 we performed a qualitative assessment for all of our reporting units. However, in the future, we may elect to bypass this qualitative evaluation for some or all of our reporting units and perform a two-step quantitative test. Quantitative testing involves comparing the estimated fair value of each reporting unit to its carrying value. We estimate reporting unit fair value using discounted cash flow (DCF) methodologies, as we believe forecasted cash flows are the best indicator of fair value. A number of significant assumptions and estimates are involved in the application of the DCF model, including sales volumes and prices, costs to produce, tax rates, capital spending, discount rates, and working capital changes. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' weighted average cost of capital (WACC) rate are estimated for each reporting unit based on peer data.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized, which could significantly and adversely impact reported results of operations and shareholders' equity. For 2013, based on our qualitative valuation, none of our reporting units were close to an impairment.

## **RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING STANDARDS**

In July, 2013, the FASB issued ASU 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists. This ASU requires an unrecognized tax benefit, or a portion of an unrecognized tax benefit, to be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. The ASU will be effective beginning in 2014. The adoption of this ASU will not have a material effect on our consolidated statements.

In March 2013, FASB issued ASU 2013-05, Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This ASU 2013-05 addresses the accounting for the cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity. The guidance outlines the events when cumulative translation adjustments should be released into net income. This ASU will be effective beginning in 2014. The adoption of this ASU may have a material effect on our consolidated financial statements, in the event that we were to divest of a foreign affiliate.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income-Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. This ASU requires additional information about the amounts reclassified out of accumulated other comprehensive income by component. The adoption of this ASU on January 1, 2013 did not have a material effect on our consolidated financial statements.

## **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Market risk represents the risk of adverse changes in the value of a financial instrument caused by changes in currency exchange rates, interest rates and equity prices. We are exposed to market risks related to currency exchange rates and interest rates.

**Currency exchange rates.** We are subject to the effects of fluctuations in currency exchange rates on various transactions and on the translation of the reported financial position and operating results of our non-U.S. companies from local currencies to U.S. dollars. A hypothetical 10% strengthening or weakening of the U.S. dollar would increase or decrease our reported sales and net income for the year ended December 31, 2013 by approximately \$57.5 million and \$4.6 million, respectively.

When appropriate, we may attempt to limit our transactional exposure to changes in currency exchange rates through contracts or other actions intended to reduce existing exposures by creating offsetting currency exposures. At December 31, 2013, we had open foreign currency forward contracts with a U.S. dollar notional value of \$54.4 million. A hypothetical 10% increase in December 31, 2013 forward exchange rates would result in a \$5.4 million increase in the fair value of these contracts.

**Interest rates.** We are exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. Because of the relatively short maturities of temporary investments and the variable rate nature of our revolving credit facility and industrial development debt, these financial instruments are reported at carrying values which approximate fair values.

We have \$160.0 million of fixed rate debt which matures at various dates through 2021. The incremental increase in the fair value of fixed rate long-term debt resulting from a hypothetical 10% decrease in interest rates would be approximately \$2.6 million. However, our sensitivity to interest rate declines and the corresponding increase in the fair value of our debt portfolio would unfavorably affect earnings and cash flows only to the extent that we elected to repurchase or retire all or a portion of our fixed rate debt portfolio at prices above carrying values.

**Actuarial assumptions.** The most significant actuarial assumptions affecting our net periodic pension credit and pension obligations are discount rates, expected returns on plan assets and plan asset valuations. Discount rates and plan asset valuations are point-in-time measures. Expected returns on plan assets are based on our historical returns by asset class.

The following table summarizes the impact of changes in significant actuarial assumptions on our December 31, 2013 actuarial valuations.

(In thousands)	Impact of Changes in Actuarial Assumptions					
	Change in Discount Rate		Change in Expected Return		Change in Market Value of Assets	
	1%	(1)%	1%	(1)%	5%	(5)%
(Decrease) increase in net benefit cost	\$ (5,610)	\$ 6,742	\$ (3,815)	\$ 3,813	\$ (898)	\$ 894
(Decrease) increase in projected benefit obligation	(55,802)	64,198	—	—	—	—
Increase (decrease) in funded status	55,802	(64,198)	—	—	21,728	(21,728)



## Item 8. Financial Statements and Supplementary Data

### Management's Reports to Shareholders

#### Management's Report on Responsibility for Financial Reporting

Management of Mine Safety Appliances Company (the Company) is responsible for the preparation of the financial statements included in this annual report. The financial statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management. The other financial information contained in this annual report is consistent with the financial statements.

#### Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

The Company's internal control over financial reporting includes policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on our financial statements.

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

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2013. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (1992)*. Based on our assessment and those criteria, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2013.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

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/s/ WILLIAM M. LAMBERT

William M. Lambert  
Chief Executive Officer

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/s/ STACY P. McMAHAN

Stacy P. McMahan  
Senior Vice President of Finance and Chief Financial Officer

February 24, 2014

## Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Mine Safety Appliances Company:

In our opinion, the consolidated balance sheets and related consolidated statements of income, comprehensive income, cash flows and changes in retained earnings and accumulated other comprehensive loss present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries (the "Company") at December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15 presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in *Internal Control - Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 8. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP  
Pittsburgh, Pennsylvania  
February 24, 2014

**MINE SAFETY APPLIANCES COMPANY**  
**CONSOLIDATED STATEMENT OF INCOME**

(In thousands, except per share amounts)	Year ended December 31,		
	2013	2012	2011
Net sales	\$ 1,112,058	\$ 1,110,443	\$ 1,112,814
Other (loss) income, net (Note 14)	(175)	10,876	5,458
	1,111,883	1,121,319	1,118,272
Costs and expenses			
Cost of products sold	615,213	620,895	654,447
Selling, general and administrative	309,206	312,858	297,779
Research and development	45,858	40,900	39,245
Restructuring and other charges (Note 2)	5,344	2,787	8,559
Interest expense	10,677	11,344	14,116
Currency exchange losses, net	5,452	3,192	3,051
	991,750	991,976	1,017,197
Income from continuing operations before income taxes	120,133	129,343	101,075
Provision for income taxes (Note 9)	35,145	41,401	33,807
	84,988	87,942	67,268
Income from continuing operations	84,988	87,942	67,268
Income from discontinued operations (Note 19)	3,061	3,819	2,777
Net income	88,049	91,761	70,045
Net loss (income) attributable to noncontrolling interests	198	(1,124)	(193)
Net income attributable to Mine Safety Appliances Company	88,247	90,637	69,852
<b>Amounts attributable to Mine Safety Appliances Company common shareholders:</b>			
Income from continuing operations	85,858	87,557	67,518
Income from discontinued operations (Note 19)	2,389	3,080	2,334
Net income	88,247	90,637	69,852
<b>Earnings per share attributable to Mine Safety Appliances Company common shareholders (Note 8)</b>			
Basic			
Income from continuing operations	\$ 2.31	\$ 2.37	\$ 1.85
Income from discontinued operations (Note 19)	\$ 0.06	\$ 0.08	\$ 0.06
Net income	\$ 2.37	\$ 2.45	\$ 1.91
Diluted			
Income from continuing operations	\$ 2.28	\$ 2.34	\$ 1.81
Income from discontinued operations (Note 19)	\$ 0.06	\$ 0.08	\$ 0.06
Net income	\$ 2.34	\$ 2.42	\$ 1.87

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

**MINE SAFETY APPLIANCES COMPANY**  
**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**

(In thousands)	Year ended December 31,		
	2013	2012	2011
Net income	\$ 88,049	\$ 91,761	\$ 70,045
Foreign currency translation adjustments	(7,281)	3,846	(15,980)
Pension and post-retirement plan adjustments (Note 13)	54,951	(28,018)	(44,218)
Comprehensive income	135,719	67,589	9,847
Comprehensive loss (income) attributable to noncontrolling interests	1,331	(840)	1,137
Comprehensive income attributable to Mine Safety Appliances	137,050	66,749	10,984

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

**MINE SAFETY APPLIANCES COMPANY**  
**CONSOLIDATED BALANCE SHEET**

(In thousands, except share amounts)	December 31,	
	2013	2012
<b>Assets</b>		
Cash and cash equivalents	\$ 96,265	\$ 82,718
Trade receivables, less allowance for doubtful accounts of \$7,306 and \$7,402	200,364	191,289
Inventories (Note 3)	136,837	136,300
Deferred tax assets (Note 9)	22,458	17,727
Income taxes receivable	9,181	6,342
Prepaid expenses and other current assets (Note 16)	35,861	29,172
<b>Total current assets</b>	<b>500,966</b>	<b>463,548</b>
Property, plant, and equipment (Note 4)	152,755	147,465
Prepaid pension cost (Note 13)	121,054	42,818
Deferred tax assets (Note 9)	14,996	17,018
Goodwill (Note 12)	260,134	258,400
Intangible assets (Note 12)	35,029	38,648
Other noncurrent assets	149,336	143,849
<b>Total assets</b>	<b>1,234,270</b>	<b>1,111,746</b>
<b>Liabilities</b>		
Notes payable and current portion of long-term debt (Note 11)	\$ 7,500	\$ 6,823
Accounts payable	66,902	59,519
Employees' compensation	38,164	41,602
Insurance and product liability	14,251	15,025
Taxes on income (Note 9)	3,662	4,389
Other current liabilities	61,085	61,442
<b>Total current liabilities</b>	<b>191,564</b>	<b>188,800</b>
Long-term debt (Note 11)	260,667	272,333
Pensions and other employee benefits (Note 13)	152,084	151,536
Deferred tax liabilities (Note 9)	49,621	17,249
Other noncurrent liabilities	7,987	11,124
<b>Total liabilities</b>	<b>661,923</b>	<b>641,042</b>
Commitments and Contingencies (Note 18)		
<b>Shareholders' Equity</b>		
Preferred stock, 4 1/2% cumulative, \$50 par value (Note 6)	3,569	3,569
Common stock, no par value (Note 6)	132,055	112,135
Stock compensation trust (Note 10)	(1,585)	(3,891)
Treasury shares, at cost (Note 6)	(281,524)	(269,739)
Accumulated other comprehensive loss	(78,269)	(127,072)
Retained earnings	792,206	747,953
<b>Total shareholders' equity</b>	<b>566,452</b>	<b>462,955</b>
Noncontrolling interests	5,895	7,749
<b>Total shareholders' equity</b>	<b>572,347</b>	<b>470,704</b>
<b>Total liabilities and shareholders' equity</b>	<b>1,234,270</b>	<b>1,111,746</b>

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

**MINE SAFETY APPLIANCES COMPANY**  
**CONSOLIDATED STATEMENT OF CASH FLOWS**

(In thousands)	Year ended December 31,		
	2013	2012	2011
<b>Operating Activities</b>			
Net income	\$ 88,049	\$ 91,761	\$ 70,045
Depreciation and amortization	30,764	31,702	32,866
Pensions (Note 13)	12,268	3,673	(4,967)
Net gain from investing activities—asset disposals (Note 14)	(436)	(8,396)	(3,328)
Stock-based compensation (Note 10)	10,337	10,010	7,732
Deferred income tax provision (Note 9)	(3,234)	213	8,800
Other noncurrent assets and liabilities	(18,162)	(14,104)	(24,130)
Currency exchange losses, net	5,127	3,151	2,511
Excess tax benefit related to stock plans (Note 6)	(2,246)	(2,799)	(632)
Other, net	4,386	1,103	(1,335)
<b>Operating cash flow before changes in certain working capital items</b>	<b>126,853</b>	<b>116,314</b>	<b>87,562</b>
(Increase) decrease in trade receivables	(13,171)	2,346	(217)
(Increase) decrease in inventories (Note 3)	(6,296)	2,677	(1,230)
Increase (decrease) in accounts payable and accrued liabilities	10,732	17,776	(398)
(Increase) decrease in income taxes receivable, prepaid expenses and other current assets	(7,337)	11,363	(459)
<b>(Increase) decrease in certain working capital items</b>	<b>(16,072)</b>	<b>34,162</b>	<b>(2,304)</b>
<b>Cash Flow From Operating Activities</b>	<b>110,781</b>	<b>150,476</b>	<b>85,258</b>
<b>Investing Activities</b>			
Capital expenditures	(36,517)	(32,209)	(30,390)
Property disposals	1,360	20,193	18,687
Other investing	—	(5,269)	—
<b>Cash Flow From Investing Activities</b>	<b>(35,157)</b>	<b>(17,285)</b>	<b>(11,703)</b>
<b>Financing Activities</b>			
Proceeds from (payments on) short-term debt, net (Note 11)	662	(128)	137
Payments on long-term debt (Note 11)	(306,766)	(246,500)	(199,000)
Proceeds from long-term debt (Note 11)	295,100	183,500	164,000
Restricted cash	(2,790)	—	—
Cash dividends paid	(43,994)	(50,990)	(37,741)
Distributions to noncontrolling interests	(556)	—	—
Company stock purchases (Note 6)	(11,785)	(3,508)	(624)
Exercise of stock options (Note 6)	9,643	4,306	1,316
Excess tax benefit related to stock plans (Note 6)	2,246	2,799	632
<b>Cash Flow From Financing Activities</b>	<b>(58,240)</b>	<b>(110,521)</b>	<b>(71,280)</b>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<b>(3,837)</b>	<b>110</b>	<b>(2,097)</b>
<b>Increase in cash and cash equivalents</b>	<b>13,547</b>	<b>22,780</b>	<b>178</b>
Beginning cash and cash equivalents	82,718	59,938	59,760
<b>Ending cash and cash equivalents</b>	<b>96,265</b>	<b>82,718</b>	<b>59,938</b>
Supplemental cash flow information:			
<b>Interest payments</b>	<b>\$ 10,884</b>	<b>\$ 10,772</b>	<b>\$ 13,969</b>
<b>Income tax payments</b>	<b>36,242</b>	<b>29,807</b>	<b>21,739</b>

