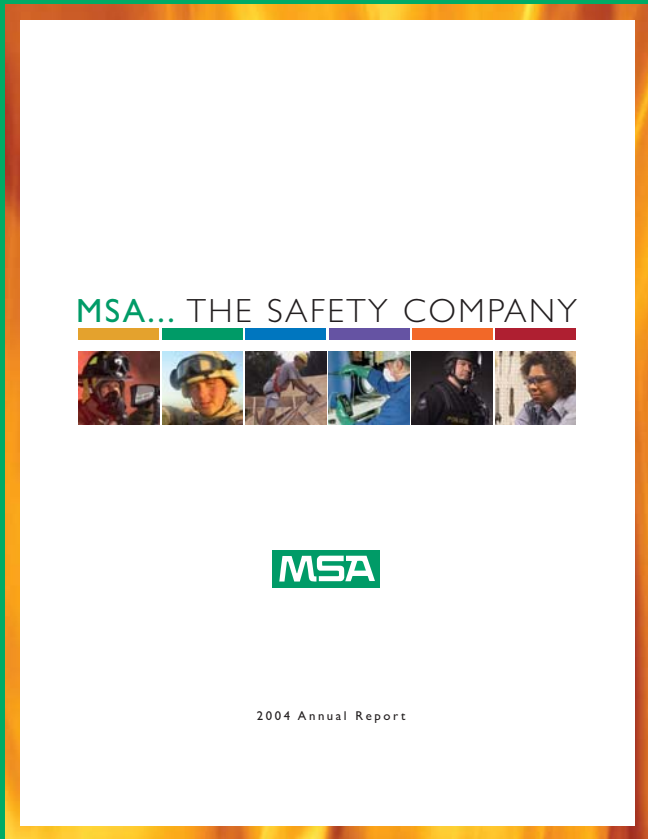


# MSA... THE SAFETY COMPANY



2004 Annual Report



## OUR MISSION

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

## OUR VISION

**T**o be the leading innovator and provider of quality safety and instrument products and services that protect and improve people's health, safety and the environment. To provide satisfaction of customer needs through the efforts of motivated, involved, highly trained employees dedicated to continuous improvement in quality, service, cost, value, technology and delivery.

## ABOUT THE COVER

In 2004, MSA celebrated its 90th anniversary. This milestone marked 90 years of focusing on just one mission: protecting the health and safety of people in all kinds of settings, who face all kinds of hazards.

Today, MSA is steadfastly carrying on this mission, fueled by countless innovations, hundreds of patents and thousands of products. With this singular focus, MSA is indeed... The Safety Company.

- For millions of firefighters throughout the world, MSA is The Safety Company they depend on when smoke and flames threaten lives.
- For the military, we're The Safety Company that helps protect soldiers on the front lines.
- For construction workers, we're The Safety Company that provides protection from falls, and from objects falling from above.
- For oil, gas and petrochemical workers, MSA is The Safety Company that fuels a less hazardous work environment.
- For police officers and government agents, we're The Safety Company that helps shield them from danger.
- At home, MSA is The Safety Company that helps keep Do-It-Yourselfers from doing harm to themselves.
- And for investors, MSA is The Safety Company because we are the only broad-line, publicly-traded safety company in the U.S.

Being The Safety Company means many things, but to all of us at MSA, it very simply summarizes our mission, our legacy and our future. Accordingly, it serves as our theme for this year's annual report.

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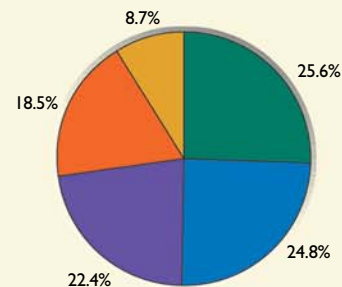
# THE BUSINESS OF MSA

**M**SA is in the business of developing, manufacturing and selling innovative products to enhance the safety and health of workers 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 it to develop an understanding of the safety equipment and instrumentation requirements in a diverse range of industries such as the fire service, homeland security, construction, public utilities, mining, chemical, petroleum, transportation, the military and hazardous materials remediation. MSA's reach has expanded into the home in an effort to better understand and protect the "do-it-yourself" consumer. MSA's principal products, each designed to serve the needs of target markets, include respiratory protective equipment, thermal imaging cameras, portable and permanent gas detection instruments, as well as head, eye, face, hearing and fall protection products.

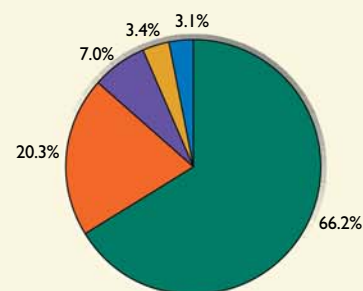
MSA was founded in 1914 by John T. Ryan and George H. Deike, two mining engineers who had firsthand knowledge of the terrible human loss that was occurring in underground coal mines. Their knowledge of the mining industry provided the foundation for the development of safety equipment to better protect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

MSA is headquartered in Pittsburgh, Pennsylvania, with operations employing 4,600 associates throughout the world. A publicly held company, MSA's stock is traded on the New York Stock Exchange under the symbol MSA.



**Annual Sales by Product Group**

- Air-Supplied Respirators
- Head Protection (Helmet, Eye, Face & Hearing)
- Instruments
- Air-Purifying Respirators
- Other



**Annual Sales by Region**

- North America
- Europe
- Asia & Pacific Rim
- Africa
- South America

## FINANCIAL HIGHLIGHTS

### For The Year (thousands, except per share)

	2002	2003	2004
Net sales	\$564,426	\$696,473	\$852,509
Net income from continuing operations	31,213	48,924	71,047
Discontinued operations – after tax	3,864	16,343	—
Net income	35,077	65,267	71,047
Basic earnings per common share:			
Continuing operations	.85	1.33	1.91
Discontinued operations	.11	.45	—
Net income	.96	1.78	1.91

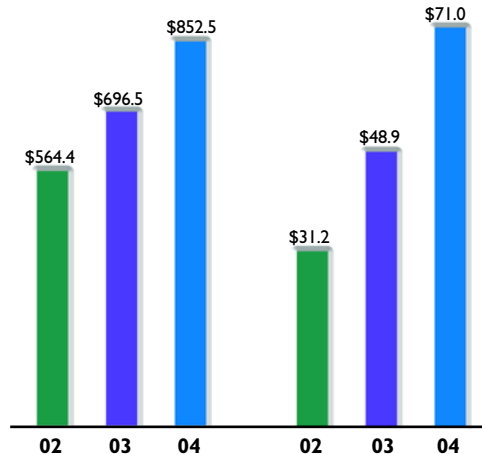
### At Year End (thousands)

	2002	2003	2004
Total assets	\$579,765	\$643,885	\$734,110
Working capital	138,182	207,216	270,593
Common shareholders' equity	288,009	306,867	376,679

### Common Stock (thousands)

	2002	2003	2004
Shares outstanding	36,621	36,928	37,341
Market capitalization	\$393,677	\$978,715	\$1,893,208

## SALES (in millions) NET INCOME (in millions) (Continuing Operations)



# TO OUR SHAREHOLDERS...

We have all had those great games, those great seasons, where everything comes together. Most of us, especially sports fans, can remember the years and remember the scores when our teams “put it all together” and we could celebrate. I certainly do and those numbers can come to my mind very quickly. 2004, MSA’s 90th year, was one of those years. For the year as a whole, almost all of our goals were accomplished. Yet, in the words of a late, well-remembered colleague of ours, “All of this didn’t just fall off the turnip truck.” MSA has had a focus on our mission, on the needs of our customers and on what we had to do to fulfill them. The efforts made toward these objectives over time particularly came through in results in 2004, and we were able to surpass our goals and vindicate our strategy and our focus that we pursued even through difficult times.



*John T. Ryan III (front, center) shown with members of MSA’s nine Global Steering Teams, including leaders, sponsors and members of the Global Alignment Council, at their first annual joint meeting held in Cranberry Township, Pa.*

A major element of our initiatives is our global teams. Since the late 1990s they have played a lead role in our new product development. These teams are composed of members from various company locations and functional areas, all focused on MSA objectives. The earliest and most extensive ones are the Global Strategy Teams that lead our efforts in six of our major product areas. More recently, teams have been set up in the areas of Global Manufacturing, Evolving Technologies and aligning our product development efforts toward corporate objectives. In the picture with me this year are the leaders of these teams, taken during a recent meeting of all of our global teams. I quipped that having all of these strategy teams together was the most impressive gathering of people working towards the improvement of MSA products ever...except perhaps when our two founders sat with Thomas Edison in his office in 1914 convincing him to design a battery for the flameless electric miners’ cap lamp—the greatest innovation in the field of mining safety. These teams have played a major role in the success of MSA in recent years. In 2004 the percentage of our commercial sales in North America derived from products introduced over the last three years was 39%. If we included products on military contracts, the value is 47%.

The products introduced in 2003 and 2004 have had good sales performance against their goals, and we see more MSA innovation coming through the pipeline.

A distinctive product success for the company in 2004 was in gas masks designed for the Homeland Security market. Our Millennium® Chemical-Biological Mask received the first gas mask approval under the U.S. NIOSH Chemical Biological Radiological and Nuclear (CBRN) standard and significantly enhanced MSA’s market leadership position. The Ultra Elite® Gas Mask also received CBRN approval, and MSA now has two of the only four masks so approved and currently active in the market.

In 2003, our North American Sales Organization developed strategic initiatives as to where in North America we should place our sales energy and how much and in what areas should we increase our efforts to better fulfill the needs of our actual and potential users. This involved the further improvement and development of MSA’s excellent relationships with distribution partners and end users of our products and enhanced our position of having the best and largest dedicated global sales force in the safety products industry. Actions were taken on these initiatives in late 2003 and at the beginning of 2004, and the results in 2004 were exceptionally good and played a substantial role in the fine performance of the company. When a part of the company such as this, which represents 40% of our sales, generates orders more than 10% over our annual goal, you know you are going to have a successful year.

The Advanced Combat Helmet for the U.S. Army was MSA’s Product of the Year in 2004. It had its origin in several years of development by CGF Gallet, which MSA purchased in 2002. To this effort was added the know-how and skill of MSA materials, engineering and manufacturing people to develop a helmet with the optimal performance and ability to fully meet the requirements of the U.S. military. After performing well in the battlefields of Afghanistan, the product became the U.S. Army’s standard unit of issue, and MSA received major contracts to fulfill the needs of our soldiers in the current conflicts. To ramp up production of a new product to high levels, while at the same time meeting yield and cost objectives, is an exceptionally difficult task. MSA factories in Newport, Vermont and Murrysville, Pennsylvania were the main areas of operations for the Advanced Combat Helmet, and MSA factories elsewhere in the United States supported them. I am pleased with the superb work our team did on this initiative, which enabled us to reach the military’s requirements schedule by mid-year and stay ahead through the end of 2004. MSA’s initiatives in Lean Sigma projects freed up space to produce the helmet in Murrysville and have continued to assist our productivity.

Our MSA Safety Works® consumer sales initiative was successful in gaining a major position at True Value Hardware to go with our existing business at The Home Depot and other major retail customers.

MSA has had a major effort in Central and Eastern Europe for some time and in 2004 reaped excellent benefits in orders

and shipments in one of the higher growth areas of the world. We are pleased to welcome the people of MSA Sordin in Sweden who have developed a promising business in communications and active electronic hearing protection. Despite the difficulties in the German and European economies, MSA Auer made a fine strong closing to the year to achieve its goals, joining MSA Gallet, MSA Española, MSA Auer Austria, and MSA Nordic in fine performance.

We frequently note that the greatest percentage opportunity for MSA sales growth is in MSA International—that is, the areas outside of North America, Europe and Central Asia. In 2004, we added sales operations in Indonesia and Hong Kong to go with MSA Malaysia set up in late 2003. A major transformation was made to MSA operations in China which is in a very promising economy, and I was pleased by our fine sales growth in this region during the second half of the year, once important initiatives were in place. Major demands in China and the world economy for minerals and agriculture produced in South America and Australia have helped the latter economies, and I commend MSA operations in these areas for another particularly successful year. I say, “Obrigado e ate logo,” (thank you and good-bye/keep in touch) to our long-time colleague, Andre Magalhães, General Manager of MSA do Brasil, who retired recently after building our business to an excellent and enduring leadership position. MSA International completed a major strategic initiative during the year and is taking action on its plans.

The company will bid farewell to its oldest product, the MSA Auer gas mantle for street lights, after 113 years, as the line was sold to a company in India. Not often does a product continue essentially unchanged for over a century.

I am pleased by the way we have made progress on a global basis. In comparing earnings in our three geographic regions—North America, Europe and International—over the last two years, 2002-2004, each region has increased its earnings substantially, even after correction for the impact of currency exchange rates and acquisitions. MSA North America’s success was led by substantial sales growth of greater than 20% compounded and by improved production productivity which covered increased efforts in new product development and sales coverage. MSA Europe, operating in a difficult local economic environment, could reach only modest sales growth after adjustment for currency values and acquisitions, but made major gains in overall productivity and cost control while increasing sales outside of their traditional Western European markets. MSA International expanded market coverage, grew sales in double-digit annual percentages and gained cost improvements in a number of areas.

In 2004, the company received a number of awards. Particularly noteworthy was the designation of our Chief Information Officer, Steve Plut, as one of the business world’s Premier 100 Information Technology Leaders from *Computerworld* magazine, based on the performance of Steve and our IT team. The installation of an enterprise computer system in 1998 was a difficult and demanding experience for the business, but the 2004 upgrade of the system went smoothly and without a hitch.

MSA’s success as The Safety Company has come from our focus on our one mission: being the global leader in sophisticated safety equipment—that is, those products that users call upon to protect themselves and their health when “life is on the line.” We take the tough jobs and tend to do best when the tasks are the most demanding. We believe we are the leading producer in the world in self-contained breathing apparatus, gas masks, hazardous gas-detection equipment, protective helmets and fire helmets; and we are closing in on the leadership in thermal imaging cameras. MSA has excellent balance and diversification in products, markets, customers and geographies with a long-term global presence.

The company’s progress has been particularly assisted by the fact that at this company all the money that we make goes to only two places—to build this particularly well-focused business for greater success in the future and to reward our shareholders.

Our strong balance sheet allows us to be aggressive in our business strategies and allows us to pursue fully our short-term, medium-term and long-term objectives.

On July 12, MSA was pleased to begin trading on the New York Stock Exchange and to provide all the people at that famous location on that day with V-Gard® protective helmets, the best one around. On the sad side, our largest shareholder, Mary Irene Ryan, my mother, passed away in the summer at age 91. There were some limited sales of stock by our family for modest diversification and to pay death taxes, but the strong relationship between my family and the company goes forward.