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

**MINE SAFETY APPLIANCES COMPANY**  
**CONSOLIDATED STATEMENT OF CHANGES IN RETAINED EARNINGS AND**  
**ACCUMULATED OTHER COMPREHENSIVE LOSS**

(In thousands)	Retained Earnings	Accumulated Other Comprehensive (Loss)
<b>Balances January 1, 2011</b>	\$ 676,195	\$ (44,316)
Net income	70,045	—
Foreign currency translation adjustments	—	(15,980)
Pension and post-retirement plan adjustments, net of tax of \$28,636	—	(44,218)
(Income) loss attributable to noncontrolling interests	(193)	1,330
Common dividends	(37,699)	—
Preferred dividends	(42)	—
<b>Balances December 31, 2011</b>	<b>708,306</b>	<b>(103,184)</b>
Net income	91,761	—
Foreign currency translation adjustments	—	3,846
Pension and post-retirement plan adjustments, net of tax of \$11,364	—	(28,018)
(Income) loss attributable to noncontrolling interests	(1,124)	284
Common dividends	(50,948)	—
Preferred dividends	(42)	—
<b>Balances December 31, 2012</b>	<b>747,953</b>	<b>(127,072)</b>
Net income	88,049	—
Foreign currency translation adjustments	—	(7,281)
Pension and post-retirement plan adjustments, net of tax of \$30,849	—	54,951
Loss attributable to noncontrolling interests	198	1,133
Common dividends	(43,952)	—
Preferred dividends	(42)	—
<b>Balances December 31, 2013</b>	<b>792,206</b>	<b>(78,269)</b>

Components of accumulated other comprehensive loss are as follows:

(In thousands)	December 31,		
	2013	2012	2011
Cumulative translation adjustments	\$ (1,189)	\$ 4,959	\$ 829
Pension and post-retirement plan adjustments (Note 13)	(77,080)	(132,031)	(104,013)
Accumulated other comprehensive loss	(78,269)	(127,072)	(103,184)

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

**MINE SAFETY APPLIANCES COMPANY**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1—Significant Accounting Policies**

**Basis of Presentation**—The Consolidated Financial Statements of Mine Safety Appliances Company are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates upon subsequent resolution of identified matters. Certain amounts in previously issued financial statements were reclassified to conform to the 2013 presentation. See Note 19 for further information regarding Discontinued Operations.

**Principles of Consolidation**—The consolidated financial statements include the accounts of the company and all subsidiaries. Intercompany accounts and transactions are eliminated.

**Noncontrolling Interests**—Noncontrolling interests reflect noncontrolling shareholders' investments in certain consolidated subsidiaries and their proportionate share of the income and accumulated other comprehensive income of those subsidiaries.

**Currency Translation**—The functional currency of all significant non-U.S. subsidiaries is the local currency. Assets and liabilities of these operations are translated at year-end exchange rates. Income statement accounts are translated using the average exchange rates for the reporting period. Translation adjustments for these companies are reported as a component of shareholders' equity and are not included in income. Foreign currency transaction gains and losses are included in net income for the reporting period.

**Cash Equivalents**—Cash equivalents include temporary deposits with financial institutions and highly liquid investments with original maturities of 90 days or less.

**Restricted Cash**—Restricted cash, which is designated for use other than current operations is included in the Prepaid Expenses and Other Current Assets in the Consolidated Balance Sheet. Restricted cash balances were \$2.8 million at December 31, 2013 and were used to support letter of credit balances. The Company did not have restricted cash at December 31, 2012 or 2011.

**Inventories**—Inventories are stated at the lower of cost or market. Most U.S. inventories are valued on the last-in, first-out (LIFO) cost method. Other inventories are valued on the average cost method or at standard costs which approximate actual costs.

**Property and Depreciation**—Property is recorded at cost. Depreciation is computed using straight-line and accelerated methods over the estimated useful lives of the assets, generally as follows: buildings 20 to 40 years and machinery and equipment 3 to 10 years. Expenditures for significant renewals and improvements are capitalized. Ordinary repairs and maintenance are expensed as incurred. Gains or losses on property dispositions are included in other income and the cost and related depreciation are removed from the accounts. Depreciation expense for the years ended December 31, 2013, 2012 and 2011 was \$27.1 million, \$27.5 million and \$27.1 million, respectively. Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow model.

**Goodwill and Other Intangible Assets**—Intangible assets are amortized on a straight-line basis over their useful lives. Intangible assets are reviewed for possible impairment whenever circumstances change such that the recorded value of the asset may not be recoverable. Goodwill is not amortized, but is subject to impairment write-down tests. We test the goodwill of each of our reporting units for impairment at least annually. The annual goodwill impairment tests are performed as of September 30 each year. All goodwill is assigned to reporting units. For this purpose, we consider our operating segments to be our reporting units. We test goodwill for impairment by either performing a qualitative evaluation or a two-step quantitative test. The qualitative evaluation is an assessment of various factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value, including goodwill.



Factors considered as part of the qualitative assessment include entity-specific industry, market and general economic conditions. We may elect to bypass the qualitative assessment for some or all of our reporting units and perform a two-step quantitative test. Quantitative testing involves estimating a reporting unit's fair value. We estimate reporting unit fair value using discounted cash flow methodologies. There has been no impairment of our goodwill as of December 31, 2013.

**Revenue Recognition**—Revenue from the sale of products is recognized when title, ownership and the risk of loss have transferred to the customer, which generally occurs either when product is shipped to the customer or, in the case of most U.S. distributor customers, when product is delivered to the customer's delivery site. We establish our shipping terms according to local practice and market characteristics. We do not ship product unless we have an order or other documentation authorizing shipment to our customers. We make appropriate provisions for uncollectible accounts receivable and product returns, both of which have historically been insignificant in relation to our net sales. Certain distributor customers receive price rebates based on their level of purchases and other performance criteria that are documented in established distributor programs. These rebates are accrued as a reduction of net sales as they are earned by the customer.

**Shipping and Handling**—Shipping and handling expenses for products sold to customers are charged to cost of products sold as incurred. Amounts billed to customers for shipping and handling are included in net sales.

**Product Warranties**—Estimated expenses related to product warranties and additional service actions are charged to cost of products sold in the period in which the related revenue is recognized or when significant product quality issues are identified.

**Research and Development**—Research and development costs are expensed as incurred.

**Income Taxes**—Deferred income taxes are provided for temporary differences between financial and tax reporting. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. If it is more likely than not that some portion or all of a deferred tax asset will not be realized, a valuation allowance is recognized. We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more likely than not threshold. We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. No provision is made for possible U.S. taxes on the undistributed earnings of foreign subsidiaries that are considered to be reinvested indefinitely.

**Stock-Based Compensation**—We account for stock-based compensation in accordance with the FASB guidance on share-based payment, which requires that we recognize compensation expense for employee and non-employee director stock-based compensation based on the grant date fair value. Except for retirement-eligible participants, for whom there is no requisite service period, this expense is recognized ratably over the requisite service periods following the date of grant. For retirement-eligible participants, this expense is recognized at the grant date.

**Derivative Instruments**—We may use derivative instruments to minimize the effects of changes in currency exchange rates. We do not enter into derivative transactions for speculative purposes and do not hold derivative instruments for trading purposes. Changes in the fair value of derivative instruments designated as fair value hedges are recorded in the balance sheet as adjustments to the underlying hedged asset or liability. Changes in the fair value of derivative instruments that do not qualify for hedge accounting treatment are recognized in the income statement as currency exchange (income) loss in the current period.

**Commitments and Contingencies**—For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters, among others. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

**Discontinued Operations and Assets Held For Sale**—For those businesses where management has committed to a plan to divest, each business is valued at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the business exceeds its estimated fair value, an impairment loss is recognized. Fair value is estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements. Depreciation and amortization expense is not recorded on assets of a business to be divested once they are classified as held for sale.

For businesses classified as discontinued operations, the results of operations are reclassified from their historical presentation to discontinued operations on the Consolidated Statement of Income, for all periods presented. The gains or losses associated with these divested businesses are recorded in discontinued operations on the Consolidated Statement of Income. Additionally, segment information does not include the operating results of businesses classified as discontinued operations for all periods presented. Management does not expect any continuing involvement with these businesses following their divestiture, and these businesses are expected to be disposed of within one year.

**Recently Adopted and Recently Issued Accounting Standards**—In July, 2013, the FASB issued ASU 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists. This ASU requires an unrecognized tax benefit, or a portion of an unrecognized tax benefit, to be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. The ASU will be effective beginning in 2014. The adoption of this ASU will not have a material effect on our consolidated statements.

In March 2013, FASB issued ASU 2013-05, Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This ASU 2013-05 addresses the accounting for the cumulative translation adjustment when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity. The guidance outlines the events when cumulative translation adjustments should be released into net income. This ASU will be effective beginning in 2014. The adoption of this ASU may have a material effect on our consolidated financial statements, in the event that we were to divest of a foreign affiliate.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income-Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. This ASU requires additional information about the amounts reclassified out of accumulated other comprehensive income by component. The adoption of this ASU on January 1, 2013 did not have a material effect on our consolidated financial statements.

## **Note 2—Restructuring and Other Charges**

During the years ended December 31, 2013, 2012 and 2011, we recorded restructuring charges of \$5.3 million, \$2.8 million and \$8.6 million, respectively. These charges were primarily related to reorganization activities.

For the year ended December 31, 2013, European segment charges of \$3.0 million were primarily related to staff reductions in Germany and the Netherlands. \$1.7 million of the European restructuring charges are accrued at December 31, 2013 and are expected to be paid in the next year. International segment charges of \$2.3 million for the year ended December 31, 2013 were primarily related to staff reductions in Australia and South Africa and were paid out in cash in 2013.

For the year ended December 31, 2012, North American, European and International segment charges of \$1.5 million, \$1.1 million and \$0.2 million, respectively, were primarily related to severance costs associated with staff reductions. At December 31, 2012, the North American, European and International segments each had accrued restructuring charges of \$0.3 million, \$2.5 million and \$0.2 million, respectively.

For the year ended December 31, 2011, European segment charges of \$5.8 million related primarily to staff reductions and the transfer of certain production activities to China. \$4.3 million of the European restructuring charges were accrued at December 31, 2011. North American segment charges for the year ended December 31, 2011 of \$1.7 million included costs associated with the relocation of certain administrative and production activities. International segment charges for the year ended December 31, 2011 of \$1.1 million were primarily related to severance costs associated with the relocation of our Wuxi, China operations to Suzhou, China.

### Note 3—Inventories

(In thousands)	December 31,	
	2013	2012
Finished products	\$ 74,466	\$ 72,658
Work in process	8,108	13,473
Raw materials and supplies	54,263	50,169
Total inventories	136,837	136,300
Excess of FIFO costs over LIFO costs	44,670	46,519
Total FIFO inventories	181,507	182,819

Inventories stated on the LIFO basis represent 15% and 16% of total inventories at December 31, 2013 and 2012, respectively.

Reductions in certain inventory quantities during the years ended December 31, 2013 and 2012 resulted in liquidations of LIFO inventories carried at lower costs prevailing in prior years. The effect of LIFO liquidations during 2013 reduced cost of sales by \$2.1 million and increased net income by \$1.4 million. The effect of LIFO liquidations during 2012 reduced cost of sales by \$0.8 million and increased net income by \$0.5 million.

### Note 4—Property, Plant, and Equipment

(In thousands)	December 31,	
	2013	2012
Land	\$ 3,835	\$ 5,267
Buildings	110,534	107,082
Machinery and equipment	349,667	334,951
Construction in progress	16,364	10,444
Total	480,400	457,744
Less accumulated depreciation	(327,645)	(310,279)
Net property	152,755	147,465

### Note 5—Reclassifications Out of Accumulated Other Comprehensive Loss

(In thousands)	Year ended December 31,		
	2013	2012	2011
Amortization of prior service cost	\$ (322)	\$ (353)	\$ (351)
Recognized net actuarial losses	13,875	6,764	1,503
Total reclassifications	13,553	6,411	1,152
Tax benefit	5,066	2,469	411
Total reclassifications, net of tax	8,487	3,942	741

### Note 6—Capital Stock

**Preferred Stock** - The Company has authorized 100,000 shares of \$50 par value 4.5% cumulative preferred nonvoting stock which is callable at \$52.50. There are 71,373 shares issued and 52,878 shares held in treasury at December 31, 2013. There were no treasury purchases of preferred stock during the three years ended December 31, 2013. The Company has also authorized 1,000,000 shares of \$10 par value second cumulative preferred voting stock. No shares have been issued as of December 31, 2013.

**Common Stock** - The Company has authorized 180,000,000 shares of no par value common stock. There were 37,202,099 and 37,007,799 shares outstanding at December 31, 2013 and December 31, 2012, respectively. Common stock activity is summarized as follows:

(Dollars in thousands)	Shares			Dollars		
	Issued	Stock Compensation Trust	Treasury	Common Stock	Stock Compensation Trust	Treasury Cost
Balances January 1, 2011	62,081,391	(1,360,714)	(24,200,951)	\$ 88,629	\$ (7,103)	\$ (263,855)
Restricted stock awards	—	103,815	—	(542)	542	—
Restricted stock expense	—	—	—	4,376	—	—
Restricted stock forfeitures	—	—	(7,469)	(6)	—	—
Stock options exercised	—	94,115	—	825	491	—
Stock option expense	—	—	—	2,343	—	—
Performance stock expense	—	—	—	1,019	—	—
Tax benefit related to stock plans	—	—	—	632	—	—
Treasury shares purchased	—	—	(17,597)	—	—	(624)
Balances December 31, 2011	62,081,391	(1,162,784)	(24,226,017)	97,276	(6,070)	(264,479)
Restricted stock awards	—	136,295	—	(711)	711	—
Restricted stock expense	—	—	—	4,891	—	—
Restricted stock forfeitures	—	—	(10,815)	(147)	—	—
Stock options exercised	—	223,022	—	3,141	1,165	—
Stock option expense	—	—	—	2,435	—	—
Performance stock issued	—	58,037	—	(303)	303	—
Performance stock expense	—	—	—	2,831	—	—
Tax benefit related to stock plans	—	—	—	2,799	—	—
Treasury shares purchased	—	—	(91,330)	—	—	(3,508)
Other, net	—	—	—	(77)	—	—
Balances December 31, 2012	62,081,391	(745,430)	(24,328,162)	112,135	(3,891)	(267,987)
Restricted stock awards	—	96,686	—	(505)	505	—
Restricted stock expense	—	—	—	4,244	—	—
Restricted stock forfeitures	—	—	(7,365)	(115)	—	—
Stock options exercised	—	277,687	—	8,194	1,449	—
Stock option expense	—	—	—	2,825	—	—
Performance stock issued	—	67,389	—	(352)	352	—
Performance stock expense	—	—	—	3,383	—	—
Tax benefit related to stock plans	—	—	—	2,246	—	—
Treasury shares purchased	—	—	(240,097)	—	—	(11,785)
Balances December 31, 2013	62,081,391	(303,668)	(24,575,624)	132,055	(1,585)	(279,772)

The Mine Safety Appliances Company Stock Compensation Trust was established to provide shares for certain benefit plans, including the management and non-employee directors' equity incentive plans. Shares held by the Stock Compensation Trust, and the corresponding cost of those shares, are reported as a reduction of common shares issued. Differences between the cost of the shares held by the Stock Compensation Trust and the market value of shares released for stock-related benefits are reflected in common stock issued.

In November 2005, the Board of Directors authorized the purchase of up to \$100 million of MSA common stock either through private transactions or open market transactions. The share purchase program has no expiration date. The maximum shares that may yet be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. We do not have any other share purchase programs. The above treasury share purchases are related to stock compensation transactions.

## Note 7—Segment Information

We are organized into eleven geographic operating segments based on management responsibilities. The operating segments have been aggregated (based on economic similarities, the nature of their products, end-user markets and methods of distribution) into three reportable segments: North America, Europe and International.

Reportable segment information is presented in the following table:

(In thousands)	North America	Europe	International	Reconciling Items	Consolidated Totals
<b>2013</b>					
Sales to external customers	\$ 559,193	\$ 289,760	\$ 263,105	\$ —	\$ 1,112,058
Intercompany sales	122,013	98,491	21,075	(241,579)	—
<b>Net income:</b>					
Continuing operations	70,577	18,398	20,373	(23,490)	85,858
Discontinued operations	—	—	2,389	—	2,389
Total assets	836,418	394,463	222,427	(219,038)	1,234,270
Interest income	243	90	809	—	1,142
Interest expense	52	175	2	10,448	10,677
Noncash items:					
Depreciation and amortization	19,732	5,357	5,675	—	30,764
Pension expense	(4,765)	(6,328)	(1,268)	—	(12,361)
Income tax provision	35,602	6,133	6,182	(12,772)	35,145
Capital expenditures	17,963	11,833	6,721	—	36,517
Net Property	85,087	33,162	34,505	1	152,755
<b>2012</b>					
Sales to external customers	551,927	289,549	268,967	—	1,110,443
Intercompany sales	114,354	98,096	18,641	(231,091)	—
<b>Net income:</b>					
Continuing operations	64,270	20,424	19,238	(16,375)	87,557
Discontinued operations	—	—	3,080	—	3,080
Total assets	726,476	352,601	205,959	(173,290)	1,111,746
Interest income	364	147	886	14	1,411
Interest expense	106	350	78	10,810	11,344
Noncash items:					
Depreciation and amortization	21,446	5,354	4,902	—	31,702
Pension income (expense)	2,138	(4,700)	(1,111)	—	(3,673)
Income tax provision	39,125	7,362	8,085	(13,171)	41,401
Capital expenditures	20,129	5,106	6,974	—	32,209
Net Property	85,923	25,460	36,081	1	147,465
<b>2011</b>					
Sales to external customers	561,140	286,753	264,921	—	1,112,814
Intercompany sales	100,094	116,471	18,305	(234,870)	—
<b>Net income:</b>					
Continuing operations	53,674	11,689	24,818	(22,663)	67,518
Discontinued operations	—	—	2,334	—	2,334
Total assets	742,707	340,305	194,127	(162,087)	1,115,052
Interest income	78	192	1,215	324	1,809
Interest expense	29	253	137	13,697	14,116
Noncash items:					
Depreciation and amortization	22,036	6,239	4,591	—	32,866
Pension income (expense)	10,800	(5,638)	(195)	—	4,967
Income tax provision	31,821	6,187	5,726	(9,927)	33,807
Capital expenditures	20,035	4,384	5,971	—	30,390
Net property	85,643	25,273	34,846	1	145,763

Reconciling items consist primarily of intercompany eliminations and items reported at the corporate level.

Geographic information on sales to external customers, based on country of origin:

(In thousands)	2013	2012	2011
United States	\$ 528,178	\$ 527,550	\$ 538,257
Germany	71,139	74,557	75,536
Other	512,741	508,336	499,021
Total	1,112,058	1,110,443	1,112,814

Geographic information on net property, based on country of origin:

(In thousands)	2013	2012	2011
United States	\$ 82,274	\$ 82,820	\$ 82,318
Germany	16,882	8,781	9,303
China	16,010	14,780	14,817
Other	37,589	41,084	39,325
Total	152,755	147,465	145,763

Sales are allocated to each country based on the destination of the end-customer. Core product sales represented 73% of total sales for the year ended December 31, 2013, up from 70% for the year ended December 31, 2012. The percentage of total sales by core product group were as follows: fixed gas & flame detection instruments, 22%; breathing apparatus, 20%; portable gas detection instruments, 14%; industrial head protection, 13%; and fall protection at 4% of total sales. The remaining 27% of total sales represented non-core product sales for the year ended December 31, 2013, an improvement from 30% of total sales for the year ended December 31, 2012.

**Note 8—Earnings per Share**

Basic earnings per share is computed by dividing net income, after the deduction of preferred stock dividends and undistributed earnings allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings per share assumes the issuance of common stock for all potentially dilutive share equivalents outstanding not classified as participating securities. Participating securities are defined as unvested stock-based payment awards that contain nonforfeitable rights to dividends.

(In thousands, except per share amounts)	2013	2012	2011
Net income attributable to continuing operations	\$ 85,858	\$ 87,557	\$ 67,518
Preferred stock dividends	(41)	(41)	(41)
Income from continuing operations available to common equity	85,817	87,516	67,477
Dividends and undistributed earnings allocated to participating securities	(643)	(836)	(730)
Income from continuing operations available to common shareholders	85,174	86,680	66,747
Net income attributable to discontinued operations	\$ 2,389	\$ 3,080	\$ 2,334
Preferred stock dividends	(1)	(1)	(1)
Income from discontinued operations available to common equity	2,388	3,079	2,333
Dividends and undistributed earnings allocated to participating securities	(18)	(29)	(25)
Income from discontinued operations available to common shareholders	2,370	3,050	2,308
Basic weighted-average shares outstanding	36,868	36,564	36,221
Stock options and other stock compensation	582	478	610
Diluted weighted-average shares outstanding	37,450	37,042	36,831
Antidilutive stock options	15	744	894
Earnings per share attributable to continuing operations:			
Basic	\$2.31	\$2.37	\$1.85
Diluted	\$2.28	\$2.34	\$1.81
Earnings per share attributable to discontinued operations:			
Basic	\$0.06	\$0.08	\$0.06
Diluted	\$0.06	\$0.08	\$0.06

## Note 9—Income Taxes

(In thousands)	2013	2012	2011
Components of income before income taxes*			
U.S. income	\$ 48,621	\$ 67,043	\$ 58,817
Non-U.S. income	71,512	62,300	42,258
Income before income taxes	120,133	129,343	101,075
Provision for income taxes*			
Current			
Federal	\$ 18,656	\$ 18,774	\$ 6,829
State	1,492	2,556	872
Non-U.S.	18,453	19,438	17,449
Total current provision	38,601	40,768	25,150
Deferred			
Federal	(3,582)	(518)	10,853
State	(483)	(125)	772
Non-U.S.	609	1,276	(2,968)
Total deferred provision	(3,456)	633	8,657
Provision for income taxes	35,145	41,401	33,807

\*The components of income before income taxes and the provision for income taxes relate to continuing operations.

Included in discontinued operations is tax expense of \$1.4 million in 2013, \$1.1 million in 2012 and \$1.0 million in 2011.

Cash flows from operations in the Consolidated Statement of Cash Flows include a deferred income tax provision (benefit) from discontinued operations of \$0.2 million, \$(0.4) million and \$0.1 million in 2013, 2012 and 2011, respectively.

Reconciliation of the U.S. federal income tax rates to our effective tax rate:

	2013	2012	2011
U.S. federal income tax rate	35.0%	35.0%	35.0%
State income taxes—U.S.	0.6	1.2	1.0
Taxes on non-U.S. income	(4.5)	(1.0)	(2.0)
Research and development credit	(1.5)	—	(1.3)
Manufacturing deduction credit	(1.1)	(2.0)	(0.3)
Valuation allowances	0.5	(0.2)	0.1
Other	0.3	(1.0)	0.9
Effective income tax rate	29.3%	32.0%	33.4%

Components of deferred tax assets and liabilities:

(In thousands)	December 31,	
	2013	2012
<b>Deferred tax assets</b>		
Book expenses capitalized for tax	\$ 7,204	\$ 8,213
Postretirement benefits	18,027	19,282
Inventory reserves	5,550	4,780
Vacation allowances	1,036	1,240
Net operating losses and tax credit carryforwards	6,711	7,558
Post employment benefits	757	1,006
Foreign tax credit carryforwards (expiring in 2019)	2,227	212
Stock options	10,185	9,672
Liability insurance	3,686	2,754
Basis of capital assets	891	1,013
Warranties	3,049	3,078
Reserve for doubtful accounts	1,569	1,547
Other	9,313	5,063
<b>Total deferred tax assets</b>	<b>70,205</b>	<b>65,418</b>
Valuation allowances	(4,938)	(3,961)
<b>Net deferred tax assets</b>	<b>65,267</b>	<b>61,457</b>
<b>Deferred tax liabilities</b>		
Property, plant and equipment	(8,935)	(10,547)
Pension	(40,833)	(10,915)
Intangibles	(25,212)	(21,492)
Other	(2,455)	(1,110)
<b>Total deferred tax liabilities</b>	<b>(77,435)</b>	<b>(44,064)</b>
<b>Net deferred taxes</b>	<b>(12,168)</b>	<b>17,393</b>

At December 31, 2013, we had net operating loss carryforwards of approximately \$28.0 million, all of which are in non-U.S. tax jurisdictions. Net operating loss carryforwards of \$0.2 million and \$0.9 million will expire in 2014 and 2015 respectively. The remainder either have a valuation allowance or may be carried forward indefinitely.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$290.5 million as of December 31, 2013. These earnings are considered to be reinvested for an indefinite period of time. Because we currently do not have any plans to repatriate these funds, we cannot determine the impact of local taxes, withholding taxes and foreign tax credits associated with the future repatriation of such earnings and, therefore, cannot reasonably estimate the associated tax liability. In cases where we intend to repatriate a portion of the undistributed earnings of our foreign subsidiaries, we provide U.S. income taxes on such earnings.