As we look to the future, we keep in mind the words of a great Pittsburgher, Chuck Noll, Coach of the Steelers in their Glory Years, “It is a lot tougher to stay on top than it was to get there.” We look forward to continuing to make further progress on behalf of our shareholders by serving our customers well.

The Fire Service globally and Homeland Security in the United States have been excellent markets for MSA, and we look to enhance our position in them, including instruments for Homeland Security. Our performance in the general industry sector, which is a very large part of our business, has gone well recently as we have worked hard to meet customer needs and as the global manufacturing industry has improved. We look forward to further progress here. International markets continue to grow and present particular opportunities for MSA.

Our objectives in our business vary a bit between segments due to the nature of each element. In our commercial business, which is everything except for major government military contracts, we seek to develop our business strongly and steadily year-to-year as we enhance our customer reach and our product offerings. We look forward to regularly growing here in this vast majority of our business.

In our sales to the military in the U.S. and other allied countries, our objective is to gain absolutely as much of such business as we can in areas where MSA has distinctive capabilities and in which sales can be profitable. In propitious periods, this business can grow very rapidly. Yet, this tends to be a somewhat volatile part of the business and we manage our operations to live with this volatility. The way to continue well in such government business is to be on as many good new projects as we can in order to offset the maturity in other areas. We are competitive in a number of new government-oriented projects in both the U.S. and worldwide, and recently we were pleased to receive a large order for one of them. Conversely, the MCU-2/P gas mask for the U.S. Air Force and Navy has been required at high levels longer than we had expected due to recent global conflicts. However, we anticipate a reduction in volume later in 2005, though the production capacity of gas masks, which has been quite constrained, will then be used to better fulfill our delivery of related Homeland Security gas masks for first responders in the U.S.

Overall, therefore, we expect the good growth in our commercial business to continue this year as long as we fulfill our tasks effectively. We would expect that our government military contract business on a global basis would not have the growth of recent years for reasons just mentioned, even though we feel positive about our competitiveness in this area. Overall, though, we look forward to another very good year for the company with ongoing progress on total sales and earnings as we fulfill our mission that men and women may work in safety and that they, their families and communities may live in health throughout the world.



**John T. Ryan III**

*Chairman of the Board and Chief Executive Officer*

# FIRE SERVICE

MSA is The Safety Company for Firefighters  
and First Responders



*The FireHawk™ Air Mask, introduced in 2004, epitomizes MSA innovation. Besides being the first device to meet both NIOSH CBRN and NFPA 1981-2002 edition SCBA standards, it features a new Rescue Belt designed into the harness assembly that allows firefighters to rappel to safer ground, capitalizing on MSA core competencies in fall protection.*



**The Ultra Elite® Gas Mask is specially designed for firefighters and is approved for CBRN protection.**

In 2004, millions of dedicated firefighters and first responders in North America, Europe and other regions of the world depended on MSA products when lives were on the line. Driven by strong demand for increasingly sophisticated products with advanced technology, MSA solidified its standing as the leading manufacturer of safety equipment for the fire service market.

As MSA's single largest market globally, the fire service generated approximately 29 percent of total revenue in 2004, led by higher shipments of self-contained breathing apparatus and thermal imaging cameras (TICs), which played a key role in the company's record sales and earnings.

For the year, MSA was the market leader in fire helmets, gas detection instruments, gas masks and thermal imaging cameras used by fire departments and first responders. The company also maintained its position as one of the top two manufacturers of self-contained breathing apparatus. Several trends helped boost MSA's sales in this key market, particularly the focus on protecting firefighters from homeland security threats such as chemical warfare agents, toxic chemicals and gases, and the demand for products that integrate state-of-the-art electronics and technology.

In 2004, new products introduced over the past three years generated about 40 percent of MSA's North American sales. One highlight was a 45 percent increase in sales of the Evolution 5000 Thermal Imaging Camera, which enables firefighters with poor or no visibility to locate victims and pinpoint fires in smoke-filled buildings. Sales of the Evolution 5000 TIC and other MSA thermal imaging cameras accelerated in Europe last year after MSA secured a bulk export license enabling volume shipments to that region. MSA Europe, for instance, secured a major order in Germany for 64 Evolution 5000 TICs. Equipped with advanced electronics, the Evolution 5000 TIC is the benchmark for excellence in thermal imaging cameras, offering maximum value with high performance, durability, portability, reliability and best-in-class technology.

The company's focus on innovation led to several notable product introductions for firefighters and other customers last year. As an example, MSA introduced the FireHawk Air Mask, an entirely new self-contained breathing apparatus that

delivers more safety and ergonomic features than any other air mask available at the end of 2004. Two components distinguish the FireHawk unit from conventional air masks: its all-new Airframe™ carrier and harness assembly and an optional rescue belt that provides an emergency egress system that is compliant with National Fire Protection Association (NFPA) standards. MSA engineering teams in Europe and the U.S. teamed up to develop FireHawk components, while the optional rescue belt integrates MSA core competencies in fall protection.

With the FireHawk Air Mask, MSA also became the first manufacturer to offer a self-contained breathing apparatus that complies with the latest NFPA performance standard – NFPA 1981-2002 Edition – and received approval from the National Institute for Occupational Safety and Health (NIOSH) for use against chemical, biological, radiological and nuclear (CBRN) contaminants. The FireHawk Air Mask provides first responders with an added level of protection if they're called to respond to a terrorist incident.

In 2004, MSA further demonstrated its fire service leadership with the introduction of the Ultra Elite Gas Mask, which also received NIOSH approval for CBRN protection. Designed specifically for firefighters, the Ultra Elite mask offers a feature that can save fire departments time and money – a facepiece seal design that duplicates MSA's widely used Ultra Elite SCBA facepiece. This feature means fire departments don't have to conduct costly new facepiece fit tests when incorporating the Ultra Elite Gas Mask into their arsenal of equipment.

For decades, MSA has been a leader in head protection for firefighters. In 2004, CAIRNSHELMETS® remained the leading brand of fire fighting helmets in the U.S.

The company, however, is also positioned for market share growth outside the U.S. In Europe, MSA Gallet helmets were sold to fire departments in Austria, Germany, Switzerland, Slovakia, the Czech Republic, Luxembourg, Poland and other nations.

Additionally, MSA Netherlands won a recent order to supply more than 200 AirMaXX eXXtreme Air Masks to the Utrecht Fire Department. In Australia, MSA was the fire service market leader, with products including SCBAs manufactured in

Europe and Cairns helmets made in Clifton, N.J. And in South America and Asia, particularly China, MSA is pursuing strategies to expand its share of the fire service market in those regions.

Indeed, MSA is The Safety Company when it comes to protecting firefighters around the world. Our customer service professionals and field representatives work closely with firefighters to understand their needs, and MSA trains authorized distributors to ensure quality service. In 2004, the fire service market truly demonstrated MSA's leadership in product engineering and innovation, and its commitment to protecting the heroes who protect us.



**Evolution® 5000 TIC**



**In 2004, sales of CAIRNSHELMETS® protective headgear, like the new Cairns 1044 fire helmet shown here, helped reaffirm the brand's leading position in the North American market.**

# MILITARY

Protecting Soldiers on the Front Lines



*The war in Iraq and Afghanistan has forced many soldiers to walk the front lines. The Advanced Combat Helmet provides superior ballistic protection while allowing maximum sensory awareness.*

*Murrysville associate Monica Bell, left, ensures top quality standards while adding trim to the Advanced Combat Helmet.*



As the United States and its allies aim to protect democracy from hostile threats, MSA is providing state-of-the-art safety equipment to protect soldiers and other military personnel.

While MSA concentrated primarily on meeting U.S. defense needs, the company also sold military products last year to such allies as Australia and Taiwan.

MSA has proudly supported America's defense mission since 1918, when the company first provided oxygen-breathing apparatus for the U.S. Army during World War I. In 2004, customers including the Army, Navy and Air Force turned to MSA for sophisticated technology that enhances head and respiratory protection.

Many achievements stood out in 2004; one of the most notable was MSA's production of the Advanced Combat Helmet (ACH) for the U.S. Army, a project that demonstrated the company's strengths in research, technology, innovation, lean manufacturing and teamwork. During the year, MSA won three contracts totaling approximately \$77 million to manufacture this helmet for the Army. Overall, MSA has been awarded contracts totaling more than \$104 million since November 2003 for the production of more than 315,000 Advanced Combat Helmets.

Responding to the Army's urgent demand for these helmets required a major effort and significant process improvements at our manufacturing plants in Newport, Vt., Clifton, N.J., Murrysville, Pa. and Jacksonville, N.C. MSA employees rose to the challenge, working tirelessly as the company implemented Lean Sigma manufacturing to ensure cost-effectiveness and a quick ramp-up of the ACH program. Initially developed for the U.S. Military Special Operations Command, the Advanced Combat Helmet has met stringent requirements for performance and safety. The helmet features a lightweight design and offers soldiers more protection with greater comfort and stability than previous helmets.



**Pennsylvania U.S. Senator Arlen Specter (R-Pa.), left, and U.S. Representative Melissa Hart (R-Pa.), shown above with Bill Lambert, President of MSA North American Operations, expressed tremendous support for the ACH during a 2004 visit to MSA's Murrysville, Pa. facility.**

Equally important, the ACH provides advanced ballistic protection while allowing maximum sensory awareness for the user, including unobstructed field of view and ambient hearing capabilities. As a result, the Army began issuing the helmet to troops deploying to Iraq and Afghanistan.

The U.S. Army Material Command recognized the ACH as one of the top inventions of 2002, based on evaluations reported by six active Army Divisions and the U.S. Army Training and Doctrine Command.

The success of the Advanced Combat Helmet was just one of MSA's major achievements last year: MSA was also awarded a \$42 million multi-year contract to supply U.S. Air Force and Navy personnel with the MCU-2/P chemical/biological gas mask.

MSA is a leading manufacturer of protective respiratory devices for defense, including CBRN gas masks that protect users from chemical, biological, radiological and nuclear contaminants. In 2004, MSA played a strong supporting role as the manufacturer of rubber face-masks for Army gas masks.

MSA is also pursuing growth opportunities outside the U.S. in this key market. For a Canadian defense customer, an MSA engineering team developed a Bullet Resistant Plate in 2004, and our new Defense Technologies Group is helping ensure that tough performance requirements for this new product are being met. In Europe, the acquisition of Sordin last year expanded MSA's line of passive and electronic hearing protection equipment for military applications and other markets.

This acquisition proved especially important in 2004 as MSA utilized Sordin technology to furnish the U.S. Army with the Modular Integrated Communications Headset (MICH™) System. Lightweight and easy to use, the MICH System is a hands-free radio unit specially designed to integrate with the Advanced Combat Helmet.

While MSA has benefited from military spending related to Operation Iraqi Freedom, it's important to note that the company has maintained a strong and diverse base of customers in other key markets. In 2004, MSA's military business accounted for approximately 20 percent of MSA's total sales.



**Since the end of 2003, MSA has secured more than \$104 million to produce 315,000 Advanced Combat Helmets.**

# CONSTRUCTION

MSA Builds Market Share



*MSA is the leading supplier of many quality products that help protect construction workers every day on the job. The V-Gard® protective helmet, shown above, is the number one hard hat used by construction and general industry workers throughout the world.*

*In 2004, MSA's Construction Safety Blitz in Florida, left, helped raise safety awareness among construction workers at more than 40 active work sites.*

In North America and around the world, MSA is building a strong foundation of growth in the construction market by delivering superior safety products, innovation and process improvement.

In 2004, the company increased sales in this key market as overall construction activity accelerated, reflecting improved economic vitality in the U.S. and abroad. MSA is well positioned to serve the construction market because of a proven ability to develop new or improved products that integrate the latest technologies in two of our core product areas – head and fall protection.

For example, MSA, the leading maker of hard hats, last year introduced a breakthrough solution to enhance helmet safety, use and comfort: the 1 Touch Suspension. Getting a hard hat



to fit just right is a key to ensuring superior head protection. The 1 Touch Suspension is a cost-effective solution that makes it easier and simpler to adjust a hard hat for optimum fit. The first major innovation in suspension technology in 20 years, the 1 Touch Suspension is easily opened, adjusted and closed with one hand.

The introduction of the 1 Touch Suspension and other suspension systems in 2004 helped MSA expand its number one market position in hard hats. Sales of industrial helmets, including the best-selling V-Gard helmet, increased approximately eight percent, propelled by strong demand in North America. Additionally, MSA's hard hat team reached a major milestone in September when it completed a V-Gard helmet order for the U.S. Department of Energy. The order marked the 20,000th custom logo MSA has produced under the company's exclusive Logo Express® program. Launched in 1985, the Logo Express service provides customers with lightning fast turnaround on custom logoed helmets, giving users yet one more reason to choose MSA.

The enduring success of the V-Gard helmet, combined with MSA's ability to provide multiple customization options and fast turnaround, demonstrates the strength of MSA, and our strength in continuous product improvement.

But MSA's expertise in construction safety reaches far beyond head protection, to fall protection systems, respirators, communications systems, eye protection, gas detection instruments and hearing protection.

Fall protection systems are a priority because falls are the leading cause of construction-related deaths, according to the U.S. Occupational Safety and Health Administration. In this important segment, MSA introduced in 2004 the next



generation harness – the TechnaCurv Full Body Harness. The TechnaCurv Harness is another example of MSA innovation; its design offers a higher level of comfort, easy adjustment and a more secure fit. Complementing this innovation was the launch of MSA's Quick-Ship program. As an example of MSA's customer focus, the program supports the seasonal buying patterns of the construction market, ensuring product delivery of selected fall protection products within 24 hours.

With an eye on opportunities to grow MSA's presence in the construction market, MSA expanded its product lines in North America and worldwide by acquiring Sordin AB, a leading manufacturer of passive and electronic hearing protection equipment. Sordin, based in Sweden, enhanced MSA's capabilities in Europe, and added hearing protection products that integrate with our V-Gard helmets and face shields. In short, Sordin is a sound fit with MSA's strength in integrating electronics into sophisticated safety products.

MSA Europe and MSA International offer strategically located platforms to serve the global construction market, which still offers untapped potential for the entire company. In China, where MSA reorganized last year to enhance manufacturing, distribution and sales capabilities, the company is manufacturing V-Gard helmets at reduced costs and applying process improvements at its factories to enhance competitiveness in local markets.



**In 2004, two major MSA fall protection innovations included the TechnaCurv Full Body Harness, top of page, and the Stryder™ Anchorage Connector, above, which provides enhanced worker mobility for iron workers and building construction workers.**

# OIL, GAS & CHEMICAL

MSA Expertise Runs Deep in Oil, Gas & Chemical Markets



*The Solaris® Multigas Detector, worn on a pocket by this worker at left, weighs less than eight ounces and is one of the smallest and lightest four-gas monitors available today. Ideal for refinery applications, it provides simultaneous detection of carbon monoxide, oxygen, H<sub>2</sub>S and combustible gas.*

**M**SA's origins as The Safety Company are rooted in an historic role as a provider of safety equipment for industries involved in the extraction of raw materials from the earth. Today, the company is applying its legacy of expertise in this area to focus on achieving growth in the global oil, gas and chemical (OGC) market, while continuing to serve the mining industry.