A reconciliation of the change in the tax liability for unrecognized tax benefits for the years ended December 31, 2013 and 2012 is as follows:

(In thousands)	2013	2012
Beginning balance	\$ 9,520	\$ 12,827
Adjustments for tax positions related to the current year	(3,628)	(2,672)
Adjustments for tax positions related to prior years	97	(367)
Statute expiration	(101)	(268)
<b>Ending balance</b>	<b>5,888</b>	<b>9,520</b>



The total amount of unrecognized tax benefits, if recognized, would reduce our future effective tax rate. We have recognized tax benefits associated with these liabilities in the amount of \$5.1 million and \$8.6 million at December 31, 2013 and 2012, respectively.

We recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. Our liability for accrued interest and penalties related to uncertain tax positions was \$0.7 million at December 31, 2012. During 2013, we reduced interest related to uncertain tax positions by \$0.2 million. Our liability for accrued interest and penalties related to uncertain tax positions was \$0.5 million at December 31, 2013.

We file a U.S. federal income tax return along with various state and foreign income tax returns. Examinations of our U.S. federal returns have been completed through 2010, with the 2009 tax year closed by statute. Various state and foreign income tax returns may be subject to tax audits for periods after 2007.

#### Note 10—Stock Plans

The 2008 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible key employees through May 2018. Management stock-based compensation includes stock options, restricted stock and performance stock units. The 2008 Non-Employee Directors' Equity Incentive Plan provides for grants of stock options and restricted stock to non-employee directors through May 2018. Stock options are granted at market prices and expire after 10 years. Stock options are exercisable beginning three years after the grant date. Restricted stock is granted without payment to the company and generally vests three years after the grant date. In general, unvested stock options, restricted stock and performance stock units are forfeited if the participant's employment with the company terminates for any reason other than retirement, death or disability. Restricted stock is valued at the market price on the grant date. The final number of shares to be issued for performance stock units may range from zero to 200% of the target award based on achieving the specified performance targets over the performance period. Performance stock units with a market condition are valued at an estimated fair value using a Monte Carlo model. We issue Stock Compensation Trust shares or Treasury shares for stock option exercises and grants of restricted stock and performance stock. As of December 31, 2013, there were 1,752,369 and 183,702 shares, respectively, reserved for future grants under the management and non-employee directors' equity incentive plans.

Stock-based compensation expense was as follows:

(In thousands)	2013	2012	2011
Restricted stock	\$ 4,129	\$ 4,744	\$ 4,370
Stock options	2,825	2,435	2,343
Performance stock	3,383	2,831	1,019
Total compensation expense before income taxes	10,337	10,010	7,732
Income tax benefit	3,810	3,700	2,825
Total compensation expense, net of income tax benefit	6,527	6,310	4,907

We did not capitalize any stock-based compensation expense in 2013, 2012, or 2011.

Stock option expense is based on the fair value of stock option grants estimated on the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2013, 2012 and 2011.

	2013	2012	2011
Fair value per option	\$ 14.17	\$ 10.77	\$ 9.94
Risk-free interest rate	1.2%	1.2%	2.6%
Expected dividend yield	2.8%	3.1%	3.6%
Expected volatility	39%	41%	40%
Expected life (years)	6.1	6.1	6.1

The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the 1 year average closing share price. Expected volatility is based on the ten year historical volatility using daily stock prices. Expected life is based on historical stock option exercise data.

A summary of option activity follows:

	Shares	Weighted Average Exercise Price	Exercisable at Year-end
Outstanding January 1, 2011	1,749,003	\$ 29.74	
Granted	166,247	34.09	
Exercised	(94,115)	13.99	
Expired	(2,495)	44.08	
Outstanding December 31, 2011	1,818,640	30.94	907,598
Granted	196,469	37.33	
Exercised	(223,022)	18.93	
Expired	(5,093)	43.33	
Forfeited	(2,334)	36.69	
Outstanding December 31, 2012	1,784,660	33.05	1,100,300
Granted	188,407	49.03	
Exercised	(277,687)	34.72	
Outstanding December 31, 2013	1,695,380	34.55	1,178,657

For various exercise price ranges, characteristics of outstanding and exercisable stock options at December 31, 2013 were as follows:

Range of Exercise Prices	Stock Options Outstanding		
	Shares	Weighted-Average	
		Exercise Price	Remaining Life
\$17.83 – \$29.33	609,820	\$ 21.76	5.5 years
\$33.55 – \$40.88	560,795	37.34	5.6
\$41.26 – \$49.92	524,765	46.42	5.4
\$17.83 – \$49.92	1,695,380	34.55	5.5

Range of Exercise Prices	Stock Options Exercisable		
	Shares	Weighted-Average	
		Exercise Price	Remaining Life
\$17.83 – \$29.33	609,820	\$ 21.76	5.5 years
\$33.55 – \$40.88	246,903	39.80	2.9
\$41.26 – \$48.95	321,934	45.10	3.1
\$17.83 – \$48.95	1,178,657	31.91	4.3

Cash received from the exercise of stock options was \$9.6 million, \$4.3 million and \$1.3 million for the years ended December 31, 2013, 2012 and 2011, respectively. The tax benefit we realized from these exercises was \$0.5 million, \$1.6 million and \$0.7 million for the years ended December 31, 2013, 2012 and 2011, respectively.

The aggregate intrinsic value of stock options exercisable at December 31, 2013 was \$22.7 million. The aggregate intrinsic value of all stock options outstanding at December 31, 2013 was \$28.2 million.

A summary of restricted stock activity follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	473,637	\$ 26.56
Granted	125,603	33.61
Vested	(76,505)	44.39
Forfeited	(10,481)	24.87
Unvested at December 31, 2011	512,254	25.66
Granted	130,985	37.61
Vested	(209,897)	20.44
Forfeited	(15,499)	28.37
Unvested at December 31, 2012	417,843	31.92
Granted	92,448	48.98
Vested	(197,465)	27.42
Forfeited	(9,407)	40.23
Unvested at December 31, 2013	303,419	39.79

A summary of performance stock unit activity follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2011	85,629	\$ 20.53
Granted	48,820	33.09
Performance adjustments	(7,506)	21.14
Forfeited	(1,500)	30.53
Unvested at December 31, 2011	125,443	25.27
Granted	54,928	41.33
Vested	(47,706)	18.23
Performance adjustments	5,679	26.39
Forfeited	(672)	41.45
Unvested at December 31, 2012	137,672	35.85
Granted	53,357	57.58
Vested	(45,809)	26.08
Performance adjustments	4,169	25.84
Unvested at December 31, 2013	149,389	46.32

During the years ended December 31, 2013, 2012 and 2011, the total intrinsic value of stock options exercised (the difference between the market price on the date of exercise and the option price paid to exercise the option) was \$4.0 million, \$4.4 million and \$1.8 million, respectively. The fair values of restricted stock vested during the years ended December 31, 2013, 2012 and 2011 were \$9.7 million, \$8.0 million and \$2.6 million, respectively. The fair value of performance stock units vested during the year ended December 31, 2013 was \$2.3 million.

On December 31, 2013, there was \$5.4 million of unrecognized stock-based compensation expense. The weighted average period over which this expense is expected to be recognized was approximately one year.

## Note 11—Short and Long-Term Debt

### Short-Term Debt

Short-term borrowings with banks, which excludes the current portion of long-term debt, was \$0.8 million and \$0.2 million at December 31, 2013 and 2012, respectively. The average month-end balance of total short-term borrowings during 2013 was \$0.4 million. The maximum month-end balance of \$1.3 million occurred at March 31, 2013. The weighted average interest rates on short-term borrowings at both December 31, 2013 and 2012 was 7%.

### Long-Term Debt

(In thousands)	December 31,	
	2013	2012
Industrial development debt issues payable through 2022, 0.30%	\$ 4,000	\$ 4,000
2006 Senior Notes payable through 2021, 5.41%	53,334	60,000
2010 Senior Notes payable through 2021, 4.00%	100,000	100,000
Senior revolving credit facility maturing in 2016	110,000	115,000
Total	267,334	279,000
Amounts due within one year	6,667	6,667
Long-term debt	260,667	272,333

Our unsecured senior revolving credit facility provides for borrowings of up to \$300.0 million through November 2016 and is subject to certain commitment fees. Loans made under the senior revolving credit facility bear interest at a variable rate, which ranged from 1.42% to 1.71% in 2013. Loan proceeds may be used for general corporate purposes, including working capital, permitted acquisitions, capital expenditures and repayment of existing indebtedness. The credit agreement also provides for an uncommitted incremental facility that permits us, subject to certain conditions, to request an increase in the senior credit facility of up to \$50.0 million. At December 31, 2013, \$184.0 million of the \$300.0 million senior revolving credit facility was unused including letters of credit.

The Company had outstanding bank guarantees and standby letters of credit with banks as of December 31, 2013 totaling \$9.0 million, of which \$6.0 million relate to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders, insurance companies and the Company's industrial development debt. No amounts were drawn on these arrangements at December 31, 2013. The Company is also required to provide cash collateral in connection with certain arrangements. At December 31, 2013, the Company has \$2.2 million of restricted cash in support of these arrangements. At December 31, 2013, the Company also has a \$4.1 million guarantee relating to voluntary retirement payments for its unionized workers in Germany.

Approximate maturities on our long-term debt over the next five years are \$6.7 million in 2014, \$6.7 million in 2015, \$116.7 million in 2016, \$26.7 million in 2017, \$26.7 million in 2018, and \$83.8 million thereafter. Some debt agreements require us to maintain certain financial ratios and minimum net worth and also contain restrictions on the total amount of debt. We were in compliance with all but one of our debt covenants at December 31, 2013.

In January 2014 the Company determined that it was in technical violation of one loan covenant related to the threshold for priority indebtedness in its 2006 Senior Note Purchase Agreement dated December 20, 2006 which resulted in cross default violations in two other loan agreements. The Company obtained the appropriate waivers from its lenders which were fully executed on February 12, 2014. The underlying financial covenants of the Note Purchase Agreement were amended at the same time. We are currently in compliance with all of our debt covenants.

Management has filed to redeem the \$4.0 million of Industrial development debt on February 28, 2014.

## Note 12—Goodwill and Intangible Assets

Changes in goodwill during the years ended December 31, 2013 and 2012 were as follows:

(In thousands)	2013	2012
Net balance at January 1	\$ 258,400	\$ 259,084
Disposals	—	(1,800)
Currency translation	1,734	1,116
Net balance at December 31	260,134	258,400

At December 31, 2013, goodwill of \$196.5 million, \$61.3 million and \$2.3 million related to the North American, European and International reporting segments, respectively.

Changes in intangible assets, net of accumulated amortization, during the years ended December 31, 2013 and 2012 were as follows:

(In thousands)	2013	2012
Net balance at January 1	\$ 38,648	\$ 47,119
Amortization expense	(3,708)	(4,181)
Impairment losses	—	(4,272)
Currency translation	89	(18)
Net balance at December 31	35,029	38,648

At December 31, 2013, gross intangible assets totaled \$67.0 million, while impairment reserves and accumulated amortization of intangibles was \$32.0 million. Gross intangible assets include \$27.6 million of distribution agreements; \$14.3 million of patents, trademarks and copyrights; \$11.0 million of technology related assets; \$7.1 million of license agreements; and \$7.0 million of other intangible assets. Accumulated amortization on these intangible assets was \$5.5 million, \$8.8 million, \$4.7 million, \$7.0 million, and \$6.0 million, respectively. Intangible asset amortization expense over the next five years is expected to be approximately \$3.5 million in 2014, \$3.5 million in 2015, \$3.3 million in 2016, \$2.9 million in 2017, and \$1.9 million in 2018.

In December 2012, we discontinued our firefighter location development project and commenced an active program to sell the related intangible assets. As a result of this decision, we recognized an impairment loss \$4.3 million to write-off the carrying value of these intangibles, consisting primarily of patents and trade secrets. The impairment loss is reported in other income in the income statement and included in Reconciling Items in segment information.

During 2012, we sold certain assets related to our North American ballistic helmet business, resulting in the disposal of \$1.8 million of goodwill. The impact of this transaction and the operating results of the North American ballistic helmet businesses was not material to net income or earnings per share for all periods presented and are not expected to be significant to future results.