Around the world, MSA is providing safety equipment that protects workers in this key market, with personal protective equipment and advanced electronic systems that sense and detect potentially deadly hazards. While pursuing international opportunities in oil producing regions such as the Middle East and South America, MSA, in 2004, also continued its historic role as a provider of mine safety equipment, mainly in such areas as Latin America, South Africa, Indonesia and Australia, where extraction remains a major industry.

The opportunities for MSA in the OGC market are truly global because there are inherent safety risks in exploration, drilling and production, coupled with growing awareness outside of North America of the need to improve worker safety. In 2004, sales of safety products to this market outside North America and Europe generated 17 percent of total revenue for MSA International, surpassed only by sales to mining customers.

In China, for instance, the demand for petrochemicals reflects the nation's rapid industrial expansion and growing economy, a trend that is expected to fuel greater demand for safety equipment. Similar trends are also being seen in the Middle East, Southeast Asia and South America, where MSA reported positive sales trends in the oil, gas and chemical sectors, as well as solid

demand for mine safety products in Australia and South Africa. After reorganizing in 2004, the affiliates of MSA International are better positioned to compete for increased market share and untapped opportunities in the OGC market and other segments.

For the oil, gas and chemical market and other industries, MSA designs and manufactures globally approved flame- and gas-detection permanent instruments, and a complete series of reliable, durable and easy-to-use single- and multi-gas portable instruments.



**The SafEye™ Open Path System is a self-contained, optical, gas detection system made possible by MSA's strategic alliance with SPECTRONIX. The SafEye Detector can reliably detect combustible gases and flames over an open path up to 500 feet long, ideal for the growing offshore oil platform market.**



**The SUPREMA® Fire & Gas Control System enhanced MSA global competitiveness in 2004. It is the first permanently installed monitoring system to meet all recognized standards for detecting fire and gas hazards.**

In 2004, MSA introduced innovative instrument products for the OGC market and other industries. These included:

- **The Sirius® Multigas Detector**, a portable instrument using photo-ionization technology that can monitor hundreds of potentially dangerous vapors and chemicals.
- **The Solaris® Multigas Detector**, an economical, small and light-weight instrument that provides simultaneous detection of three common gases and combustible gas. The Solaris Detector earned approvals for use in Europe and Canada, to coincide with the device's existing U.S. approvals.
- **The Ultima® X Series Gas Monitors**, MSA's market-leading permanent instrument line. These globally approved gas monitors were enhanced with the release of X<sup>3</sup>™ Technology – which brings multi-sensing, Modbus digital communication, and signal boost capability to the Ultima X Series.

In Europe, MSA's modular and flexible SUPREMA Fire & Gas Control System exemplified the company's global expertise in this market. Designed primarily for the oil and gas industry, the SUPREMA unit became the first control system certified and tested to meet all relevant global performance standards for the detection of fire and gas hazards. The unit's certification to Safety Integrity Level 3 provides MSA with a distinct competitive edge. The SUPREMA System is pre-programmed for fire and gas applications, which significantly reduces the effort and costs typically associated with setup and changes during operation. With its versatility, the SUPREMA System has applications in other industries as well. In 2004, MSA Europe received its largest permanent instrument order to date for the system from the Vienna, Austria subway system.

Last year, MSA offerings to the OGC market were further bolstered by the company's strategic alliance with SPECTRONIX Ltd. Announced at the end of 2003, the alliance helped foster the development of a next-generation SafEye Open Path infrared system that detects, over long distances, the presence of flame or combustible gas hazards. As a result, MSA set new standards in fire and gas detection through a combination of certified performance, flexibility and reduced cost of ownership.

MSA's strategy for the OGC market is to offer, through our growing international sales and distribution network, complete one-stop solutions for our customers. Our numerous products for OGC applications include fall protection equipment, head and respiratory protection, smoke detectors, heat sensors, manual alarm call points and more.

# COMMERCIAL GOVERNMENT

MSA Meets the Growing Needs of the Commercial Government Market, Fueled by Homeland Security Demand



*In 2004, MSA core competencies in respiratory protection and instrumentation helped protect law enforcement officers around the world. Above, members of Allegheny County's (Pa.) Police SWAT Team wear MSA's Millennium Gas Mask.*

*Used at many high-profile public events in 2004, the SAFESITE™ System, left, was deployed at the U.S. Olympic training facility in Athens during the 2004 Summer Olympics.*

**M**SA understands what it takes to protect police officers and other customers in the commercial government market from a multitude of potential dangers, including chemical, biological, radiological and nuclear (CBRN) agents. It takes a commitment to developing new technology and manufacturing equipment that can save lives when terrorists and violent criminals strike.

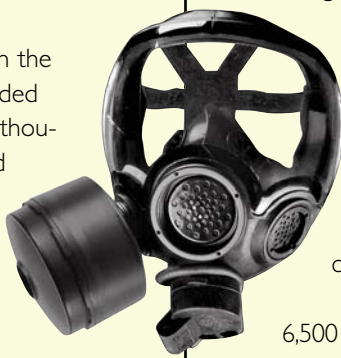
In 2004, MSA sales to this key market surged to continue a growth trend that began after the terrorist attacks on Sept. 11, 2001 sparked federal, state and local government spending on homeland security initiatives. Drawing on the company's legacy of leadership in the fire service and military markets, MSA has expanded its product line for this global market to protect thousands of men and women who protect cities and communities in America and abroad.

As an example, MSA leveraged its core competencies in respiratory protection to develop the Millennium® CBRN Gas Mask for police, first responders and other users. In 2004, the Millennium mask became the first full-facepiece air-purifying respirator certified by the National Institute for Occupational Safety and Health (NIOSH) for CBRN protection. Applying technology and lessons learned from MSA's military gas mask design, the Millennium Gas Mask provides wearers with effective protection from the types of deadly gases and chemical warfare agents terrorists might use.

Fueled by the strong demand for gas masks from the military and from commercial government customers, MSA's facility in Evans City, Pa. increased production of bonded style masks in 2004 by 36 percent compared to the prior year. This demand, and MSA's ability to meet it, enhanced the company's position as the number one manufacturer of gas masks.

Following the launch of the Millennium Gas Mask, MSA introduced a gas mask specially designed for firefighters – the Ultra Elite model – which also achieved NIOSH certification for CBRN protection. By the end of 2004, MSA held two of the only four certifications for such masks.

In 2004, MSA introduced other commercial government products that adapted and integrated proven technology. One highlight was MSA's introduction of the SAFESITE™ Wireless Gas Detection System, expressly designed to monitor air at large-scale public events. The SAFESITE System uses multiple chemical sensing technologies and wireless communications to detect and communicate the presence of chemical warfare agents, volatile organic compounds and many toxic chemicals. A major advantage of the system is that it enables users to get reliable readings and alerts while operating the system from a remote site, out of harm's way. To showcase this product in 2004, law enforcement officials authorized its use at the 2004 Olympics, the Kentucky Derby, the Democratic National Convention and other major events.



**Millennium® Gas Mask**

Complementing the SAFESITE System, MSA introduced a series of hand-held monitors that allow law enforcement agencies to implement a systems approach for the detection of chemical warfare agents and other airborne threats. The HAZMATCAD™ and HAZMATCAD™ Plus detectors are easy-to-use portable hand-held instruments that utilize surface acoustic wave technology to detect and classify trace amounts of chemical warfare agents. The HAZMATCAD Plus unit also detects certain toxic industrial chemicals. In addition, the Sirius

Multigas Detector allows first responders to monitor for select toxic chemicals, combustible gases and volatile organic compounds using advanced photoionization technology.

To be sure, U.S. spending on homeland security helped propel MSA's sales and earnings to record levels in 2004, but the company also reported major orders in the international commercial government market.

In Europe, the German Border Police ordered 6,500 MSA Gallet MO 5006 police helmets, with an option for another 6,000 over the next two years.

This new helmet offers improved comfort in a lighter weight design, as well as a tilting chin and mouth protector, simple handling and easy-to-remove padding for cleaning. Also in Germany, the Federal state of Baden-Wuerttemberg ordered 4,000 3S H-A full-face masks, with an option for another 4,000. The 3S mask is a derivative of the standard helmet-mask combination, with an attachable head harness.

As demonstrated by these successes, MSA is indeed well positioned as The Safety Company when it comes to protecting law enforcement and other first responders around the world.



**The HAZMATCAD™ Detector provides law enforcement officials with a new tool for fighting the war on terror. Utilizing surface acoustic wave technology, it can quickly detect and classify trace amounts of chemical warfare agents.**

# CONSUMER PRODUCTS

Keeping Safe and Sound at Home



*As the fastest growing brand of consumer safety products, MSA Safety Works® contributed to MSA's overall growth in 2004, while helping protect do-it-yourselfers. Shown at right are MSA's new Sport Series protective eyeglasses, which combine the best of fashion and safety.*





In the growing market for consumer safety products, MSA is applying its 90 years of safety leadership – and focus on innovation and new product development – to offer home safety solutions through leading home center retailers. In 2004, the MSA Safety Works product line continued to be the fastest growing brand of consumer safety products, with sharply higher sales and 21 new products introduced during the year.

Through MSA Safety Works, the company is meeting a critical need in the consumer safety market. Millions of people are injured at home each year, often while working on projects without protective equipment, and yet MSA researchers found that as few as 1 in 10 shoppers consider buying safety products when they purchase equipment for home improvement projects.



**The MSA Safety Squad in action.**

Through consumer education and products that offer protection, comfort, and ease-of-use, MSA's business strategy is to increase the use of protective gear at home to reduce injuries and fatalities. It's a strategy that is working for MSA, and for the retail chains that carry our rapidly expanding product

line. By the end of 2004, MSA Safety Works had achieved a compounded average annual sales growth rate of more than 100 percent since its inception in 1998.

The Home Depot was the first major home improvement retailer to carry MSA consumer products. In August 2004, MSA added another major retailing brand by reaching an agreement with True Value, a leader in the hardware industry since 1948. True Value will offer the MSA Safety Works product line through its network of 6,200 dealer locations in North America. Through retailers like The Home Depot and True Value, MSA Safety Works offers quality products for first aid, eye protection, head protection, hearing protection, body protection and respiratory protection.



**In 2004, the Safety Squad traveled cross country in a customized Dodge Durango to provide do-it-yourselfers with quick, on-site lessons on home and personal safety.**



**Featuring many interactive displays, the Home-Safety Learning Center helped raise safety awareness among kids and their parents.**

When consumers need safety goggles, hard hats, ear plugs or respirators, MSA Safety Works products integrate fashion and ergonomic design while delivering superior performance and functionality. In 2004, for instance, MSA rolled out its Sport Series Safety Glasses, which meet the latest standards for high impact protective eyewear while offering improved comfort and fashion not found in conventional safety glasses.

While product distribution and innovation were two key components of MSA's consumer market success over the past year, safety education continued to be a focus of the brand. In 2004, MSA formed its "Safety Squad" – a team of safety specialists that traveled across the United States during the summer to distribute safety products, at no charge, to unprotected people working in neighborhoods and at construction sites. Traveling in a customized Dodge Durango sporting the MSA Safety Works logo, the Safety Squad logged more than 10,000 miles and visited more than 100 communities to spread MSA's safety message to consumers.

Separately, another innovative education program scored a "home" run for safety. The MSA Safety Works' Home-Safety Learning Center, an interactive four-room inflatable "house" that teaches visitors about protective products for the eyes, ears, head and lungs, opened its doors to thousands of children and adults at retail stores, children's festivals, and home and garden shows. This colorful 37-foot by 25-foot exhibit provided a hands-on experience in home safety. Other promotions for MSA Safety Works included a new advertising campaign that was credited with boosting brand awareness and sales.

In 2004, MSA focused on the North American market for consumer safety products, guided by MSA's goal to be the leader in establishing a new standard of excellence in the category.

# MSA TAKES CENTER STAGE AT THE NEW YORK STOCK EXCHANGE

When MSA Chairman and CEO John T. Ryan III rang the Opening Bell at the New York Stock Exchange on Monday, July 12, 2004, he said he wanted to ring it loud and long so it could be heard in the many dozens of countries where MSA has operations. Judging from the sound of the applause from those gathered on the NYSE's trading floor, this was quite successful. The bell ringing marked MSA's debut on the NYSE, a mere 90 years after the safety company was founded by Mr. Ryan's grandfather – John T. Ryan – and his partner, George H. Deike.

For MSA, the move to the NYSE is a major milestone that is enhancing the visibility of the company and its common stock, and its stature as the only broad-line safety company publicly-traded in U.S. markets.

"The decision to move to the NYSE provides MSA with an effective opportunity to attract new investors," said Mr. Ryan who, along with other officers of the company, wore to the ceremony V-Gard helmets sporting the "MSA/NYSE Listed" logo. "MSA is a fundamentally strong company with a great story to tell, and we believe the NYSE offers an ideal platform to help us achieve that goal."

In the first day of trading on the NYSE, nearly 200,000 MSA shares were traded. In 2004, the volume of MSA

shares traded more than tripled. By year's end, MSA had a market capitalization of nearly \$1.9 billion and 37 million common shares outstanding. Prior to the move to the NYSE, only one analyst covered the company; by the end of 2004, that number had increased to five.

Although MSA moved from the American Stock Exchange to the NYSE, the stock continues to trade under the same symbol – MSA.

As Mr. Ryan opened trading, the MSA Safety Bug was parked outside the NYSE to promote the company's safety mission, while traders on the floor of the exchange received MSA safety products.

The whirlwind day included meetings with NYSE officials and numerous media interviews for Mr. Ryan, who fielded live questions from CNBC, Bloomberg, CNN, and other business media outlets.



The MSA Safety Works Volkswagen Safety Bug symbolized MSA's arrival at the New York Stock Exchange.



Above Top: Ringing the NYSE Opening Bell on July 12, 2004 symbolized a significant milestone for MSA. Shown above with Catherine Kinney, NYSE President and Co-Chief Operating Officer, are members of MSA's executive team including, from left to right, Douglas McClaine, William Lambert, John T. Ryan III, Dennis Zeitler, Rob Cañizares, and director L. Edward Shaw.

On the trading floor, John T. Ryan III above at left, confers with representatives of Bear Wagner, MSA's newly selected specialist firm.



NYSE Certification of Listing.

# 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, 2004

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.)

**121 Gamma Drive  
RIDC Industrial Park  
O'Hara Township  
Pittsburgh, Pennsylvania**  
(Address of principal executive offices)

**15238**  
(Zip Code)

Registrant's telephone number, including area code: **412-967-3000**

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
<b>Common Stock, no par value</b>	<b>New York Stock Exchange</b>

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

**Preferred Stock Purchase Rights**  
(Title of Class)

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in 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 an accelerated filer (as defined in Rule 12b-2 of the Act).  
Yes  No

As of February 18, 2005, there were outstanding 36,360,358 shares of common stock, no par value, not including 3,062,767 shares held by the Mine Safety Appliances Company Stock Compensation Trust. Total market value of outstanding shares as of February 18, 2005 was approximately \$1,712 million. The aggregate market value of voting stock held by non-affiliates as of February 18, 2005 was approximately \$1,486 million.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the May 10, 2005 Annual Meeting of Shareholders are incorporated by reference into Part III.

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## Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. 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 or our industry's 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, among other things: the availability of government funding in the fire service, homeland security and military markets; our ability to compete successfully against current and future competitors; the timely and successful introduction of new products; risks inherent in litigation, including product liability claims; currency exchange rate fluctuations and various political and economic risks associated with international operations; fluctuations in the cost and availability of purchased materials and components; our ability to successfully identify and integrate future acquisitions; and the impact of unforeseen economic and political changes, including the threat of terrorism and its potential consequences. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable words. These statements are only predictions and are not guarantees of future performance. Therefore, actual events or results may differ materially from those expressed or forecast in 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 I. Business

**Overview**—Mine Safety Appliances Company was incorporated in Pennsylvania in 1914. We are a global leader in the development, manufacture and supply of sophisticated products that protect people’s health and safety. Sophisticated safety products typically integrate any 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 around the world in the fire service, homeland security, construction and other industries, as well as the military. This broad product offering includes self-contained breathing apparatus, or SCBAs, gas masks, gas detection instruments, head protection, respirators and thermal imaging devices. We also provide a broad offering of consumer and contractor safety products through retail channels. We believe we hold the number one global market position with respect to 2004 net sales of SCBAs, gas masks, gas detection instruments, hard hats and fire helmets.

We dedicate significant resources to research and development, which allows us to produce innovative, sophisticated 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, to develop industry product requirements and standards and anticipate their impact on our product lines. Evidencing our commitment to innovation, in 2004, we generated approximately one-third of our net sales from new products introduced over the prior three years.

**Segments**—We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. We believe that we best serve these customer preferences by organizing our business into the following three 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, 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 sophisticated safety products to protect workers around the world in the fire service, homeland security, 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:

*Respiratory protection.* Respiratory protection 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. We offer a broad and comprehensive line of respiratory protection products, including:

- *Self Contained Breathing Apparatus, or SCBAs.* SCBAs are used by first responders, petrochemical plant workers and anyone entering an environment deemed immediately dangerous to life and health. SCBAs are also used by first responders to protect against exposure to chemical, biological, radiological and nuclear, or CBRN, agents.
- *Filtering respirators.* Filtering respirators cover a broad class of respirators for many hazardous applications, including:
  - full face gas masks for the military and first responders exposed to known and unknown concentrations of dangerous gases, chemicals, vapors and particulates;
  - 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, haz-mat 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.
- *Gas masks.* We have supplied gas masks to the U.S. military for several decades. The latest versions of these masks are currently in use by the U.S. military in Iraq, Afghanistan and other parts of the world. Our commercial version of this gas mask, the Millennium, was developed based on the MCU-2/P, the gas mask currently used by the U.S. Air Force and U.S. Navy.
- *Escape hoods.* Our Response Escape Hood is 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. The hood gives users head and upper neck coverage and respiratory protection to help them escape from threatening situations quickly and easily.

*Hand-held and permanent instruments.* Our hand-held and permanent instruments include gas detection instruments and thermal imaging cameras. Our 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 the lack of oxygen in confined spaces or the presence of combustible or toxic gases. Our hand-held thermal imaging cameras are used by firefighters to see downed victims through dense smoke, or to detect the source of the fire.

- *Single- and multi-gas hand-held detectors.* Our line of single- and multi-gas detectors provide a portable solution for detecting the presence of oxygen, hydrogen sulfide, carbon monoxide and combustible gases, either singularly or all four gases at once. Our line of hand held portable instruments are used by chemical workers, oil and gas workers, utility workers entering confined spaces, or anywhere a user needs protection to continuously monitor the quality of the atmosphere they are working in and around.
- *Thermal imaging cameras.* Our infrared thermal imaging cameras, or TICs, are used in the global fire service market. TICs detect sources of heat in order to locate firefighters and other people trapped inside burning or smoke-filled structures. TICs can also be used to identify “hot spots.” Recently, we introduced the Evolution® 5000 and 5200 Thermal Imaging Cameras, which combine the functionality and durability required by the fire service with features and performance capability not found in other small format TICs.
- *Multi-point permanently installed gas detection systems.* Our comprehensive line of gas monitoring systems are used to continuously monitor for combustible and toxic gases and oxygen deficiency in virtually any gas detection application where continuous monitoring is required. Our systems are used for gas detection in the pulp and paper, refrigerant monitoring, petrochemical and general industrial applications. Our newest line, the SafeSite Hazardous Gas Detection System, designed and developed for homeland security applications, combines the technologies and features from our line of permanent and portable gas detection offerings. The SafeSite System detects and communicates the presence of toxic industrial chemicals and chemical warfare agents. With up to 16 monitoring stations, wirelessly connected to a base station, the SafeSite System allows law enforcement officials to rapidly deploy and set up perimeter gas sensing sentinels that continuously monitor the air for toxic gases at large public events, in subways or at federal facilities, and continuously report their status to incident command.
- *Flame detectors and open-path infrared gas detectors.* Our line of flame and combustible gas detectors are used for plant-wide monitoring of toxic gas concentrations and for detecting the presence of flames. These systems utilize infrared optics to detect potentially hazardous conditions across distances as far as 120 meters, making them suitable for use in such places 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.

*Eye, face, hearing and head protection.* Eye, face, hearing and head protection is used in work environments where hazards present a danger to the eye, face, hearing and head, such as dust, flying particles, metal fragments, chemicals, extreme glare, optical radiation and items dropped from above. Our basic categories of these products are:

- *Industrial hard hats.* Our broad line of hard hats include full-brim hats and traditional hard hats, available in custom colors and with custom logos. These hard hats are used by plant, steel and construction workers, miners and welders.
- *Fire helmets.* Our fire service products include leather, traditional, modern and specialty helmets designed to satisfy the preferences of firefighters across geographic regions. Our CairnsHELMET is the number one helmet in the North American fire service market based on 2003 sales. Similarly, our Gallet firefighting helmet has a number one market position in Europe based on 2003 sales.
- *Military helmets.* Our Advanced Combat Helmet is used by the military for ballistic head protection. It was designed for the Special Forces of the U.S. military and recently has been designated as the “basis of issue” by the U.S. Army and earned distinction as being named one of the greatest inventions of 2002 by the Department of Army’s Material Command.
- *Eye, face and hearing protection.* We manufacture and sell a broad line of hearing protection products, non-prescription protective eyewear and face shields, used in a variety of industries.

*Body protection.*

- *Fall protection.* Our broad line of fall protection equipment includes the following: confined space equipment; harnesses/fall arrest equipment; lanyards; and lifelines.

**Customers**—Our customers generally fall into three categories: industrial and military end-users, distributors and retail consumers. In North America, we make nearly all of our non-military sales through our distributors. In our Europe and International segments, we make our sales through both indirect and direct sales channels. Our U.S. military customers, which are comprised of multiple U.S. government entities, including the Department of Defense, represented the largest group of customers based on our 2004 net sales and accounted for approximately 16% of sales. The year-end backlog of orders under contracts with U.S. government agencies was \$80.8 million in 2004, \$83.7 million in 2003, and \$38.7 million in 2002.

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

<b>Products</b>	<b>Principal End-Users</b>
Respiratory Protection	First Responders; General Industry Workers; Military Personnel
Gas Detection	Oil, Gas, Petrochemical and Chemical Workers; First Responders; Hazmat and Confined Space Workers
Head, Eye and Face, and Hearing Protection	Construction Workers and Contractors; First Responders; General Industry Workers; Military Personnel
Thermal Imaging Cameras	First Responders

**Sales and Distribution**—Our sales and distribution team consists of distinct marketing, field sales and customer service organizations for our three geographic segments: North America, Europe, and International. We believe our sales and distribution team, totaling over 400 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, educating them about hazards, exposure limits, safety requirements and product applications, as well as specific performance requirements of our products. In our International segment and Eastern Europe where distributors are not well established, our sales associates work with and sell directly to end-users. Our development of relationships with end-users is critical to increasing the overall demand for our products.

The in-depth customer training and education provided by our sales associates to our customers are critical to ensure proper use of many of our products, such as SCBAs and gas detection instruments. As a result of our sales associates working closely with end-users, they gain valuable insight into customers' 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 with respect to product application, industry standards and regulations, sales skills and sales force automation.

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 select authorized national, regional, and local distributors. Some of our key distributors include: Airgas; W.W. Grainger Inc.; Fisher Safety, a division of Fisher Scientific International Inc.; Orr Safety Inc.; and Hagemeyer. For example, 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 Europe 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 distributors worldwide.

We market consumer products under the MSA Safety Works brand through a dedicated sales and marketing force. We serve the retail consumer through various channels of distribution, including hardware and equipment rental outlets and The Home Depot and TrueValue retail chains.

**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 \$12 billion. The industry supplying this market is broad and highly fragmented with few participants able to offer a comprehensive line of safety products. Generally, global demand for safety products has been stable because purchases of these products are non-discretionary since they protect workers in hazardous and life-threatening work environments and because their use is often mandated by government and industry regulations. Moreover, the safety products industry generates stable revenues because of the need to consistently replace many safety products that have limited life spans due to normal course 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 which 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 service.

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

**Research and Development**—To maintain our position at the forefront of protective equipment technology, we operate three sophisticated research and development facilities. We believe our dedication and commitment to innovation and research and development allow us to produce innovative sophisticated safety products that are often first to market and exceed industry standards. In 2004, 2003 and 2002, on a global basis, we spent approximately \$22.6 million, \$20.9 million and \$19.5 million,

respectively, on research and development. Our engineering groups operate primarily in the United States and Germany, and to a lesser extent in Australia, France, Brazil, China, Japan, Great Britain and Italy. 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 the markets and the technologies, opportunities and challenges they foresee in each product area. These teams present their strategies, new product development portfolios and resource allocation recommendations to our global research and development alignment council, made up of senior executives from our global operations. The council refines the recommendations and presents them to our senior executive team, which consists of the chief executive officer, chief financial officer, and presidents of our North America, Europe and International segments. The senior executive team then establishes resource allocation, corporate alignment and strategic direction.

We believe our team-based, cross-geographic and cross-functional approach to new product development is unique in our industry and a source of our 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 three geographic regions.

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, such as the National Institute for Occupational Safety and Health, or NIOSH, and the National Fire Protection Association, or NFPA, to develop industry product requirements and standards and anticipate their impact on our product lines. For example, nearly every consensus standard-setting body around the world that impacts our product lines has one of our key managers as a voting member. Key members of our management team understand the impact that these standard-setting organizations have on our new product development pipeline and devote time and attention to anticipating a new standard's impact on our net sales and operating results. Because of our technological sophistication, commitment to and membership on global standard-setting bodies, resource dedication to research and development and unique approach to the new product development process, we believe we are well-positioned to anticipate and adapt to the needs of changing product standards and gain the approvals and certifications necessary to meet new government and multinational product regulations.

**Patents and Intellectual Property**— We own and have obtained licenses to 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 a substantial body of manufacturing know-how that we believe provides a significant competitive advantage over our competitors.

**Raw Materials and Suppliers**— Nearly all 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, hardhats 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, we have not experienced any significant problems in obtaining adequate raw materials.

**Employees**— As of December 31, 2004, we had approximately 4,600 employees, approximately 2,200 of whom were employed by our Europe and International segments. None of our U.S. employees are subject to the provisions of a collective bargaining agreement. Some of our employees outside the United States are members of unions. We have not experienced a work stoppage in over 10 years and believe our relations with our employees are good.

**Available Information**— We post the following filings on the Investor Relations page on our Web site 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. All such filings on our Investor Relations Web page are available to be viewed on this page free of charge. Information contained on our Web site is not part of this annual report on Form 10-K or our other filings with the Securities and Exchange Commission.



## Item 2. Properties

Our principal executive offices are located at 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Pennsylvania 15238 in a 93,014 square-foot building owned by us. We own or lease our primary facilities located in six states in the United States and in 16 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:

<b>Location</b>	<b>Function</b>	<b>Square Feet</b>	<b>Owned or Leased</b>
<b>North America</b>			
Murrysville, PA	Manufacturing	295,223	Owned
Cranberry Twp., PA	Manufacturing	211,320	Owned
Evans City, PA	Manufacturing	194,961	Leased
Jacksonville, NC	Manufacturing	106,505	Owned
Pittsburgh, PA	Office	93,014	Owned
Cranberry Twp., PA	Research and Development	68,175	Owned
Sparks, MD	Office, Research and Development, and Manufacturing	52,452	Leased
Englewood, CO	Manufacturing	41,320	Leased
Clifton, NJ	Manufacturing	41,250	Owned
Englewood, CO	Distribution	14,985	Leased
Newport, VT	Manufacturing	11,500	Leased
Toronto, Canada	Distribution	6,100	Leased
Mexico City, Mexico	Distribution and Manufacturing	5,800	Leased
<b>Europe</b>			
Berlin, Germany	Office, Research and Development, Manufacturing and Distribution	339,548	Leased
Chatillon sur Chalaronne, France	Office, Research and Development, Manufacturing and Distribution	78,495	Leased
Glasgow, Scotland	Office and Manufacturing	24,516	Leased
Milan, Italy	Office, Research and Development and Distribution	24,500	Owned
Mohammedia, Morocco	Manufacturing	23,914	Owned
Glasgow, Scotland	Distribution	6,204	Leased
Varnamo, Sweden	Office, Research and Development, Manufacturing and Distribution	5,000	Leased
<b>International</b>			
Johannesburg, South Africa	Office, Manufacturing and Distribution	81,323	Leased
Sydney, Australia	Office, Research and Development, Manufacturing and Distribution	57,100	Owned
São Paulo, Brazil	Office, Research and Development, Manufacturing and Distribution	54,713	Owned
Wuxi, China	Office, Research and Development, Manufacturing and Distribution	35,000	Owned
Lima, Peru	Office and Distribution	34,348	Owned
Santiago, Chile	Office, Manufacturing and Distribution	8,461	Owned
Tokyo, Japan	Office, Research and Development and Distribution	1,184	Leased

### **Item 3. Legal Proceedings**

We are subject to federal, state and local laws, regulations and ordinances relating to the protection of the environment, including those governing discharges to air and water, handling and disposal practices for solid and hazardous wastes, and the maintenance of a safe workplace. There are no current or expected legal proceedings or expenditures with respect to environmental matters that would materially affect our operations.