## Note 13—Pensions and Other Postretirement Benefits

We maintain various defined benefit and defined contribution plans covering the majority of our employees. Our principal U.S. plan is funded in compliance with the Employee Retirement Income Security Act (ERISA). It is our general policy to fund current costs for the international plans, except in Germany and Mexico, where it is common practice and permissible under tax laws to accrue book reserves.

We provide health care benefits and limited life insurance for certain retired employees who are covered by our principal U.S. defined benefit pension plan until they become Medicare-eligible.

Information pertaining to defined benefit pension plans and other postretirement benefits plans is provided in the following table:

(In thousands)	Pension Benefits		Other Benefits	
	2013	2012	2013	2012
<b>Change in Benefit Obligations</b>				
Benefit obligations at January 1	\$ 463,806	\$ 394,269	\$ 30,551	\$ 30,425
Service cost	11,132	9,511	687	694
Interest cost	17,934	19,018	1,050	1,265
Participant contributions	136	137	—	—
Plan Amendments	(239)	—	144	—
Actuarial (gains) losses	(34,248)	58,102	(4,107)	(191)
Benefits paid	(19,232)	(17,804)	(1,593)	(1,642)
Settlements	(1,474)	(2,542)	—	—
Termination benefits	—	387	—	—
Currency translation	2,544	2,728	—	—
Benefit obligations at December 31	440,359	463,806	26,732	30,551
<b>Change in Plan Assets</b>				
Fair value of plan assets at January 1	384,452	357,967	—	—
Actual return on plan assets	67,391	41,478	—	—
Employer contributions	4,053	4,448	1,449	1,642
Participant contributions	136	137	143	222
Settlements	(1,474)	(2,542)	—	—
Benefits paid	(16,316)	(15,198)	(1,592)	(1,864)
Reimbursement of German benefits	(2,916)	(2,606)	—	—
Currency translation	(757)	768	—	—
Fair value of plan assets at December 31	434,569	384,452	—	—
<b>Funded Status</b>				
Funded status at December 31	(5,790)	(79,354)	(26,732)	(30,551)
Unrecognized transition losses	21	24	—	—
Unrecognized prior service cost	374	712	(2,193)	(2,618)
Unrecognized net actuarial losses	116,945	198,169	6,832	11,492
Net amount recognized	111,550	119,551	(22,093)	(21,677)
<b>Amounts Recognized in the Balance Sheet</b>				
Noncurrent assets	121,054	42,818	—	—
Current liabilities	(5,518)	(5,021)	(1,695)	(1,882)
Noncurrent liabilities	(121,326)	(117,151)	(25,037)	(28,669)
Net amount recognized	(5,790)	(79,354)	(26,732)	(30,551)
<b>Amounts Recognized in Accumulated Other Comprehensive Income</b>				
Net actuarial losses	116,945	198,169	6,832	11,492
Prior service cost (credit)	374	712	(2,193)	(2,618)
Unrecognized net initial obligation	21	24	—	—
Total (before tax effects)	117,340	198,905	4,639	8,874
<b>Accumulated Benefit Obligations for all Defined Benefit Plans</b>	403,682	414,957	—	—

(In thousands)	Pension Benefits			Other Benefits		
	2013	2012	2011	2013	2012	2011
<b>Components of Net Periodic Benefit Cost (Credit)</b>						
Service cost	\$ 11,132	\$ 9,511	\$ 8,674	\$ 687	\$ 694	\$ 785
Interest cost	17,934	19,018	19,531	1,050	1,265	1,501
Expected return on plan assets	(30,884)	(32,328)	(34,125)	—	—	—
Amortization of transition amounts	3	2	4	—	—	—
Amortization of prior service cost	102	101	104	(424)	(454)	(455)
Recognized net actuarial losses	13,323	6,235	793	552	529	710
Curtailement loss	658	747	52	—	—	—
Termination benefits	—	387	—	—	—	—
Net periodic benefit cost (credit)	12,268	3,673	(4,967)	1,865	2,034	2,541

Amounts included in accumulated other comprehensive income expected to be recognized in 2014 net periodic benefit costs.

(In thousands)	Pension Benefits	Other Benefits
Loss recognition	\$ 9,039	\$ 332
Prior service cost (credit) recognition	84	(335)
Transition obligation recognition	2	—

	Pension Benefits		Other Benefits	
	2013	2012	2013	2012
<b>Assumptions used to determine benefit obligations</b>				
Average discount rate	4.5%	4.0%	4.6%	3.8%
Rate of compensation increase	3.1%	3.8%	—	—
<b>Assumptions used to determine net periodic benefit cost</b>				
Average discount rate	4.0%	5.0%	3.8%	4.8%
Expected return on plan assets	8.2%	8.2%	—	—
Rate of compensation increases	3.8%	3.9%	—	—

Discount rates were determined using various corporate bond indexes as indicators of interest rate levels and movements and by matching our projected benefit obligation payment stream to current yields on high quality bonds.

The expected return on assets for the 2013 net periodic pension cost was determined by multiplying the expected returns of each asset class (based on historical returns) by the expected percentage of the total portfolio invested in that asset class. A total return was determined by summing the expected returns over all asset classes.

	Pension Plan Assets at December 31,	
	2013	2012
Equity securities	71%	64%
Fixed income securities	19	25
Pooled investment funds	5	6
Insurance contracts	3	3
Cash and cash equivalents	2	2
Total	100%	100%

The overall objective of our pension investment strategy is to earn a rate of return over time to satisfy the benefit obligations of the pension plans and to maintain sufficient liquidity to pay benefits and meet other cash requirements of our pension funds. Investment policies for our primary U.S. pension plan are determined by the plan's Investment Committee and set forth in the plan's investment policy. Asset managers are granted discretion for determining sector mix, selecting securities and timing transactions, subject to the guidelines of the investment policy. An aggressive, flexible management of the portfolio is permitted and encouraged, with shifts of emphasis among equities, fixed income securities and cash equivalents at the discretion of each manager. No target asset allocations are set forth in the investment policy. For our non-U.S. pension plans, our investment objective is generally met through the use of pooled investment funds and insurance contracts.

The following table summarizes our pension plan assets measured at fair value on a recurring basis by fair value hierarchy level (See Note 17):

December 31, 2013				
(In thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Equity securities	\$ 307,486	\$ —	\$ 428	\$ 307,914
Fixed income securities	36,749	47,545	—	84,294
Pooled investment funds	—	22,430	—	22,430
Insurance contracts	—	—	13,512	13,512
Cash and cash equivalents	6,067	—	352	6,419
<b>Total</b>	<b>350,302</b>	<b>69,975</b>	<b>14,292</b>	<b>434,569</b>

December 31, 2012				
(In thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Equity securities	\$ 245,840	\$ —	\$ —	\$ 245,840
Fixed income securities	43,600	52,762	—	96,362
Pooled investment funds	—	22,030	—	22,030
Insurance contracts	—	—	12,254	12,254
Cash and cash equivalents	7,966	—	—	7,966
<b>Total</b>	<b>297,406</b>	<b>74,792</b>	<b>12,254</b>	<b>384,452</b>

Equity securities consist primarily of publicly traded U.S. and non-U.S. common stocks. Equities are valued at closing prices reported on the listing stock exchange.

Fixed income securities consist primarily of U.S. government and agency bonds and U.S. corporate bonds. Fixed income securities are valued at closing prices reported in active markets or based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, and may include adjustments, for certain risks that may not be observable, such as credit and liquidity risks.

Pooled investment funds consist of mutual and collective investment funds that invest primarily in publicly traded non-U.S. equity and fixed income securities. Pooled investment funds are valued at net asset values calculated by the fund manager based on fair value of the underlying securities. The underlying securities are generally valued at closing prices reported in active markets, quoted prices of similar securities, or discounted cash flows approach that maximizes observable inputs such as current value measurement at the reporting date.

Insurance contracts are valued in accordance with the terms of the applicable collective pension contract.

Cash equivalents consist primarily of money market and similar temporary investment funds. Cash equivalents are valued at closing prices reported in active markets.



The preceding methods may produce fair value measurements that are not indicative of net realizable value or reflective of future fair values. Although we believe the valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table presents a reconciliation of Level 3 assets:

(In thousands)	Insurance Contracts	Other
Balance January 1, 2012	\$ 11,562	\$ —
Net realized and unrealized gains included in earnings	1,933	—
Net purchases, issuances and settlements	(1,241)	—
Balance December 31, 2012	12,254	—
Net realized and unrealized gains included in earnings	1,074	780
Net purchases, issuances and settlements	173	—
Transfers into Level 3	11	—
Balance December 31, 2013	13,512	780

We expect to make net contributions of \$4.5 million to our pension plans in 2014.

For measurement purposes, 7.5% increase in the costs of covered health care benefits was assumed for the year 2013, decreasing by 0.5% for each successive year to 4.5% in 2019 and thereafter. A one-percentage-point change in assumed health care cost trend rates would have increased or decreased the other postretirement benefit obligations and current year plan expense by approximately \$1.5 million and \$1.7 million, respectively.

Expense for defined contribution pension plans was \$5.8 million in 2013, \$5.9 million in 2012 and \$5.7 million in 2011.

Estimated pension benefits to be paid under our defined benefit pension plans during the next five years are \$20.4 million in 2014, \$20.6 million in 2015, \$21.2 million in 2016, \$22.3 million in 2017, \$23.2 million in 2018, and are expected to aggregate \$133.3 million for the five years thereafter. Estimated other postretirement benefits to be paid during the next 5 years are \$1.7 million in 2014, \$1.8 million in 2015, \$1.9 million in 2016, \$2.0 million in 2017, \$2.1 million in 2018, and are expected to aggregate \$11 million for the five years thereafter.

#### Note 14—Other (Loss) Income, Net

(In thousands)	2013	2012	2011
Interest income	\$ 1,142	\$ 1,411	\$ 1,809
Land impairment loss	(1,557)	—	—
Gain on asset dispositions, net	436	8,396	3,328
Escrow settlement	—	4,790	—
Intangible asset impairment loss (See Note 10)	—	(4,272)	—
Other, net	(196)	551	321
Total	(175)	10,876	5,458

During the year ended December 31, 2013, impairment charges were taken on land not used in operations.

During the year ended December 31, 2012, we settled an escrow claim for indemnification with the sellers of General Monitors. Under the terms of the settlement, we received \$4.8 million in December 2012. The settlement proceeds have been recognized in other income because the settlement occurred after the business combination measurement period ended. The escrow agreement has now expired and the remaining escrow account balance was released to the sellers. In addition, we recognized gains on the sale of assets totaling \$8.4 million in 2012 compared to gains of \$3.3 million in 2011. These gains were primarily related to property sales in our Cranberry Woods office park.

## Note 15—Leases

We lease office space, manufacturing and warehouse facilities, automobiles and other equipment under operating lease arrangements. Rent expense was \$12.9 million in 2013, \$12.5 million in 2012 and \$12.2 million in 2011. Minimum rent commitments under noncancellable leases are \$11.9 million in 2014, \$9.8 million in 2015, \$4.2 million in 2016, \$2.4 million in 2017, \$1.8 million in 2018 and \$2.8 million thereafter.

## Note 16—Derivative Financial Instruments

As part of our currency exchange rate risk management strategy, we enter into certain derivative foreign currency forward contracts that do not meet the GAAP criteria for hedge accounting, but which have the impact of partially offsetting certain foreign currency exposures. We account for these forward contracts on a full mark-to-market basis and report the related gains or losses in currency exchange losses (gains) in the consolidated statement of income. At December 31, 2013, the notional amount of open forward contracts was \$54.4 million and the unrealized gain on these contracts was \$1.3 million. All open forward contracts will mature during the first quarter of 2014.

The following table presents the balance sheet location and fair value of assets and liabilities associated with derivative financial instruments.

(In thousands)	December 31,	
	2013	2012
Derivatives not designated as hedging instruments:		
Foreign exchange contracts - Prepaid expenses and other current assets	\$ 1,308	\$ 801

The following table presents the income statement location and impact of derivative financial instruments:

(In thousands)	Income Statement Location	(Gain) Recognized in Income	
		Year ended December 31,	
		2013	2012
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Currency exchange (gains), net	\$ (755)	\$ (1,139)

## Note 17—Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are:

Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3—Unobservable inputs for the asset or liability.

The valuation methodologies we used to measure financial assets and liabilities were limited to the pension plan assets described in Note 13 and the derivative financial instruments described in Note 16. See Note 13 for the fair value hierarchy classification of pension plan assets. We estimate the fair value of the derivative financial instruments, consisting of foreign currency forward contracts, based upon valuation models with inputs that generally can be verified by observable market conditions and do not involve significant management judgment. Accordingly, the fair values of the derivative financial instruments are classified within Level 2 of the fair value hierarchy.

With the exception of fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. At December 31, 2013, the reported carrying amount of our fixed rate long-term debt (including the current portion) was \$153.3 million and the fair value was \$160.3 million. The fair value of our long-term debt was determined using cash flow valuation models to estimate the market value of similar transactions as of December 31, 2013. The fair value of this debt was determined using Level 2 inputs as described above.