Various lawsuits and claims arising in the normal course of business are pending against us. These lawsuits are primarily product liability claims. We are presently named as a defendant in approximately 2,400 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 32,000 plaintiffs. Approximately 90% of these lawsuits involve plaintiffs alleging they suffer from silicosis, with the remainder alleging they suffer from other or combined injuries, including asbestosis. These lawsuits typically allege that these conditions resulted in part from respirators that were negligently designed or manufactured by us. Consistent with the experience of other companies involved in silica and asbestos-related litigation, there has been an increase in the number of asserted claims that could potentially involve us. We cannot determine our potential liability, if any, for such claims, in part because the defendants in these lawsuits are often numerous, and the claims generally do not specify the amount of damages sought.

With some limited exceptions, we maintain insurance against product liability claims. We also maintain a reserve for uninsured product liability based on expected settlement charges for pending claims and an estimate of unreported claims derived from experience, sales volumes and other relevant information. We reevaluate our exposures on an ongoing basis and make adjustments to reserves as appropriate. Based on information currently available, we believe that the disposition of matters that are pending will not have a materially adverse effect on our financial condition.

In connection with our sale of the Callery Chemical facility in Evans City, Pennsylvania, we have retained responsibility for certain environmental costs at this site, where relatively low levels of contamination are known to exist. Under the terms of the asset purchase agreement with BASF, our maximum liability for these matters is capped at \$50.0 million. Based on environmental studies performed prior to the sale of the division, we do not believe that our potential exposure under the terms of this agreement will materially affect our financial condition.

### **Item 4. Submission of Matters to a Vote of Security Holders**

During the fourth quarter of 2004, there were no matters submitted to a vote of security holders through the solicitation of proxies or otherwise.

## Executive Officers of the Registrant

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

<b>Name</b>	<b>Age</b>	<b>Position</b>
John T. Ryan III	61	Chairman of the Board of Directors; Chief Executive Officer
James H. Baillie	58	Vice President; President, MSA Europe
Joseph A. Bigler	55	Vice President
Kerry M. Bove	46	Vice President
Rob Cañizares M.	55	Vice President; President, MSA International
Benedict V. DeMaria	57	Vice President
Ronald N. Herring, Jr	44	Vice President
William M. Lambert	46	Vice President; President, MSA North America
Douglas K. McClaine	47	Secretary and General Counsel
Dennis L. Zeitler	56	Vice President; Chief Financial Officer and Treasurer

*John T. Ryan III* has served as chairman and chief executive officer since October 1, 1991.

*James H. Baillie* has served as vice president and president of MSA Europe since March 10, 1999. Prior to that time, he was executive vice president of Sylvania Lighting International.

*Joseph A. Bigler* has served as vice president since January 9, 1998. He is primarily responsible for North American sales and distribution.

*Kerry M. Bove* has served as vice president since August 16, 2000. He is primarily responsible for research, product development, manufacturing and marketing of instrument products in North America. Beginning in November 1999, Mr. Bove served as general manager of the instrument division. From November 1998 until November 1999, he was our marketing director.

*Rob Cañizares M.* has served as vice president and president of MSA International since January 20, 2003. Prior to working with MSA, Mr. Cañizares served as senior vice president of global sales and service group of Trane Company, beginning on February 1, 1997.

*Benedict V. DeMaria* has served as vice president since January 9, 1998. He is primarily responsible for human resources and corporate communications.

*Ronald N. Herring, Jr.* has served as vice president since January 1, 2004. Mr. Herring is primarily responsible for research, product development, manufacturing and marketing of safety products in North America. Prior to that time, he served as the general manager of the safety products division, beginning on January 1, 2003, and as the director of marketing for the safety products division.

*William M. Lambert* has served as vice president since January 1, 1998 and was also appointed president of MSA North America on January 1, 2003. Prior to that time, he was general manager of the safety products division.

*Douglas K. McClaine* has served as secretary and general counsel since July 1, 2002. Prior to that, he served as associate general counsel, beginning on May 16, 1994.

*Dennis L. Zeitler* has served as chief financial officer and treasurer since November 1, 2000. Prior to that time, he served as vice president and treasurer, beginning on September 1, 1988.

## 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 and paid were as follows:

	Price Range of Our Common Stock		Dividends
	High	Low	
<b>Year ended December 31, 2003</b>			
First Quarter	\$12.44	\$10.17	\$.06
Second Quarter	14.99	11.76	.06
Third Quarter	19.58	14.21	.07
Fourth Quarter	28.83	17.71	.07
<b>Year ended December 31, 2004</b>			
First Quarter	\$31.92	\$21.37	\$.07
Second Quarter	36.75	25.10	.10
Third Quarter	44.00	31.50	.10
Fourth Quarter	52.50	35.00	.10

On February 18, 2005, there were 361 registered holders of our shares of common stock.

Share price and dividend information has been adjusted to reflect the three-for-one split of our common stock in January 2004.

The information appearing in Part III below regarding common stock issuable under our equity compensation plans is incorporated herein by reference.

#### 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, 2004	—	—	—	214,882
November 1 - November 30, 2004	26,692	\$ 44.02	26,692	188,190
December 1 - December 31, 2004	—	—	—	188,190

On December 19, 1996, we announced that our Board of Directors had authorized management to purchase up to 4,500,000 split-adjusted shares of common stock from time to time in private transactions and on the open market. The share purchase program has no expiration date.

On October 26, 2004, the Board of Directors authorized the purchase of up to 200,000 additional shares of common stock from time to time in private transactions and on the open market. The share purchase program has no expiration date.

We do not have any other share repurchase programs.

## Item 6. Selected Financial Data

The following selected financial data should be read in conjunction with our consolidated financial statements, including the respective notes thereto, as well as the section entitled "Management's discussion and analysis of financial condition and results of operations," included elsewhere in this annual report on Form 10-K.

<i>(In thousands, except as noted)</i>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
<b>Statement of Operations Data:</b>					
Net sales	\$ 852,509	\$ 696,473	\$ 564,426	\$ 509,736	\$ 468,307
Other income	5,004	1,724	2,271	2,776	2,444
Cost of products sold	512,089	422,273	344,847	306,759	289,302
Selling, general and administrative	204,799	180,060	149,730	139,861	135,210
Research and development	22,648	20,897	19,459	15,742	15,224
Interest expense	3,845	4,564	4,769	5,349	4,040
Currency exchange losses (gains)	264	(3,356)	(191)	1,197	(444)
Provision for income taxes	42,821	24,835	16,870	17,753	8,531
Net income from continuing operations	71,047	48,924	31,213	25,851	18,888
Net income from discontinued operations	—	2,685	3,864	5,780	4,351
Gain on sale of discontinued operations - after tax	—	13,658	—	—	—
Net income	71,047	65,267	35,077	31,631	23,239
<b>Earnings per Share Data:</b>					
Basic per common share continuing operations (in dollars)	\$ 1.91	\$ 1.33	\$ .85	\$ .72	\$ .51
Diluted per common share continuing operations (in dollars)	1.86	1.31	.85	.71	.51
Dividends paid per common share (in dollars)	.37	.26	.22	.18	.16
Weighted average common shares outstanding—basic	37,111	36,730	36,512	35,729	36,904
<b>Balance Sheet Data:</b>					
Working capital	\$ 270,593	\$ 207,216	\$ 138,182	\$ 135,186	\$ 114,175
Working capital ratio	3.1	2.8	2.4	2.6	2.3
Net property	123,716	120,560	130,407	156,413	159,586
Total assets	734,110	643,885	579,765	520,698	489,683
Long-term debt	54,463	59,915	64,350	67,381	71,806
Common shareholders' equity	376,679	306,867	288,009	252,451	225,382
Equity per common share (in dollars)	10.09	8.31	7.86	6.95	6.35

### Notes:

Cost of products sold, selling, general and administrative expenses, and research and development expenses include noncash pension income.

Noncash pension income, pre-tax	\$ 7,188	\$ 8,845	\$ 13,125	\$ 14,962	\$ 14,900
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Working capital at December 31, 2003 and 2002 excludes assets held for sale.

## 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 contains 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 section of this annual report on Form 10-K entitled "Forward-Looking Statements."

### BUSINESS OVERVIEW

We are a global leader in the development, manufacture and supply of sophisticated products that protect people's health and safety. Sophisticated safety products typically integrate any combination of electronics, mechanical systems and advanced materials to protect users against hazardous or life threatening situations. Our comprehensive line of safety products are used by workers around the world in the fire service, homeland security, construction and other industries, as well as the military.

In recent years, we have concentrated on specific initiatives intended to help improve our competitive position and profitability, including:

- identification and development of promising new markets;
- a focus on innovation and new product introductions;
- further strengthening relationships with major distributors;
- optimizing factory performance and driving operational excellence;
- positioning international business to capture significant growth opportunities; and
- pursuing strategic acquisitions.

We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. We believe that we best serve these customer preferences by organizing our business into three geographic segments: North America, Europe, and International. Each segment includes a number of operating companies. In 2004, approximately 66%, 20% and 14% of our net sales from continuing operations were made by our North America, Europe 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 Europe segment includes well-established companies in most Western European countries, and more recently established operations in a number of Eastern European locations. Our largest European companies, based in Germany and France, develop, manufacture, and sell a wide variety of products. Operations in other European 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, and the U.S., or are purchased from third party vendors.

*International.* Our International segment includes operating entities located in Abu Dhabi, Argentina, Australia, Brazil, Chile, China, Hong Kong, India, Indonesia, Japan, Malaysia, Peru, Singapore, South Africa and Zimbabwe, some of which are in developing regions of the world. Principal manufacturing operations are located in Australia, Brazil, South Africa, and China. These companies develop and 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 the U.S., Germany and France, or are purchased from third party vendors.

Because some of the countries that comprise our International segment are located in developing regions of the world, several factors have the potential to adversely affect our international operations and our financial results, including:

- significant changes in economic, social, political, monetary or trade policies of the governments of countries that comprise our International segment, as well as political or social unrest in those countries;
- trade protection measures and price controls;
- trade sanctions and embargos; and
- nationalization and expropriation.

These events are infrequent and unpredictable. However, it is highly unlikely that such events will occur simultaneously in several or all of the countries that comprise our International segment. We believe that our exposure is not material since, with

the exception of Australia, which represents approximately 5% of our net sales, no individual International affiliate represents more than 3% of our total assets, net sales or gross profits.

Because our financial statements are stated in U.S. dollars, currency fluctuations may affect our results of operations and financial position and may affect the comparability of our results between financial periods. We manage our exchange rate risks primarily by sourcing our products in the same currency as our customer pays us. In the few instances where product cost and product payment are not in the same currency and such mismatch creates a material exchange rate risk, we may use foreign currency forward contracts. On a global basis, we have a broad based balance sheet exposure to numerous currencies that serves to minimize the impact of fluctuations in any one currency.

In 2004, we achieved record sales and net income from continuing operations for the fourth consecutive year. We believe that this performance and our improving financial performance in recent years are the result of initiatives that have allowed us to anticipate and respond quickly to market requirements, particularly in the fire service, homeland security, construction and general industries, as well as the military. We believe that sales growth in the fire service market reflects our ability to quickly bring to market products that comply with changing industry standards and to create new market demand with innovative products. For example, we have successfully responded to increased homeland security and military market demand for products such as the Millennium Chemical-Biological and the MCU-2/P gas masks and the Advanced Combat Helmet that has occurred since the September 11th attacks and during the ongoing war on terrorism. In recent years, demand in the homeland security and military markets has more than offset sluggishness in some North American industrial markets.

The level of demand for our products in the fire service, homeland security and military markets is strongly influenced by the levels of government funding available to address the needs of first responders and to meet the requirements of military operations. A reduction in available government funding in the future could adversely affect the demand for our products in these markets.

Our results in Europe improved nicely in 2004, and have shown resiliency despite the poor economic climate in most of Western Europe. Our acquisition of CGF Gallet in 2002, now MSA Gallet, added the leading line of European firefighter head protection to our product line and has helped improve our overall performance in Europe. As discussed further under "Acquisitions," we recently improved our market position and expertise in hearing protection by acquiring Sordin AB, which is headquartered in Varnamo, Sweden. In other international markets, 2004 results were generally higher in most markets, particularly in Latin America and Australia. These improvements reflect focused efforts to effectively reach customers and, particularly in Latin America, improvements in general economic conditions.

To sharpen our focus on our core safety products business, in November 2002, we announced our decision to explore the potential sale of Callery Chemical, our only non-safety products business unit. As discussed further below under "Discontinued Operations," this division was sold in September 2003.

## ACQUISITIONS

On June 30, 2004, we acquired Sordin AB of Varnamo, Sweden, a leading manufacturer of passive and electronic hearing protection designed for the industrial, law enforcement and military markets. We believe the acquisition of Sordin enhances our position as a provider of modern, leading-edge hearing protective devices. Many of Sordin's products are compatible with our other safety products, including our flagship V-Gard® Hard Hat. Sordin also developed the modular integrated communications system currently being used with the Advanced Combat Helmet that we manufacture for the U.S. Army. The initial purchase price was approximately \$4.3 million. Additional consideration of up to \$5.4 million could be paid based on Sordin's earning performance through June 30, 2009.

## DISCONTINUED OPERATIONS

On September 12, 2003, we sold our Callery Chemical Division to BASF Corporation. In accordance with accounting principles generally accepted in the United States of America, the operating results of the Callery Chemical Division for all periods presented through the date of sale and the gain on the sale to BASF Corporation during the year ended December 31, 2003 have been reported as discontinued operations in the consolidated statements of income. The sale of the Callery Chemical Division to BASF Corporation resulted in an after-tax gain of \$13.7 million.

At December 31, 2003, approximately \$2.3 million of trade receivables and other current assets related to the Callery Chemical Division operation were reported as assets held for sale. These amounts were received during the first quarter of 2004.

The after-tax proceeds of \$53.8 million received from the sale of the Callery Chemical Division and the subsequent liquidation of net assets retained by us were distributed to shareholders on November 24, 2003 and charged to retained earnings as a capital distribution.

## RESULTS OF CONTINUING OPERATIONS

### Year Ended December 31, 2004 Compared to Year Ended December 31, 2003

**Net sales.** Net sales for the year ended December 31, 2004 were \$852.5 million, an increase of \$156.0 million, or 22%, from \$696.5 million for the year ended December 31, 2003. Our net sales increased in all segments as follows:

	<u>2004</u>	<u>2003</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
<i>(In millions)</i>				
North America	\$564.6	\$452.6	\$112.0	25%
Europe	173.0	146.2	26.8	18%
International	114.9	97.7	17.2	18%

Net sales of the North American segment were \$564.6 million for the year ended December 31, 2004, an increase of \$112.0 million, or 25%, compared to \$452.6 million for the year ended December 31, 2003. We believe that our 2004 sales growth in North America was the direct result of our focus on key markets, including fire service, homeland security, and the military. Our sales of Advanced Combat Helmets, and related communications systems, to the military increased approximately \$58.6 million during 2004, reflecting increased government funding to support the war on terrorism. During the current year, our sales of self-contained breathing apparatus, or SCBAs, and thermal imaging cameras, or TICs, to the fire service market increased approximately \$33.0 million and \$7.7 million, respectively. We continue to see strong demand for our latest generation SCBAs, which, in 2003, were the first to be approved under the 2002 NFPA performance standards and the NIOSH Chemical, Biological, Radiological and Nuclear, or CBRN, standard to protect first responders against possible terrorist attacks. Higher thermal imaging camera sales reflect strong demand for our Evolution<sup>®</sup> 5000 TIC, which combines the functionality and durability required by the fire service with features and performance not found on other small format cameras. Sales of instrument products were approximately \$10.6 million higher in the current year, on strong demand for our latest generation portable instruments, such as the Solaris<sup>®</sup> Multigas Detector, one of the smallest and lightest four-gas monitors available today. In recent months, we have also seen a modest improvement in the industrial sector demand for instrument products.

During 2003, we changed our standard shipping terms to U.S. distributors from FOB Shipping Point to FOB Destination. We made this change to improve customer service by obtaining greater control and flexibility over carrier selection and delivery schedules and by reducing customer exposure to in-transit loss and damage. The effect of this change, which delayed revenue recognition on affected shipments until the goods reach their destination, reduced sales and gross margins in 2003 by approximately \$4.7 million and \$2.7 million, respectively.

Net sales by European operations were \$173.0 million for the year ended December 31, 2004, an increase of \$26.8 million, or 18%, from \$146.2 million for the year ended December 31, 2003. Approximately half of the increase was due to the favorable effect of the stronger euro on net sales when stated in U.S. dollars. Sales by Sordin, which we acquired on June 30, 2004, accounted for approximately \$4.5 million of the increase. The remainder of the improvement was primarily related to strong late year shipments of breathing apparatus by our German company to customers in Eastern Europe. Local currency sales at our other European affiliates were generally flat year-to-year, reflecting continued sluggishness in the Western European industrial sector.

Net sales by International operations were \$114.9 million for the year ended December 31, 2004 compared to \$97.7 million for the year ended December 31, 2003, an increase of \$17.2 million, or 18%. Approximately half of the increase in International segment sales, when stated in U.S. dollars, was related to the favorable effect of stronger international currencies, particularly the Australian dollar and the South African rand. The remainder of the sales improvement was in Latin America, reflecting generally improved economic conditions.

**Cost of products sold.** Cost of products sold was \$512.1 million for the year ended December 31, 2004, an increase of \$89.8 million, or 21%, from \$422.3 million for the year ended December 31, 2003. The increase relates primarily to higher sales.

Cost of products sold and selling, general and administrative expenses in 2003 were favorably affected by a change in the vacation vesting policy for U.S. employees. Under the vacation vesting policy adopted in 2003, employees earn their vacation entitlement during the current year. Previously, vacation was vested on the last day of the prior year. The policy change resulted in favorable adjustments to cost of products sold and selling, general and administrative expenses during 2003 of approximately \$3.6 million and \$1.8 million, respectively. The vacation policy was changed to align the year the benefit is earned with the year it is received.

Cost of products sold and operating expenses include net periodic pension benefit costs and credits. Pension credits, combined with pension costs, resulted in net pension credits for the year ended December 31, 2004 of \$7.2 million, of which approximately \$4.4 million was included in cost of products sold, \$2.5 million in selling general and administrative expenses, and \$0.3 million in research and development expenses. Net pension credits for the year ended December 31, 2003 were \$8.8 million, of which approximately \$5.4 million was included in cost of products sold, \$3.1 million in selling, general and



administrative expenses, and \$0.3 million in research and development expenses. In 2003, an additional pension credit of \$2.0 million relating to a curtailment gain from the sale of the Callery Chemical Division was included in net income from discontinued operations. The recognition of pension income in the years ended December 31, 2004 and 2003 is primarily the result of the exceptional investment performance of the MSA Non-Contributory Pension Plan for the Employees, or the MSA Pension Plan, over the past ten years. During that period, the investment performance of the MSA Pension Plan has ranked among the top 1% of all U.S. pension funds according to a comparison of fund performance made by our investment consultant. Future net pension credits can be volatile depending on the future performance of plan assets, changes in actuarial assumptions regarding such factors as the selection of discount rates and rates of return on plan assets, changes in the amortization levels of actuarial gains and losses, plan amendments affecting benefit pay-out levels, and profile changes in the participant populations being valued. Changes in any of these factors could cause net pension credits to change. To the extent net pension credits decline in the future, our net income would be adversely affected.

**Gross profit.** Gross profit for the year ended December 31, 2004 was \$340.4 million, an increase of \$66.2 million, or 24%, from \$274.2 million for the year ended December 31, 2003. The ratio of gross profit to sales increased to 39.9% in 2004 compared to 39.4% in 2003. The improved gross profit ratio in 2004 was primarily due to production efficiencies associated with higher North American sales, partially offset by proportionately higher sales of Advanced Combat Helmets to the government at gross margins that are generally lower than our margins on commercial sales. Our European operations also reported improved gross profits primarily related to a product mix shift away from lower margin military helmets in 2003 to higher margin fire helmets in 2004.

**Selling, general and administrative expenses.** Selling, general and administrative expenses for the year ended December 31, 2004 were \$204.8 million, an increase of \$24.7 million, or 14%, from \$180.1 million for the year ended December 31, 2003. Selling, general and administrative expenses were 24.0% of sales in 2004 compared to 25.9% of sales in 2003. Our selling, general and administrative expenses in North America increased approximately \$15.5 million, primarily related to additional marketing and selling expenses associated with generating and supporting the higher sales volumes. Selling, general and administrative expenses for the year ended December 31, 2003 included a favorable adjustment of approximately \$1.8 million related to the previously-discussed change in the vacation vesting policy for our U.S. employees. The strengthening of international currencies (particularly the euro, the Australian dollar, and the South African rand) increased selling, general and administrative expenses when stated in U.S. dollars by approximately \$6.9 million for the year ended December 31, 2004. The remainder of the increase was primarily due to the acquisition of Sordin and higher rent expense in Germany associated with the leaseback of property that was sold in September 2003. Approximately \$1.7 million of deferred gain related to the sale of the German property was recognized in other income during the year ended December 31, 2004.

**Research and development expenses.** Research and development expenses were \$22.6 million for the year ended December 31, 2004, an increase of \$1.7 million, or 8%, from \$20.9 million for the year ended December 31, 2003. The increase reflects our current focus on new product development, particularly in instruments and other electronic products.

**Depreciation and amortization expense.** Depreciation and amortization expense, which is reported in cost of sales, selling, general and administrative expenses, and research and development expenses, was \$25.5 million for the year ended December 31, 2004, an increase of \$2.3 million, or 10%, from \$23.2 million for the year ended December 31, 2003. The increase was primarily due to new asset additions in the United States to support higher Advanced Combat Helmet production volumes.

**Interest expense.** Interest expense for the year ended December 31, 2004 was \$3.8 million, a decrease of \$0.8 million, or 16%, from \$4.6 million for the year ended December 31, 2003. The decrease was related to reductions in long term debt and short term borrowings and the discontinuance of our accounts receivable securitization arrangement in August 2004.

**Currency exchange adjustments.** During the year ended December 31, 2004, we recorded currency exchange losses of \$0.3 million compared to gains of \$3.4 million for the year ended December 31, 2003. Currency exchange gains in 2003 were primarily related to euro and Canadian dollar denominated assets held by us, and reflect a significant strengthening of those currencies during the year. Less favorable currency exchange adjustments during 2004 reflect a less significant strengthening of the euro and the Canadian dollar, as well as the offsetting effect of forward exchange contracts that we entered into to hedge our exposure to movements in euro exchange rates.

**Other income.** Other income for the year ended December 31, 2004 was \$5.0 million, an increase of \$3.3 million from \$1.7 million in the same period last year. During the current year, we recognized approximately \$1.1 million of estimated interest income with respect to settled issues in the federal income audits of tax years 1995 through 2001. The estimated interest income is based on our current expectations regarding the final outcome of the IRS audits. As previously mentioned, approximately \$1.7 million of deferred gain related to the sale of our German property was recognized as a gain on disposition of assets during 2004.

**Income tax provision.** Our effective income tax rate for the year ended December 31, 2004 was 37.6% compared to 33.7% for the year ended December 31, 2003. The higher effective tax rate in 2004 was primarily related to less favorable adjustments to previously-established valuation allowances on foreign tax credit carry forwards and adjustments to prior years' taxes. In 2004, we released approximately \$0.6 million of valuation allowances and made unfavorable adjustments to prior year's taxes of approximately \$1.1 million. In 2003, we released approximately \$1.2 million of valuation allowances and made favorable adjustments to prior year's taxes of approximately \$0.8 million. The valuation allowances were released based on tax planning strategies that we implemented and an improved outlook for foreign source income.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$112.8 million as of December 31, 2004. These earnings are considered to be reinvested for an indefinite period of time. It is not practicable to determine the deferred tax liability on these undistributed earnings. We are in the process of evaluating the impact of the provisions of the American Jobs Creation Act of 2004 dealing with the limited opportunity in 2005 to repatriate some of these undistributed earnings at a U.S. tax cost that may be lower than the normal tax cost on such distributions. We are awaiting final guidance from the Internal Revenue Service ("IRS") to complete that evaluation, which may result in our decision to remit a portion of these undistributed earnings in 2005; however, we cannot currently estimate the amount of such distribution that may be reasonably possible. The range of possible amounts that we are considering for repatriation under this provision is between zero and approximately \$50 million. The related potential range of income tax payable on amounts considered for repatriation is between zero and approximately \$3 million.

In October 2004, the President signed the American Jobs Creation Act of 2004, which provides a deduction for income from qualified domestic production activities, which will be phased in from 2005 through 2010. The act also provides for a two-year phase-out of the existing extra-territorial income exclusion for foreign sales that was viewed to be inconsistent with international trade protocols by the European Union. Based on current earnings levels, we expect that the net effect of the phase-out of the extra-territorial income exclusion and the phase-in of the new deduction will result in a decrease in our effective tax rate for 2005 and 2006 of approximately 0.5 percentage points and approximately 1 percentage point thereafter.

The determination of annual income tax expense takes into consideration amounts which may be needed to cover exposures for open tax years. Our federal income tax returns for the years 1995 through 2001 remain under audit with the only open issue relating to the calculation of research and development tax credits. We believe that we have made adequate provision for income taxes and interest which may become payable or receivable for the years not yet settled. We do not expect any material adverse impact on earnings to result from the resolution of matters related to open tax years, and we are optimistic that we can reach resolution with the IRS during 2005. To the extent that we are successful in sustaining our position that no adjustment should be made to research and development credits claimed over the period covered by the examination, tax reserves previously established based upon the examining agent's disallowance of the claimed credits would be released, reducing tax expense in the period of settlement. Furthermore, such a final settlement would have a beneficial impact on interest costs.

**Net income.** Net income from continuing operations for the year ended December 31, 2004 was \$71.0 million, an increase of \$22.1 million, or 45%, over net income from continuing operations for the year ended December 31, 2003 of \$48.9 million. Continuing operations earnings per basic share of common stock improved to \$1.91 in 2004 compared to \$1.33 in 2003.

North America segment net income from continuing operations for the year ended December 31, 2004 was \$55.6 million, an increase of \$16.5 million, or 42%, from \$39.1 million for the year ended December 31, 2003. The improvement in North American net income was primarily due to the previously-discussed sales growth.

Europe segment net income from continuing operations for the year ended December 31, 2004 was \$6.7 million, an increase of \$3.9 million, or 141%, from \$2.8 million for the year ended December 31, 2003. Approximately \$0.4 million of the increase was due to the favorable currency translation effects of a stronger euro. Local currency net income improvement occurred primarily in Germany, where income was up approximately \$2.4 million on improved sales and lower operating costs. Europe segment net income for 2004 also included approximately \$0.6 million of income from the mid-year acquisition of Sordin AB.

International segment net income from continuing operations for the year ended December 31, 2004 was \$8.5 million, an increase of \$2.2 million, or 34%, from \$6.3 million for the year ended December 31, 2003. Approximately \$1.1 million of the income improvement occurred in Latin America, reflecting improved economic conditions. Favorable currency translation effects, primarily related to the strengthening of the Australian dollar and the South African rand, increased International segment income when stated in U.S. dollars by approximately \$0.7 million.

## Year Ended December 31, 2003 Compared to Year Ended December 31, 2002

**Net sales.** Net sales for the year ended December 31, 2003 were \$696.5 million, an increase of \$132.1 million, or 23%, from \$564.4 million for the year ended December 31, 2002. Our net sales increased in all segments as follows:

	<u>2003</u>	<u>2002</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
(In millions)				
North America	\$452.6	\$369.7	\$ 82.9	22%
Europe	146.2	122.4	23.8	19%
International	97.7	72.2	25.5	35%

Net sales by North American operations were \$452.6 million for the year ended December 31, 2003, an increase of \$82.9 million, or 22%, from \$369.7 million for the year ended December 31, 2002. Approximately half of the sales growth was driven by increased sales of SCBA and thermal imaging cameras to the fire service market. These improvements reflect a combination of continued strong government funding and increased demand for our CBRN-compliant SCBA and Evolution 5000 thermal imaging cameras. The remainder of the sales growth in North America was due to increased sales of gas masks and ballistic helmets to military and homeland security markets, which reflects increased government spending on military and homeland security needs. Sales of instruments and fall protection equipment were flat year-to-year, reflecting continued sluggishness in industrial markets.

During 2003, we changed our standard shipping terms to U.S. distributors from FOB Shipping Point to FOB Destination. We made this change to improve customer service by obtaining greater control and flexibility over carrier selection and delivery schedules and by reducing customer exposure to in-transit loss and damage. The effect of this change, which delays revenue recognition on affected shipments until the goods reach their destination, reduced sales and gross margins in 2003 by approximately \$4.7 million and \$2.7 million, respectively.

Net sales by European operations were \$146.2 million for the year ended December 31, 2003, an increase of \$23.8 million, or 19%, from \$122.4 million for the year ended December 31, 2002. The sales increase was primarily due to favorable translation effects of approximately \$18.9 million due to a stronger euro and the inclusion of a full year of sales by MSA Gallet, which was acquired during the second quarter of 2002. Local currency sales at our other European affiliates were somewhat lower year-to-year, reflecting the general sluggishness in the Western European industrial sector.