## Note 18—Contingencies

We categorize the product liability losses that we experience into two main categories; single incident and cumulative trauma. Single incident product liability claims are discrete incidents that are typically known to us when they occur and involve observable injuries and, therefore, more quantifiable damages. Therefore, we maintain a reserve for single incident product liability claims based on expected settlement costs for pending claims and an estimate of costs for unreported claims derived from experience, sales volumes and other relevant information. Our reserve for single incident product liability claims at December 31, 2013 and 2012 was \$4.0 million and \$4.4 million, respectively. Single incident product liability expense was negligible during year ended December 31, 2013. During the years ended December 31, 2012 and 2011, single incident product liability expense was \$0.7 million and \$1.5 million, respectively. We evaluate our single incident product liability exposures on an ongoing basis and make adjustments to the reserve as new information becomes available.

Cumulative trauma product liability claims involve exposures to harmful substances (*e.g.*, silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis or coal worker's pneumoconiosis. We are presently named as a defendant in 2,840 lawsuits in which plaintiffs allege to have contracted certain cumulative trauma diseases related to exposure to silica, asbestos, and/or coal dust. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by us. We are unable to estimate total damages sought in these lawsuits as they generally do not specify the injuries alleged or the amount of damages sought, and potentially involve multiple defendants.

Cumulative trauma product liability litigation is difficult to predict. In our experience, until late in a lawsuit, we cannot reasonably determine whether it is probable that any given cumulative trauma lawsuit will ultimately result in a liability. This uncertainty is caused by many factors, including the following: cumulative trauma complaints generally do not provide information sufficient to determine if a loss is probable; cumulative trauma litigation is inherently unpredictable and information is often insufficient to determine if a lawsuit will develop into an actively litigated case; and even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even once it is probable that such a lawsuit will result in a loss, it is difficult to reasonably estimate the amount of actual loss that will be incurred. These amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit.

Because of these factors, we cannot reliably determine our potential liability for such claims until late in the lawsuit. We, therefore, do not record cumulative trauma product liability losses when a lawsuit is filed, but rather, when we learn sufficient information to determine that it is probable that we will incur a loss and the amount of loss can be reasonably estimated. We record expenses for defense costs associated with open cumulative trauma product liability lawsuits as incurred.

We cannot estimate any amount or range of possible losses related to resolving pending and future cumulative trauma product liability lawsuits that we may face because of the factors described above. As new information about cumulative trauma product liability cases and future developments becomes available, we reassess our potential exposures.

A summary of cumulative trauma product liability lawsuit activity follows:

	2013	2012	2011
Open lawsuits, January 1	2,609	2,321	1,900
New lawsuits	489	750	479
Settled and dismissed lawsuits	(258)	(462)	(58)
Open lawsuits, December 31	2,840	2,609	2,321

Nearly half of the open lawsuits at December 31, 2013 have had a de minimus level of activity over the last 5 years. It is possible that these cases could become active again at any point due to changes in circumstances.

With some common contract exclusions, we maintain insurance for cumulative trauma product liability claims. We have purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs. In the normal course of business, we make payments to settle product liability claims and for related defense costs. We record receivables for the amounts that are covered by insurance. The available limits of these policies are many times our recorded insurance receivable balance.

Various factors could affect the timing and amount of recovery of our insurance receivables, including the outcome of negotiations with insurers, legal proceedings with respect to product liability insurance coverage and the extent to which insurers may become insolvent in the future.

Our insurance receivables at December 31, 2013 and 2012 totaled \$124.8 million and \$130.0 million, respectively, all of which is reported in other non-current assets.

A summary of insurance receivable balances and activity related to cumulative trauma product liability losses follows:

(In millions)	2013	2012	2011
Balance January 1	\$ 130.0	\$ 112.1	\$ 89.0
Additions	34.0	29.7	35.6
Collections and settlements	(39.2)	(11.8)	(12.5)
Balance December 31	124.8	130.0	112.1

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the years ended December 31, 2013, 2012, and 2011 were \$1.7 million, \$2.1 million and \$1.1 million, respectively. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. In cases where the payment stream covers multiple years, the present value of the payments is recorded as a note receivable (current and long term) in the balance sheet within prepaid expenses and other current assets and other noncurrent assets.

Our aggregate cumulative trauma product liability losses and administrative and defense costs for the three years ended December 31, 2013, totaled approximately \$104.2 million, substantially all of which was insured.

We believe that the increase in the insurance receivable balance that we have experienced since 2005 is primarily due to disagreements among our insurance carriers, and consequently with us, as to when their individual obligations to pay us are triggered and the amount of each insurer's obligation, as compared to other insurers. We believe that our insurers do not contest that they have issued policies to us or that these policies cover certain cumulative trauma product liability claims. We believe that our ability to successfully resolve our insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning our rights to coverage.

We regularly evaluate the collectability of the insurance receivables and record the amounts that we conclude are probable of collection. Our conclusions are based on our analysis of the terms of the underlying insurance policies, our experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of our insurance carriers to pay the claims, our understanding and interpretation of the relevant facts and applicable law and the advice of legal counsel, who believe that our insurers are required to provide coverage based on the terms of the policies.

Although the outcome of cumulative trauma product liability matters cannot be predicted with certainty and unfavorable resolutions could materially affect our results of operations on a quarter-to-quarter basis, based on information currently available and the amounts of insurance coverage available to us, we believe that the disposition of cumulative trauma product liability lawsuits that are pending against us will not have a materially adverse effect on our future results of operations, financial condition, or liquidity.

We are currently involved in insurance coverage litigations with a number of our insurance carriers.

In 2009, we sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to us and that it engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under the policy for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Motions for summary judgment on certain issues will be submitted to the court at the earliest possible date. A trial date has not yet been scheduled.

In 2010, North River sued us in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. We assert claims against North River for breaches of contract for failures to pay amounts owed to us. We also allege that North River engaged in bad-faith claims handling. We believe that North River's refusal to indemnify us under these policies for product liability losses and legal fees paid by us is wholly contrary to Pennsylvania law and we are vigorously pursuing the legal actions necessary to collect all due amounts. Summary judgment on certain issues is pending with the court. A trial date has not yet been scheduled.

In July 2010, we filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of our excess insurance carriers concerning the future rights and obligations of MSA and our excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of our rights under the insurance policies issued by our insurers. The case is currently in discovery. We have resolved our claims against certain of our insurance carriers on some of their policies through negotiated settlements. When settlement is reached, we dismiss the settling carrier from this action in Delaware.

During September 2013, we resolved coverage litigation with Associated International Insurance Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Associated International Insurance Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Allstate Insurance Company, through a negotiated settlement. As part of this settlement, both parties dismissed all claims against one another under the above-referenced coverage litigations in the Court of Common Pleas of Allegheny County, Pennsylvania and the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

During December 2013, we resolved coverage litigation with Columbia Casualty Company, through a negotiated settlement. As part of this settlement, we dismissed all claims against Columbia Casualty Company in the above-referenced coverage litigation in the Superior Court of the State of Delaware. The settlement did not have an impact on our operating results.

#### **Note 19—Assets Held for Sale and Discontinued Operations**

**Assets Held for Sale** - In September 2013, we entered into an agreement to sell the detector tube assets. The transaction closed in January, 2014. In addition to the asset sale agreement, we entered into transitional manufacturing and sales agreements with the buyer. Under the terms of the transitional agreements, we will continue to manufacture and sell detector tubes on behalf of the buyer until mid-2014. The gain on the transaction will be recognized in 2014, at the conclusion of the transitional manufacturing period and will not be material to net income or earnings per share.

Certain assets related to detector tube manufacturing are classified as held for sale at December 31, 2013. These assets are reported in the following balance sheet lines:

(In millions)	December 31, 2013
Inventory	\$ 1.4
Property, net of depreciation	0.2
Total assets	1.6

**Discontinued Operations** - The Company is actively negotiating the sale of substantially all of the assets and liabilities of its South African personal protective equipment distribution business and its Zambian operations. Management has deemed it probable that the sale of these assets and liabilities will close in 2014. The operations of this business qualify as a component of an entity under FASB ASC 205-20 "Presentation of Financial Statements - Discontinued Operations", and thus the operations have been reclassified as discontinued operations and prior periods have been reclassified to conform to this presentation. Management does not believe the assets associated with the South African distribution business or the Zambian operations are impaired at December 31, 2013.

Summarized financial information for discontinued operations is as follows:

(In thousands)	Year ended December 31,		
	2013	2012	2011
<b>Discontinued Operations</b>			
Net Sales	\$ 52,692	\$ 58,461	\$ 60,414
Other income (loss), net	40	115	(78)
Cost and expenses:			
Cost of products sold	41,181	45,277	48,544
Selling, general and administrative	7,389	8,376	8,588
Interest expense	—	17	1
Currency exchange losses, net	(325)	(41)	(540)
Income from discontinued operations before income taxes	4,487	4,947	3,743
Provision for income taxes	1,426	1,128	966
Income from discontinued operations, net of tax	3,061	3,819	2,777

(In thousands)	December 31,	
	2013	2012
<b>Discontinued Operations assets and liabilities</b>		
Cash and Cash Equivalents	\$ 2,980	\$ 2,465
Trade receivables, less allowance for doubtful accounts	7,452	8,870
Inventories	11,359	11,875
Net property	317	286
Other assets	1,326	2,252
<b>Total assets</b>	<b>23,434</b>	<b>25,748</b>
Accounts Payable	5,447	3,356
Accrued and other liabilities	930	1,685
<b>Total liabilities</b>	<b>6,377</b>	<b>5,041</b>
<b>Net assets</b>	<b>17,057</b>	<b>20,707</b>

The assets and liabilities reported above are included in the International Segment detail in Note 7.

The following summary provides financial information for discontinued operations related to net loss (income) related to noncontrolling interests:

(In thousands)	Year ended December 31,		
	2013	2012	2,011
<b>Net loss (income) attributable to noncontrolling interests</b>			
Loss (income) from continuing operations	\$ 870	\$ (385)	\$ 250
(Income) from discontinued operations	(672)	(739)	(443)
Net loss (income)	198	(1,124)	(193)

**Note 20—Quarterly Financial Information (Unaudited)**

(In thousands, except earnings per share)	2013				
	Quarters				Year
	1st	2nd	3rd	4th	
<b>Continuing Operations:</b>					
Net sales	\$ 269,886	\$ 285,859	\$ 264,884	\$ 291,429	\$ 1,112,058
Gross profit	121,704	129,665	115,426	130,050	496,845
Net income attributable to Mine Safety Appliances Company	18,627	23,315	18,987	24,929	85,858
Earnings per share*					
Basic	0.50	0.63	0.51	0.67	2.31
Diluted	0.49	0.62	0.51	0.66	2.28
<b>Discontinued Operations:</b>					
Net sales	13,353	13,836	13,361	12,142	52,692
Gross profit	3,078	3,215	2,790	2,428	11,511
Net income attributable to Mine Safety Appliances Company	659	734	514	482	2,389
Earnings per share*					
Basic	0.02	0.02	0.01	0.01	0.06
Diluted	0.02	0.02	0.01	0.01	0.06
<b>2012</b>					
(In thousands, except earnings per share)	2012				
	Quarters				Year
	1st	2nd	3rd	4th	
<b>Continuing Operations:</b>					
Net sales	\$ 278,255	\$ 279,367	\$ 270,480	\$ 282,341	\$ 1,110,443
Gross profit	123,377	119,538	118,391	128,242	489,548
Net income attributable to Mine Safety Appliances Company	23,090	27,078	18,173	19,216	87,557
Earnings per share*					
Basic	0.63	0.74	0.49	0.52	2.37
Diluted	0.62	0.73	0.48	0.51	2.34
<b>Discontinued Operations:</b>					
Net sales	15,230	15,371	16,087	11,773	58,461
Gross profit	3,614	3,588	3,863	2,119	13,184
Net income attributable to Mine Safety Appliances Company	832	917	1,060	271	3,080
Earnings per share*					
Basic	0.02	0.02	0.03	0.01	0.08
Diluted	0.02	0.02	0.03	0.01	0.08

\* Per share amounts are calculated independently for each period presented; therefore, the sum of the quarterly per share amounts may not equal the per share amounts for the year.

**Note 21—Subsequent Event**

Subsequent to December 31, 2013, our Safety Works joint venture was informed of a significant unfavorable change to the terms of a contract with its largest customer. The future impact of this change is not estimable at February 24, 2014.



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

None.

### **Item 9A. Controls and Procedures**

(a) *Evaluation of disclosure controls and procedures.* Based on their evaluation as of the end of the period covered by this Form 10-K, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to our management, including the principal executive officer and principle financial officer, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in internal control.* There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

See Item 8. Financial Statements and Supplementary Data—"Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm."

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

None.

## PART III

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

### Item 11. Executive Compensation

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

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

### Item 14. Principal Accountant Fees and Services

With respect to this Part III, incorporated by reference herein pursuant to Rule 12b—23 are (1) “Election of Directors,” (2) “Executive Compensation,” (3) “Other Information Concerning the Board of Directors,” (4) “Stock Ownership,” and (5) “Selection of Independent Registered Public Accounting Firm,” appearing in the Proxy Statement filed pursuant to Regulation 14A in connection with the registrant’s Annual Meeting of Shareholders to be held on May 6, 2014. The information appearing in such Proxy Statement under the caption “Audit Committee Report” and the other information appearing in such Proxy Statement and not specifically incorporated by reference herein is not incorporated herein. As to Item 10 above, also see the information reported in Part I of this Form 10-K, under the caption “Executive Officers of the Registrant,” which is incorporated herein by reference. As to Item 10 above, the Company has adopted a Code of Ethics applicable to its principal executive officer, principal financial officer and principal accounting officer and other Company officials. The text of the Code of Ethics is available on the Company’s website at [www.MSAsafety.com](http://www.MSAsafety.com). Any amendment to, or waiver of, a required provision of the Code of Ethics that applies to the Company’s principal executive, financial or accounting officer will also be posted on the Company’s Internet site at that address.

As to Item 12 above, the following table sets forth information as of December 31, 2013 concerning common stock issuable under the Company’s equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,695,380	\$ 34.55	1,936,071*
Equity compensation plans not approved by security holders	None	—	None
<b>Total</b>	<b>1,695,380</b>	<b>34.55</b>	<b>1,936,071</b>

\* Includes 1,752,369 shares available for issuance under the 2008 Management Equity Incentive Plan and 183,702 shares available for issuance under the 2008 Non-Employee Directors’ Equity Incentive Plan.

## PART IV

### Item 15. Exhibits and Financial Statement Schedules

(a) 1. Financial Statements and Report of Independent Registered Public Accounting Firm (see Part II, Item 8 of this Form 10-K).

The following information is filed as part of this Form 10-K.

	<u>Page</u>
Management's Report on Responsibility for Financial Reporting and Management's Report on Internal Control Over Financial Reporting	33
Report of Independent Registered Public Accounting Firm	34
Consolidated Statement of Income—three years ended December 31, 2013	35
Consolidated Statement of Comprehensive Income—three years ended December 31, 2013	36
Consolidated Balance Sheet—December 31, 2013 and 2012	37
Consolidated Statement of Cash Flows—three years ended December 31, 2013	38
Consolidated Statement of Changes in Retained Earnings and Accumulated Other Comprehensive Income—three years ended December 31, 2013	39
Notes to Consolidated Financial Statements	40

(a) 2. The following additional financial information for the three years ended December 31, 2013 is filed with the report and should be read in conjunction with the above financial statements:

#### Schedule II—Valuation and Qualifying Accounts

All other schedules are omitted because they are not applicable, not material or the required information is shown in the consolidated financial statements and consolidated notes to the financial statements listed above.

#### (a) 3. Exhibits

- 3(i) Restated Articles of Incorporation as amended and restated May 23, 1986 and as further amended through May 2007, filed as Exhibit 3.1 to Form 8-K on May 15, 2007, is incorporated herein by reference.
- 3(ii) By-laws of the registrant, as amended to February 17, 2012, filed as Exhibit 3.1 to Form 8-K on February 24, 2012, is incorporated herein by reference.
- 10(a)\* 2008 Management Equity Incentive Plan, as amended and restated through February 25, 2011, filed as Exhibit 10.1 to Form 10-Q on July 28, 2011, is incorporated herein by reference.
- 10(b)\* Retirement Plan for Directors, as amended effective April 1, 2001, filed as Exhibit 10(a) to Form 10-Q on May 10, 2006, is incorporated herein by reference.
- 10(c)\* Supplemental Pension Plan as of May 5, 1998, filed as Exhibit 10(d) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
- 10(d)\* Supplemental Pension Plan as amended and restated effective January 1, 2005, filed as Exhibit 10.3 to Form 10-Q on November 27, 2013, is incorporated herein by reference.
- 10(e)\* 2008 Non-Employee Directors' Equity Incentive Plan, as amended through November 27, 2013, filed herewith.
- 10(f)\* Executive Insurance Program as Amended and Restated as of January 1, 2006, filed as Exhibit 10(a) to Form 10-Q on August 7, 2007, is incorporated herein by reference.
- 10(g)\* Annual Incentive Bonus Plan as of May 5, 1998, filed as Exhibit 10(g) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
- 10(h)\* Supplemental Executive Retirement Plan, effective January 1, 2008, filed as Exhibit 10.2 to Form 10-Q on April 30, 2009, is incorporated herein by reference.

- 10(i)\* Form of Change-in-Control Severance Agreement between the registrant and its executive officers, filed as Exhibit 10.1 to Form 10-Q on April 30, 2009, is incorporated herein by reference.
- 10(j) Trust Agreement, effective June 1, 1996, as amended through May 15, 2010, between the registrant and PNC Bank, N.A. re the Mine Safety Appliances Company Stock Compensation Trust filed as Exhibit 10.1 to Form 10-Q on July 28, 2010, is incorporated herein by reference.
- 10(k)\* 2003 Supplemental Savings Plan, effective January 1, 2003, filed herewith.
- 10(l)\* 2005 Supplemental Savings Plan, effective January 1, 2005, filed as Exhibit 10.4 to Form 10-Q on April 30, 2009, is incorporated herein by reference.
- 10(m)\* CEO Annual Incentive Award Plan filed as Appendix A to the registrant's definitive proxy statement dated March 29, 2005, is incorporated herein by reference.
- 10(n) Credit Agreement dated October 13, 2010 by and among Mine Safety Appliances Company, each of the guarantors party thereto, each of the lenders party thereto, PNC Bank, National Association, as administrative agent for the lenders, and J.P. Morgan Chase Bank, N.A., as syndication agent for the Lenders, filed as Exhibit 10.1 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(o) Guaranty and Suretyship Agreement dated October 13, 2010 from General Monitors Transnational, LLC in favor of PNC Bank, National Association, and the other lenders party to the Credit Agreement, filed as Exhibit 10.2 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(p) Guaranty and Suretyship Agreement dated October 13, 2010 from Fifty Acquisition Corp. in favor of PNC Bank, National Association, and the other lenders party to the Credit Agreement, filed as Exhibit 10.3 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(q) Note Purchase Agreement and Private Shelf Agreement dated October 13, 2010 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed as Exhibit 10.4 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(r) Guarantee Agreement dated as of October 13, 2010 made by General Monitors Transnational, LLC in favor of the Note Purchasers, filed as Exhibit 10.5 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(s) Guarantee Agreement dated as of October 13, 2010 made by Fifty Acquisition Corp. in favor of the Note Purchasers, filed as Exhibit 10.6 to Form 8-K on October 19, 2010, is incorporated herein by reference.
- 10(t) First Amendment to Credit Agreement dated November 16, 2011 by and among Mine Safety Appliances Company, each of the guarantors party thereto, each of the lenders party thereto, PNC Bank, National Association, as administrative agent for the lenders, and J. P. Morgan Chase Bank N.A., as syndication agent for the Lenders, filed as Exhibit 10.1 to Form 8-K on November 21, 2011, is incorporated herein by reference.
- 10(u) Guaranty and Suretyship Agreement effective November 18, 2011 from MSA International, Inc. in favor of PNC Bank, National Association, and other lenders party to the Credit Agreement, filed as Exhibit 10.2 to Form 8-K on November 21, 2011, is incorporated herein by reference.
- 10(v) Amendment No. 1 to 2010 Note Purchase Agreement and Private Shelf Agreement dated April 5, 2012 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed herewith.
- 10(w) Guarantee Agreement dated April 5, 2012 from MSA International, Inc. in favor of the note holders under the 2010 Note Purchase Agreement and Private Shelf Agreement, filed herewith.
- 10(x) Amendment No. 3 and Waiver to 2010 Note Purchase Agreement and Private Shelf Agreement dated February 12, 2014 by and among Mine Safety Appliances Company, Prudential Investment Management, Inc. and the Series A Purchasers thereto, filed herewith.
- 10(y) Note Purchase Agreement dated December 20, 2006, by and among Mine Safety Appliances Company and each of the holders of the Notes, filed herewith.
- 10(z) Amendment No. 1 and Waiver to 2006 Note Purchase Agreement dated February 12, 2014 by and among Mine Safety Appliances Company and each of the holders of the Notes, filed herewith.
- 10(aa) Guarantee Agreement dated February 12, 2014 from General Monitors Transnational, LLC in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.

- 10(bb) Guarantee Agreement dated February 12, 2014 from General Monitors, Inc. in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.
- 10(cc) Guarantee Agreement dated February 12, 2014 from MSA International, Inc. in favor of the note holders under the 2006 Note Purchase Agreement, filed herewith.
- 21 Affiliates of the registrant is filed herewith.
- 23 Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm is filed herewith.
- 31.1 Certification of W. M. Lambert pursuant to Rule 13a-14(a) is filed herewith.
- 31.2 Certification of Stacy P. McMahan pursuant to Rule 13a-14(a) is filed herewith.
- 32 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C.(S)1350 is filed herewith.
- 101.INS XBRL Instance Document
- 101.SCH XBRL Taxonomy Extension Schema Document
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

\* *The exhibits marked by an asterisk are management contracts or compensatory plans or arrangements.*

The registrant agrees to furnish to the Commission upon request copies of all instruments with respect to long-term debt referred to in Note 11 of the Notes to Consolidated Financial Statements filed as part of Item 8 of this annual report which have not been previously filed or are not filed herewith.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### MINE SAFETY APPLIANCES COMPANY

February 24, 2014 (Date)	By	/s/ WILLIAM M. LAMBERT <b>William M. Lambert President and Chief Executive Officer</b>
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Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOHN T. RYAN III <b>John T. Ryan III</b>	Director, Chairman of the Board	February 24, 2014
/s/ WILLIAM M. LAMBERT <b>William M. Lambert</b>	Director; President and Chief Executive Officer	February 24, 2014
/s/ STACY P. MCMAHAN <b>Stacy P. McMahan</b>	Senior Vice President Finance; Principal Financial and Accounting Officer	February 24, 2014
/s/ ROBERT A. BRUGGEWORTH <b>Robert A. Bruggeworth</b>	Director	February 24, 2014
/s/ ALVARO GARCIA-TUNON <b>Alvaro Garcia-Tunon</b>	Director	February 24, 2014
/s/ THOMAS B. HOTOPP <b>Thomas B. Hotopp</b>	Director	February 24, 2014
/s/ DIANE M. PEARSE <b>Diane M. Pearse</b>	Director	February 24, 2014
/s/ REBECCA B. ROBERTS <b>Rebecca B. Roberts</b>	Director	February 24, 2014
/s/ L. EDWARD SHAW, JR. <b>L. Edward Shaw, Jr.</b>	Director	February 24, 2014
/s/ THOMAS H. WITMER <b>Thomas H. Witmer</b>	Director	February 24, 2014

**MINE SAFETY APPLIANCES COMPANY AND AFFILIATES**  
**VALUATION AND QUALIFYING ACCOUNTS**  
**THREE YEARS ENDED DECEMBER 31, 2013**

	<u>2013</u>	<u>2012</u>	<u>2011</u>
	<i>(In thousands)</i>		
<b>Allowance for doubtful accounts:</b>			
Balance at beginning of year	\$ 7,402	\$ 7,043	\$ 9,391
<b>Additions—</b>			
Charged to costs and expenses	763	1,289	1,148
<b>Deductions—</b>			
Deductions from reserves, net (1)(2)	859	930	3,496
Balance at end of year	<u>7,306</u>	<u>7,402</u>	<u>7,043</u>
<b>Income tax valuation allowance:</b>			
Balance at beginning of year	\$ 3,961	\$ 2,777	\$ 4,323
<b>Additions—</b>			
Charged to costs and expenses (3)	977	1,184	—
<b>Deductions—</b>			
Deductions from reserves (3)	—	—	1,546
Balance at end of year	<u>4,938</u>	<u>3,961</u>	<u>2,777</u>

(1) Bad debts written off, net of recoveries.

(2) Activity for 2013, 2012 and 2011 includes currency translation gains (losses) of \$(121), \$428 and \$(387), respectively.

(3) Activity for 2013, 2012 and 2011 includes currency translation gains (losses) of \$242, \$97 and \$(123), respectively.