Net sales by International operations were \$97.7 million for the year ended December 31, 2003 compared to \$72.2 million for the year ended December 31, 2002, an increase of \$25.5 million, or 35%. The sales improvement occurred primarily in Australia where sales grew by approximately \$7.1 million, including sales of approximately \$4.3 million of breathing apparatuses to the Australian Navy and as a result of higher sales of \$3.6 million of various products in various locations in Latin America. Approximately one-third of the increase in International sales, when stated in U.S. dollars, was due to the favorable currency translation effects of a stronger Australian dollar and South African rand.

**Cost of products sold.** Cost of products sold was \$422.3 million for the year ended December 31, 2003, an increase of \$77.5 million, or 22%, from \$344.8 million for the year ended December 31, 2002. The increase relates primarily to higher sales.

Cost of products sold and selling, general and administrative expenses in 2003 were favorably affected by a change in the vacation vesting policy for U.S. employees. Under the vacation vesting policy adopted in 2003, employees earn their vacation entitlement during the current year. Previously, vacation was vested on the last day of the prior year. The policy change resulted in favorable adjustments to cost of products sold and selling, general and administrative expenses during 2003 of \$3.6 million and \$1.8 million, respectively. The vacation policy was changed to align the year the benefit is earned with the year it is received.

Cost of products sold and selling, general and administrative expenses include net periodic pension benefit costs and credits. Pension credits, combined with pension costs, resulted in net pension credits of \$10.8 million in 2003, of which approximately \$5.4 million was included in the cost of products sold, \$3.1 million in the selling, general and administrative expenses, and \$0.3 million in research and development expenses. The remaining \$2.0 million, relating to a curtailment gain from the sale of the Callery Chemical Division, was included in net income from discontinued operations. Net pension credits for the year ended December 31, 2002 were \$13.1 million, of which approximately \$8.0 million was included in cost of products sold, \$4.6 million in selling, general and administrative expenses, and \$0.5 million in research and development expenses.

**Gross profit.** Gross profit for the year ended December 31, 2003 was \$274.2 million, an increase of \$54.6 million, or 25%, from \$219.6 million for the year ended December 31, 2002. The ratio of gross profit to sales improved slightly to 39.4% in 2003 compared to 38.9% in 2002.

**Selling, general and administrative expenses.** Selling, general and administrative expenses for the year ended December 31, 2003 were \$180.1 million, an increase of \$30.4 million, or 20%, from \$149.7 million for the year ended December 31, 2002. Selling, general and administrative expenses were 25.9% of sales in 2003 compared to 26.5% of sales in 2002. Approximately half of the increase was related to higher marketing and selling expenses required to support the significant sales growth in North

America. The remainder of the increase occurred in Europe, and reflects an increase from the inclusion of a full year's expenses of approximately \$5.0 million for MSA Gallet, which was acquired in the second quarter of 2002, and the currency exchange effect of \$7.3 million due to a stronger euro.

**Research and development expenses.** Research and development expenses were \$20.9 million for the year ended December 31, 2003, an increase of \$1.4 million, or 7%, from \$19.5 million for the year ended December 31, 2002. Research and development activities are performed primarily in the United States and Europe.

**Depreciation and amortization expense.** Depreciation and amortization expense, which is included in cost of products sold, selling, general and administrative expenses, and research and development expenses, was \$23.2 million for the year ended December 31, 2003, an increase of \$1.7 million, or 8%, from \$21.5 million for the year ended December 31, 2002. The increase was primarily due to new production equipment additions in the United States to support higher production volumes.

**Interest expense.** Interest expense for the year ended December 31, 2003 was \$4.6 million compared to \$4.8 million for the year ended December 31, 2002. The decrease relates to reductions in long term debt and short term borrowings.

**Currency exchange.** Currency exchange gains of \$3.4 million were recorded in the year ended December 31, 2003 compared to gains of \$0.2 million for the year ended December 31, 2002. Currency exchange gains in 2003 were primarily related to euro and Canadian dollar denominated assets held by us, and reflect a significant strengthening of those currencies during the year.

**Income tax provision.** The effective income tax rate was 33.7% for the year ended December 31, 2003 and 35.1% for the year ended December 31, 2002. The effective tax rate in 2003 was favorably affected by the one-time effect of releasing \$1.2 million of previously-established valuation allowances on foreign tax credit carry forwards. These valuation allowances were released in 2003 as a result of tax planning strategies that were implemented during the year and an improved outlook for foreign source income.

**Net income.** Net income from continuing operations for the year ended December 31, 2003 was \$48.9 million, an increase of \$17.7 million, or 57%, over net income from continuing operations for the year ended December 31, 2002 of \$31.2 million. Continuing operations earnings per basic share of common stock improved to \$1.33 in 2003 compared to \$0.85 in 2002.

North American net income from continuing operations for the year ended December 31, 2003 was \$39.1 million, an increase of \$13.2 million, or 51%, from \$25.9 million for the year ended December 31, 2002. The improvement in North American net income was primarily due to the previously-discussed sales growth.

European net income from continuing operations for the year ended December 31, 2003 was \$2.8 million, an increase of \$0.3 million, or 11%, from \$2.5 million for the year ended December 31, 2002. The improvement reflects a full year of income for MSA Gallet, partially offset by lower income in our German operation.

International net income from continuing operations for the year ended December 31, 2003 was \$6.3 million, an increase of \$3.9 million, or 168%, from \$2.4 million for the year ended December 31, 2002. Approximately two-thirds of the improvement occurred in Australia and Latin America on higher sales. The remainder of the improvement occurred in our operations in Peru, Chile and China, which all experienced losses in 2002, primarily as a result of one-time charges related to employee severance costs and asset write-offs.

## LIQUIDITY AND CAPITAL RESOURCES

Our main sources of liquidity are cash generated from operations and borrowing capacity. Our principal liquidity requirements are for working capital, capital expenditures, and principal and interest payments on outstanding indebtedness.

Cash and cash equivalents increased \$3.3 million during 2004 compared to an increase of \$36.8 million during 2003.

Continuing operations provided cash of \$51.8 million in 2004 compared to providing \$32.5 million in 2003. Better cash flow from operations during 2004 reflects improved net income from continuing operations and non-cash items, partially offset by increases in working capital, particularly inventory. Trade receivables were \$161.6 million at December 31, 2004 and \$144.9 million, including \$15.0 million of securitized receivables that were removed from the balance sheet, at December 31, 2003. Trade receivables expressed in number of days sales outstanding were 69 days at December 31, 2004, compared to 76 days at December 31, 2003. LIFO inventories were \$124.8 million at December 31, 2004 and \$90.1 million at December 31, 2003. On a FIFO basis, inventories measured against cost of products sold turned 3.1 times in 2004 and 3.3 times in 2003. Increases in trade receivables and inventories during 2004 were primarily related to higher sales levels. Cash flow from continuing operations in 2003 was \$10.5 million lower than in 2002. Improved cash flow from net income and non-cash items in 2003 was more than offset by increases in receivables and inventories.

Discontinued operations provided \$2.1 million of cash in 2004, primarily through collection of trade receivables that were reported as assets held for sale at December 31, 2003. In 2003, discontinued operations provided cash of \$8.0 million, reflecting operating results through the date of sale and the liquidation of trade receivables.

Our investing activities used cash of \$32.8 million in 2004, compared with providing \$66.7 million in 2003. During 2004, we used \$27.3 million of cash for property additions, primarily production equipment in the U.S. required to support our higher sales volume. Also in 2004, we used cash of \$4.3 million to acquire Sordin AB. In 2003, the sale of the Callery Chemical Division and property in Germany provided cash of \$63.0 million and \$22.9 million, respectively. In 2002, investing activities used cash of \$34.1 million, including approximately \$14.5 million to acquire MSA Gallet.

Financing activities used cash of \$19.4 million in 2004 compared to using \$76.3 million in 2003. Primary uses of cash for financing activities in the current year were for dividend payments of \$13.8 million and reductions in long-term debt of \$5.0 million. During 2003, in addition to regular dividend payments of \$9.5 million, we made a special distribution to common shareholders of \$53.8 million, representing the after-tax proceeds from the sale of the Callery Chemical Division and the subsequent liquidation of net assets retained by us. Dividends paid on our common stock during 2004 (our 87th consecutive year of dividend payment) were \$0.37 per share. Dividends paid on our common stock in 2003 and 2002 were \$0.26 and \$0.22, per share, respectively.

On April 6, 2004, we entered into an eight year interest rate swap agreement. Under the terms of the agreement, we receive a fixed interest rate of 8.39% and pay a floating interest rate based on LIBOR. The notional amount of the swap is initially \$20.0 million and declines \$4.0 million per year beginning in 2008. The interest rate swap has been designated as a fair value hedge of a portion of our fixed rate 8.39% Senior Notes.

The fair value of the interest rate swap at December 31, 2004, has been recorded as a liability of \$0.4 million that is included in other noncurrent liabilities, with an offsetting reduction in the carrying value of the long-term debt.

As a result of entering into the interest rate swap, we have increased our exposure to interest rate fluctuations. Differences between the fixed rate amounts received and the variable rate amount paid are recognized in interest expense on an ongoing basis. This rate difference resulted in a reduction in interest expense of approximately \$0.3 million during 2004.

Long-term debt, including the current portion at December 31, 2004 was \$59.0 million, or 13.5% of total capital. For purposes of this calculation, total capital is defined as long-term debt plus the current portion of long-term debt and shareholders' equity.

The following table sets forth our long-term debt obligations:

	<i>(In thousands)</i>	
	<u>2004</u>	<u>2003</u>
U.S.		
Industrial development debt issues payable through 2022, 1.34%	\$10,750	\$ 10,750
Series B Senior Notes payable through 2006, 7.69%	8,000	12,000
Senior Notes payable through 2012, 8.39%	39,585	40,000
Other	100	150
International		
Various notes payable through 2006, 9.63% to 19.0%	<u>524</u>	<u>1,853</u>
Total	58,959	64,753
Amounts due within one year	<u>4,496</u>	<u>4,838</u>
Long-term debt	<u>54,463</u>	<u>59,915</u>

Approximate maturities of these obligations are \$4.5 million in 2005, \$8.1 million in 2006, \$7.9 million in 2008, \$9.7 million in 2009, and \$28.8 million thereafter. Some debt agreements require us to maintain certain financial ratios and minimum net worth and contain restrictions on the total amount of debt. We were in compliance with our debt covenants as of December 31, 2004.

Short-term bank lines of credit amounted to \$20.6 million of which \$18.7 million was unused at December 31, 2004. Generally, these short-term lines of credit are renewable annually, and there are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the current portion of long-term debt, were \$1.9 million and \$0.8 million at December 31, 2004 and 2003, respectively. The average month-end balance of total short-term borrowings during 2004 was \$0.9 million, while the maximum month-end balance of \$1.9 million occurred at December 31, 2004. The weighted average interest rates of short-term borrowings at December 31, 2004 and 2003, were 7% and 3%, respectively.

We believe our sources of liquidity currently available from our cash reserves on hand, cash flow from operations and borrowing capacity are sufficient to meet our principal liquidity requirements for at least the next 12 months.

## ACCOUNTS RECEIVABLE SECURITIZATION

In August 2004, we terminated our securitization arrangement with a financial institution under which Mine Safety Funding Corporation, a consolidated wholly-owned bankruptcy remote subsidiary of the company, could sell up to \$30.0 million of eligible accounts receivable to a multi-seller asset-backed commercial paper issuer. We terminated this arrangement because we no longer required the source of funding that the securitization provided.

At December 31, 2003, \$15.0 million of securitized accounts receivable had been removed from our balance sheet under the securitization arrangement and our retained interest in accounts receivable available for securitization was \$40.0 million.

## CUMULATIVE TRANSLATION ADJUSTMENTS

The year-end position of the U.S. dollar relative to international currencies resulted in a translation gain of \$8.9 million being credited to the cumulative translation adjustments shareholders' equity account in 2004, compared to gains of \$14.7 million in 2003 and \$5.8 million in 2002. Translation gains in 2004 were primarily due to the strengthening of the euro, Australian dollar, and South African rand. Translation gains in 2003 reflect the strengthening of most currencies against the U.S. dollar. The most significant gains in 2003 related to our operations in Europe and Australia. Translation gains in 2002 occurred primarily in Europe, partially offset by losses in South America.

## 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, 2004 were as follows:

<i>(In millions)</i>	<u>Total</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>Thereafter</u>
Long-term debt*	\$ 59.0	\$ 4.5	\$ 8.1	\$ –	\$ 7.9	\$ 9.7	\$ 28.8
Operating leases	28.6	6.4	4.8	3.9	3.2	3.3	7.0
Technology transfer agreement	0.8	0.8	–	–	–	–	–
Take or pay supply contract	<u>5.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.0</u>	<u>–</u>	<u>–</u>
Totals	93.9	13.2	14.4	5.4	12.1	13.0	35.8

\*Future interest payments are not included in the table above.

We expect to make net contributions of \$1.6 million to our pension plans in 2005.

We have purchase commitments for materials, supplies, services, and property, plant and equipment as part of our ordinary conduct of business.

During the third quarter of 2003, we sold our real property in Berlin, Germany for approximately \$25.7 million, resulting in a gain of approximately \$13.6 million. At the same time, we entered into an eight year agreement to lease back the portion of the property that we occupy. Under sale-leaseback accounting, \$12.1 million of gain was deferred and is being amortized over the term of the lease.

In September 2003, we entered into a lease agreement with BASF pertaining to that portion of the Callery Chemical site that is occupied by our Evans City, Pennsylvania manufacturing operations. The initial term of the lease was one year, with a renewal option for five successive one year periods. In September 2004, we exercised our first one year renewal option.

Various lawsuits and claims arising in the normal course of business are pending against us. These lawsuits are primarily product liability claims. We are presently named as a defendant in approximately 2,400 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 32,000 plaintiffs. Approximately 90% of these lawsuits involve plaintiffs alleging they suffer from silicosis, with the remainder alleging they suffer from other or combined injuries, including asbestosis. These lawsuits typically allege that these conditions resulted in part from respirators that were negligently designed or manufactured by us. Consistent with the experience of other companies involved in silica and asbestos-related litigation, there has been an increase in the number of asserted claims that could potentially involve us. We cannot determine our potential maximum liability for such claims, in part because the defendants in these lawsuits are often numerous, and the claims generally do not specify the amount of damages sought.

With some limited exceptions, we maintain insurance against product liability claims. We also maintain a reserve for uninsured product liability based on expected settlement charges for pending claims and an estimate of unreported claims derived from experience, sales volumes and other relevant information. We reevaluate our exposures on an ongoing basis and make adjustments to reserves as appropriate. Based on information currently available, we believe that the disposition of matters that are pending will not have a materially adverse effect on our financial condition.