**MINE SAFETY APPLIANCES COMPANY**  
**SUBSIDIARIES OF THE REGISTRANT**  
**DECEMBER 31, 2013**

<b>Name</b>	<b>State or Other Jurisdiction of Incorporation</b>
General Monitors, Inc.	California
General Monitors Transnational, LLC.	Nevada
Compañía MSA de Argentina S.A.	Argentina
MSA (Aust.) Pty. Limited	Australia
MSA-Auer Sicherheitstechnik Vertriebs GmbH	Austria
MSA Belgium NV	Belgium
MSA do Brasil Ltda.	Brazil
MSA Canada	Canada
MSA de Chile Ltda.	Chile
MSA (China) Safety Equipment Co., Ltd.	China
MSA (Suzhou) Safety Equipment Research and Development Co., Ltd.	China
MSA International, Inc.	Delaware
MSA Gallet	France
MSA Auer	Germany
MSA Europe	Germany
MSA-Auer Hungaria Safety Technology	Hungary
General Monitors Ireland Limited	Ireland
MSA Italiana S.p.A.	Italy
MSA Japan Ltd.	Japan
MSA Safety Malaysia Snd Bhd	Malaysia
MSA de Mexico, S.A. de C.V.	Mexico
MSA Nederland, B.V.	Netherlands
MSA del Peru S.A.C.	Peru
MSA-Auer Polska Sp. z o.o.	Poland
MSA (Britain) Limited	Scotland
MSA S.E. Asia Pte. Ltd.	Singapore
Samsac Holding (Pty.) Limited	South Africa
MSA Española S.A.	Spain
MSA Nordic	Sweden
Sordin AB	Sweden

The above-mentioned subsidiary companies are included in the consolidated financial statements of the registrant filed as part of this annual report. The names of certain other subsidiaries, which considered in the aggregate as a single affiliate would not constitute a significant subsidiary, have been omitted.



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 33-43696, 333-51983, 333-121196, 333-157681, 333-157682, 333-157683 and 333-174601) of Mine Safety Appliances Company of our report dated February 24, 2014 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania  
February 24, 2014

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)

I, William M. Lambert, certify that:

1. I have reviewed this annual report on Form 10-K of Mine Safety Appliances Company;

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

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

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

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

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

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

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

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

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

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

February 24, 2014

/s/ WILLIAM M. LAMBERT  
William M. Lambert  
Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a)

I, Stacy P. McMahan, certify that:

1. I have reviewed this annual report on Form 10-K of Mine Safety Appliances Company;

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

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

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

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

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

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

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

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

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

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

February 24, 2014

/s/ Stacy P. McMahan  
Stacy P. McMahan  
Chief Financial Officer

**CERTIFICATION**

Pursuant to 18 U.S.C. (S) 1350, the undersigned officers of Mine Safety Appliances Company (the “Company”), hereby certify, to the best of their knowledge, that the Company’s Annual Report on Form 10-K for the year ended December 31, 2013 (the “Report”) fully complies with the requirements of Section 13 (a) or 15 (d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 24, 2014

/s/ WILLIAM M. LAMBERT  
**William M. Lambert**  
**Chief Executive Officer**

/s/ STACY P. McMAHAN  
**Stacy P. McMahan**  
**Chief Financial Officer**

## PRINCIPAL OPERATIONS

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### North America

**Corporate Headquarters** – Cranberry Township, Pa.

**U.S. Manufacturing** – Cranberry Township, Pa.;  
Jacksonville, N.C.; Murrysville, Pa.

**Research** – John T. Ryan Memorial Laboratory,  
Cranberry Township, Pa.

**MSA Canada Inc.**, Toronto; Edmonton

**MSA de Mexico, S.A. de C.V.**, Querétaro

**Safety Works, LLC**, Wexford, Pa.

### Europe

**Mine Safety Romania S.R.L.**, Bucharest, Romania

**Mine Safety Sp. z o.o.**, Raszyn, Poland

**MSA Auer GmbH**, Berlin, Germany

**MSA Auer Schweiz GmbH**, Oberglatt, Switzerland

**MSA Auer Vertriebs GmbH**, Absdorf, Austria

**MSA Belgium, N.V.**, Lier

**MSA (Britain) Limited**, Glasgow

**MSA Safety Czech, s.r.o.**, Ostrava

**MSA Española S.A.U.**, Barcelona

**MSA Gallet**, Chatillon sur Chalaronne, France; Mohammedia, Morocco

**MSA Italiana S.p.A.**, Milan

**MSA Nederland B.V.**, Hoorn

**MSA Nordic AB**, Malmo, Sweden

**MSA Safety, LLC**, Moscow, Russia

**MSA Safety Hungary Ltd.**, Budapest

**MSA Sordin AB**, Varnamo, Sweden

### International

**Compañía MSA de Argentina S.A.**, Buenos Aires

**MSA (Aust.) Pty. Ltd.**, Sydney

**MSA (Australia), Auckland**, New Zealand (Branch Office)

**MSA do Brasil Ltda.**, São Paulo

**MSA de Chile Ltda.**, Santiago

**MSA de Colombia S.A.S.**, Bogota

**MSA (China) Safety Equipment Co., Ltd.**, Suzhou

**MSA Egypt LLC**, Cairo

**MSA Hong Kong Ltd.**, Hong Kong

**MSA (India) Limited**, Calcutta

**MSA Japan Ltd.**, Tokyo

**MSA Safety Malaysia Sdn. Bhd.**, Kuala Lumpur

**MSA Middle East**, Abu Dhabi, U.A.E. (Office)

**MSA Middle East FZE**, Dubai, U.A.E.

**MSA del Peru S.A.C.**, Lima

**MSA S.E. Asia Pte. Ltd.**, Singapore

**MSA Select Ltd.**, Kitwe, Zambia

**MSA (Suzhou) Safety Equipment Research and  
Development Co., Ltd.**, Suzhou, China

**MSA (Thailand) Limited**, Bangkok

**PT MSA Indonesia Ltd.**, Jakarta

**Samsac Africa (Proprietary) Ltd.**, Johannesburg

**Select Personal Protective Equipment (PTY) Ltd.**, Johannesburg

### General Monitors

**Electrasem, LLC**, Corona, Calif.

**Gassonic A/S**, Ballerup, Denmark

**General Monitors Inc.**, Lake Forest, Calif.

**General Monitors Ireland Ltd.**, Galway, Ireland

**General Monitors Pacifica, Pte. Ltd.**, Singapore

**General Monitors Systems, LLC**, Lake Forest, Calif.

**General Monitors Systems Asia, Pte., Ltd.**, Singapore

## DIRECTORS AND CORPORATE OFFICERS

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### Board of Directors

**John T. Ryan III** (3) (4) (5) (6)

Chairman of the Board; Retired (2008); formerly Chief Executive Officer of the Company

**Robert A. Bruggeworth** (1) (2)

President and Chief Executive Officer, RF Micro Devices, Inc. (high-performance RF components and compound semiconductors manufacturer); Director, RF Micro Devices, Inc.

**Alvaro Garcia-Tunon** (1) (4) (6)

Retired (2012); formerly Executive Vice President and Chief Financial Officer, Wabtec Corporation (supplier of technology-based products and services for rail, transit and other global industries); Director and Chairman of the Audit Committee of Matthews International Corp.

**Thomas B. Hotopp** (2) (5)

Retired (2003); formerly President of the Company

**William M. Lambert** (3)

President and Chief Executive Officer of the Company

**Diane M. Pearse** (1) (4) (6)

Senior Vice President, Operations and Merchandising, Redbox Automated Retail, LLC (a fully automated DVD rental company)

**Rebecca B. Roberts** (2)

Retired (2011); formerly President of Chevron Pipe Line Company; Director, Black Hills Corporation and Enbridge Energy Partners L.P.

**L. Edward Shaw, Jr.** (4) (5) (6)

Retired (2010); formerly Senior Managing Director, Breedem Capital Management LLC (investment management and multidisciplinary professional services firm); Director and Chairman of the Compensation Committee of HealthSouth Corporation

**Thomas H. Witmer** (1) (2) (3) (5)

Lead Director; Retired (1998); formerly President and Chief Executive Officer, Medrad, Inc. (manufacturer of medical devices)

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Executive Committee

(4) Member of the Finance Committee

(5) Member of the Nominating and Corporate Governance Committee

(6) Member of the Law Committee

### Officers

**William M. Lambert**

President and Chief Executive Officer

**Stacy P. McMahan**

Senior Vice President and Chief Financial Officer

**Joseph A. Bigler**

Vice President and Chief Customer Officer

**Steven C. Blanco**

Vice President, Global Operational Excellence

**Kerry M. Bove**

Vice President; President, MSA Asia, Australia, Africa, and Latin America

**Ronald N. Herring, Jr.**

Vice President; President, MSA Europe, Russia, Middle East, and India

**Douglas K. McClaine**

Vice President; Secretary and General Counsel

**Dr. Thomas Muschter**

Vice President, Global Product Leadership

**Paul R. Uhler**

Vice President, Global Human Resources

**Nishan J. Vartanian**

Vice President; President, MSA North America

**Markus H. Weber**

Vice President; Chief Information Officer

## ORGANIZATION

MSA made a number of key organizational changes in 2013 to further enhance the company's position as the world's leading provider of advanced safety equipment and to ensure continuity of strong and experienced leadership going forward.



**Stacy P. McMahan**



**Dennis L. Zeitler**



**Joseph A. Bigler**



**Nishan J. Vartanian**



**Rebecca B. Roberts**

**Stacy P. McMahan** was elected Senior Vice President and Chief Financial Officer, completing a planned management succession process that began in 2012. Ms. McMahan came to MSA in 2012 with more than 23 years of finance leadership experience, most recently serving as Vice President of Finance, Customer Channels Group, for Thermo Fisher Scientific, Inc. Prior to that she spent six years with Johnson & Johnson as Vice President of Finance, and 16 years with Eli Lilly, where she served in a treasury-oriented position in Brussels, Belgium; as Finance Manager in Basingstoke Hampshire, UK; and in a CFO role in Sydney, Australia.

As Chief Financial Officer, Stacy succeeds **Dennis L. Zeitler**, who retired from the company at the end of 2013. With nearly four decades of service to the company, Dennis helped to expertly guide the financial health of MSA with an unwavering commitment to honesty, transparency and integrity. In addition to his financial management expertise, Dennis provided the vision and served as the "architect" for the world class office park known today as Cranberry Woods, home to the company's corporate headquarters and John T. Ryan Memorial Lab. His straightforward style, professionalism and dedication to MSA's mission have, without question, served MSA very well, and we are grateful for his many contributions.

With a focus on creating a truly customer-centric culture across the MSA organization, in 2013 **Joseph A. Bigler** was named Vice President and Chief Customer Officer, a newly created position for the company. In this role Mr. Bigler is responsible for developing and implementing a global customer experience framework that identifies and improves a broad range of critical customer touch points. A 41-year veteran of MSA, Mr. Bigler most recently served as President of the company's North American operations.

Ensuring continuity of experienced leadership for the company's North American business segment, **Nishan J. Vartanian** was elected Vice President and President of MSA North America. A 28-year veteran of the company, Mr. Vartanian played the lead role in guiding the integration of MSA's acquisition of California-based General Monitors in 2010. In 2011, he was appointed to MSA's Executive Leadership Team and, in 2012, was elected Vice President of MSA's Fixed Gas and Flame Detection business.

In anticipation of future retirements among the Company's Board of Directors, in 2013 MSA elected **Rebecca B. Roberts** to its Board of Directors. Ms. Roberts retired in 2011 as President of Chevron Pipe Line Company, a wholly owned subsidiary of Chevron Corp, where she was responsible for a network of more than 10,000 miles of pipelines transporting crude oil, petroleum products, chemicals, natural gas and natural gas liquids in North America. In addition to her MSA responsibilities, Ms. Roberts currently serves as a director for Black Hills Corporation and Enbridge Energy Partners L.P.

## SECTION 302 CERTIFICATIONS AND NYSE CEO CERTIFICATION

In June 2013, the Company's Chief Executive Officer submitted to the New York Stock Exchange the annual certification as to compliance with the Exchange's Corporate Governance Listing Standards required by Section 303A.12(a) of the Exchange's Listed Company Manual. The certification was unqualified.

The Company's reports filed with the Securities and Exchange Commission during the past year, including the Annual Report on Form 10-K for the year ended December 31, 2013, have contained the certifications of the Company's Chief Executive Officer and Chief Financial Officer regarding the quality of the Company's public disclosure required by Section 302 of the Sarbanes-Oxley Act.

## SHAREHOLDERS' INQUIRIES

Additional copies of the company's 2013 Annual Report, including Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by shareholders after April 2, 2014. Printed and electronic versions are available. Requests should be directed to the Chief Financial Officer, who can be reached at one of the following:

Phone: 724-741-8270  
Fax: 866-538-7488  
Internet: [www.MSAsafety.com](http://www.MSAsafety.com)  
U.S. Mail: MSA  
Chief Financial Officer  
1000 Cranberry Woods Drive  
Cranberry Township, PA 16066



1000 Cranberry Woods Drive  
Cranberry Township, PA 16066

724-776-8600

[www.MSAafety.com](http://www.MSAafety.com)