In connection with our sale of Callery Chemical facility in Evans City, Pennsylvania, we have retained responsibility for certain environmental costs at this site, where relatively low levels of contamination are known to exist. Under the terms of the asset purchase agreement with BASF, our maximum liability for these matters is capped at \$50.0 million. Based on environmental

studies performed prior to the sale of the division, we do not believe that our potential exposure under the terms of this agreement will materially affect our financial condition.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. 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.

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

**Accounting for contingencies.** We accrue for contingencies in accordance with FAS No. 5, Accounting 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 accrue for our estimates of the probable costs to be incurred in the resolution of product liability claims. These estimates are based on actuarial valuations, past experience, and our judgments regarding the probable outcome of pending and threatened claims. 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. Our product liability expense averaged less than 1% of net sales from continuing operations during the three years ended December 31, 2004.

**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 less than 2% of net sales during the three years ended December 31, 2004.

**Income taxes.** We account for income taxes in accordance with FAS No. 109, Accounting for Income Taxes, which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax basis of recorded assets and liabilities. FAS No. 109 also requires that deferred tax assets be reduced by valuation allowances if it is more likely than not that some portion of the deferred tax asset will not be realized.

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 would adjust the related valuation allowances in the period that the change in circumstances occurs, along with a corresponding charge or credit to income. There were no valuation allowances as of December 31, 2004.

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. 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.

**Pensions and other postretirement benefits.** We account for our pension and postretirement benefit plans as required under FAS No. 87, Employers' Accounting for Pensions, and FAS No. 106, Employers' Accounting for Postretirement Benefits Other than Pensions. 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.

**Goodwill.** As required by FAS No. 142, Goodwill and Other Intangible Assets, each year we evaluate for goodwill impairment by comparing the fair value of each of our reporting units with its carrying value. If carrying value exceeds fair value, then a possible impairment of goodwill exists and requires further evaluation. We estimate the fair value of our reporting units using a combination of discounted cash flow analysis and market capitalization based on historical and projected financial information. We apply our best judgment in assessing the reasonableness of the financial projections and other estimates used to determine the fair value of each reporting unit.

## RECENTLY ISSUED ACCOUNTING STANDARDS

In November 2004, the Financial Accounting Standards Board (FASB) issued FAS No. 151, Inventory Costs, an Amendment of ARB No. 43, Chapter 4. FAS No. 151 requires the exclusion of certain costs from inventories and the allocation of fixed production overheads to inventories to be based on the normal capacity of the production facilities. The provisions of this Statement are effective for costs incurred after December 31, 2005. We are currently evaluating the effect of the adoption of this standard, however, we do not expect it will have a material effect on our consolidated results of operations or financial condition.

In December 2004, the FASB issued FAS No. 123R, Share-Based Payment, which is a revision of FAS No. 123, Accounting for Stock-Based Compensation, and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and its related implementation guidance. FAS No. 123R establishes standards for accounting for transactions in which an entity exchanges its equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. FAS No. 123R requires an entity to recognize the cost of employee services received in share-based payment transactions, thereby reflecting the economic consequences of those transactions in the financial statements. This Statement applies to all awards granted on or after July 1, 2005, and to awards modified, repurchased, or cancelled after that date. We will recognize compensation cost on a prospective basis beginning July 1, 2005, for the portion of outstanding awards for which the requisite service has not yet been rendered, based on the grant-date fair value of these awards calculated under FAS No. 123 for pro forma disclosures. We expect that adopting this Statement will not have a material effect on our 2005 results.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-1, Application of FASB Statement No. 109, Accounting for Income Taxes, to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004, which states that the FASB staff believes that the qualified production activities deduction provided by the American Jobs Creation Act of 2004 should be accounted for as a special deduction in accordance with FASB Statement No. 109. This Statement was effective upon issuance.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2, Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004, which states that the FASB staff believes that the lack of clarification of certain provisions within the Act and the timing of the enactment necessitate a practical exemption from the FAS 109 requirement to reflect in the period of enactment the effect of a new tax law. Accordingly, an enterprise is allowed time beyond the financial reporting period of enactment to evaluate the effect of the Act on its plan for reinvestment or repatriation of foreign earnings for purposes of applying FAS 109.

## 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 rate sensitivity.** 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, 2004 by approximately \$28.8 million and \$1.5 million, respectively. We manage our exchange risks primarily by sourcing our products in the same currency as our customer pays us. 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, 2004, contracts for the purpose of hedging cash flows were not significant.

**Interest Rate Sensitivity.** 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 industrial development debt, these financial instruments are reported at carrying values which approximate fair values.



We hold one interest rate swap agreement, which is used to hedge the fair market value on a portion of our 8.39% fixed rate long-term debt. At December 31, 2004, the swap agreement had a notional amount of \$20.0 million and a fair market value in favor of the bank of \$0.4 million. The swap will expire in 2012. The notional amount of the swap declines \$4.0 million per year beginning in 2008. A hypothetical increase of 10% in market interest rates would result in a decrease of approximately \$0.5 million in the fair value of the interest rate swap.

We have \$48.0 million of fixed rate debt which matures at various dates through 2012. 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 \$0.9 million, excluding the impact of outstanding hedge instruments. 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.

## Item 8. Financial Statements and Supplementary Data

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

Management of Mine Safety Appliances Company (the Company) 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, 2004. 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. Based on our assessment and those criteria, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2004.

Our management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

/s/ John T. Ryan III  
**John T. Ryan III**  
Chairman of the Board  
Chief Executive Officer

/s/ Dennis L. Zeitler  
**Dennis L. Zeitler**  
Vice President and Treasurer  
Chief Financial Officer

March 7, 2005

## Report of Independent Registered Public Accounting Firm

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

We have completed an integrated audit of Mine Safety Appliances Company's 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

#### Consolidated financial statements

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, cash flows, and changes in retained earnings and accumulated other comprehensive income present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries (the Company) at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes 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. We believe that our audits provide a reasonable basis for our opinion.

#### Internal control over financial reporting

Also, in our opinion, management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control - Integrated Framework* issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP  
**PricewaterhouseCoopers LLP**  
Pittsburgh, Pennsylvania  
March 7, 2005

## CONSOLIDATED STATEMENT OF INCOME

(In thousands, except per share amounts)

### Year Ended December 31

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net sales	\$ 852,509	\$ 696,473	\$ 564,426
Other income	<u>5,004</u>	<u>1,724</u>	<u>2,271</u>
	<u>857,513</u>	<u>698,197</u>	<u>566,697</u>
Costs and expenses			
Cost of products sold	512,089	422,273	344,847
Selling, general and administrative	204,799	180,060	149,730
Research and development	22,648	20,897	19,459
Interest	3,845	4,564	4,769
Currency exchange losses (gains)	<u>264</u>	<u>(3,356)</u>	<u>(191)</u>
	<u>743,645</u>	<u>624,438</u>	<u>518,614</u>
Income from continuing operations before income taxes	113,868	73,759	48,083
Provision for income taxes	<u>42,821</u>	<u>24,835</u>	<u>16,870</u>
Net income from continuing operations	71,047	48,924	31,213
Net income from discontinued operations	—	2,685	3,864
Gain on sale of discontinued operations – after tax	<u>—</u>	<u>13,658</u>	<u>—</u>
Net income	<u>\$ 71,047</u>	<u>\$ 65,267</u>	<u>\$ 35,077</u>
Basic earnings per common share:			
Continuing operations	\$ 1.91	\$ 1.33	\$ .85
Discontinued operations	<u>—</u>	<u>.45</u>	<u>.11</u>
Net income	<u>\$ 1.91</u>	<u>\$ 1.78</u>	<u>\$ .96</u>
Diluted earnings per common share:			
Continuing operations	\$ 1.86	\$ 1.31	\$ .85
Discontinued operations	<u>—</u>	<u>.44</u>	<u>.10</u>
Net income	<u>\$ 1.86</u>	<u>\$ 1.75</u>	<u>\$ .95</u>

See notes to consolidated financial statements.

## CONSOLIDATED BALANCE SHEET

(In thousands, except share amounts)

<b>December 31</b>		<u>2004</u>	<u>2003</u>
<b>Assets</b>			
Current Assets	Cash and cash equivalents	\$ 76,545	\$ 73,244
	Trade receivables, less allowance for doubtful accounts of \$7,548 and \$6,418	161,584	129,900
	Inventories	124,846	90,103
	Deferred tax assets	19,377	17,890
	Prepaid expenses and other current assets	15,308	10,794
	Assets held for sale	<u>—</u>	<u>2,311</u>
	Total current assets	<u>397,660</u>	<u>324,242</u>
Property	Land	5,122	4,642
	Buildings	83,530	80,044
	Machinery and equipment	279,607	269,739
	Construction in progress	<u>6,182</u>	<u>5,521</u>
	Total	374,441	359,946
	Less accumulated depreciation	<u>(250,725)</u>	<u>(239,386)</u>
	Net property	123,716	120,560
Other Assets	Prepaid pension cost	131,496	121,290
	Deferred tax assets	21,513	23,047
	Goodwill	49,495	44,810
	Other noncurrent assets	<u>10,230</u>	<u>9,936</u>
	Total	<u>\$ 734,110</u>	<u>\$ 643,885</u>
<b>Liabilities</b>			
Current Liabilities	Notes payable and current portion of long-term debt	\$ 6,378	\$ 5,666
	Accounts payable	40,705	40,029
	Employees' compensation	19,284	15,486
	Insurance and product liability	14,926	13,518
	Taxes on income	3,790	4,976
	Other current liabilities	<u>41,984</u>	<u>35,040</u>
	Total current liabilities	<u>127,067</u>	<u>114,715</u>
Long-Term Debt		<u>54,463</u>	<u>59,915</u>
Other Liabilities	Pensions and other employee benefits	83,628	74,808
	Deferred tax liabilities	76,704	70,845
	Other noncurrent liabilities	<u>14,637</u>	<u>15,744</u>
	Total other liabilities	<u>174,969</u>	<u>161,397</u>
<b>Shareholders' Equity</b>			
	Preferred stock, 4 1/2% cumulative, \$50 par value (callable at \$52.50)	3,569	3,569
	Common stock, no par value (shares outstanding: 2004—37,341,386 2003—36,927,984)	39,248	31,187
	Stock compensation trust	(16,436)	(19,385)
	Treasury shares, at cost	(143,295)	(137,173)
	Deferred stock compensation	(1,247)	(993)
	Accumulated other comprehensive income	1,793	(6,037)
	Earnings retained in the business	<u>493,979</u>	<u>436,690</u>
	Total shareholders' equity	<u>377,611</u>	<u>307,858</u>
	Total	<u>\$ 734,110</u>	<u>\$ 643,885</u>

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands)

Year Ended December 31

	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Operating Activities</b>			
Net income	\$ 71,047	\$ 65,267	\$ 35,077
Net income from discontinued operations	—	(2,685)	(3,864)
Gain on the sale of discontinued operations	<u>—</u>	<u>(13,658)</u>	<u>—</u>
Net income from continuing operations	71,047	48,924	31,213
Depreciation and amortization	25,496	23,208	21,525
Pensions	(7,188)	(8,845)	(13,125)
Net gain on sale of investments and assets	63	(2,332)	(35)
Deferred income taxes	7,106	4,922	4,765
Receivables	(23,519)	(27,039)	(3,008)
Inventories	(27,422)	(3,162)	5,518
Accounts payable and accrued liabilities	5,070	1,253	(3,616)
Other assets and liabilities	(5,549)	(1,864)	(1,775)
Tax benefit related to stock plans	4,946	893	539
Other—including currency exchange adjustments	<u>1,731</u>	<u>(3,447)</u>	<u>1,043</u>
Cash flow from continuing operations	51,781	32,511	43,044
Cash flow from discontinued operations	<u>2,061</u>	<u>8,029</u>	<u>6,412</u>
<b>Cash Flow From Operating Activities</b>	<u>53,842</u>	<u>40,540</u>	<u>49,456</u>
<b>Investing Activities</b>			
Property additions	(27,330)	(19,628)	(20,072)
Property disposals	883	23,521	649
Proceeds from sale of discontinued operations	—	63,042	—
Acquisitions, net of cash acquired, and other investing	<u>(6,391)</u>	<u>(279)</u>	<u>(14,667)</u>
<b>Cash Flow From Investing Activities</b>	<u>(32,838)</u>	<u>66,656</u>	<u>(34,090)</u>
<b>Financing Activities</b>			
Additions to long-term debt	18	245	677
Reductions of long-term debt	(5,042)	(4,902)	(7,089)
Changes in notes payable and short-term debt	566	(9,146)	5,578
Cash dividends and special distributions	(13,758)	(63,270)	(7,961)
Company stock purchases	(6,122)	(2,309)	(846)
Company stock sales	<u>4,911</u>	<u>3,036</u>	<u>2,508</u>
<b>Cash Flow From Financing Activities</b>	<u>(19,427)</u>	<u>(76,346)</u>	<u>(7,133)</u>
Effect of exchange rate changes on cash	<u>1,724</u>	<u>5,917</u>	<u>1,543</u>
Increase in cash and cash equivalents	3,301	36,767	9,776
Beginning cash and cash equivalents	<u>73,244</u>	<u>36,477</u>	<u>26,701</u>
Ending cash and cash equivalents	<u>\$ 76,545</u>	<u>\$ 73,244</u>	<u>\$ 36,477</u>
Supplemental cash flow information:			
Interest payments	\$ 4,632	\$ 5,025	\$ 5,890
Income tax payments	37,329	35,743	18,546

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF CHANGES IN RETAINED EARNINGS AND ACCUMULATED OTHER COMPREHENSIVE INCOME

<i>(In thousands)</i>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Income</u>	<u>Comprehensive Income</u>
Balances January 1, 2002	\$ 407,577	\$ (26,216)	
Net income	35,077	-	\$ 35,077
Cumulative translation adjustments	-	5,772	5,772
Minimum pension liability adjustments (a)	-	(57)	(57)
Comprehensive income	-	-	<u>\$ 40,792</u>
Common dividends	(7,914)	-	
Preferred dividends	<u>(47)</u>	<u>-</u>	
Balances December 31, 2002	434,693	(20,501)	
Net income	65,267	-	\$ 65,267
Cumulative translation adjustments	-	14,699	14,699
Minimum pension liability adjustments (a)	-	(235)	(235)
Comprehensive income	-	-	<u>\$ 79,731</u>
Special distribution to common shareholders	(53,799)	-	
Common dividends	(9,425)	-	
Preferred dividends	<u>(46)</u>	<u>-</u>	
Balances December 31, 2003	436,690	(6,037)	
Net income	71,047	-	\$ 71,047
Cumulative translation adjustments	-	8,904	8,904
Minimum pension liability adjustments (a)	-	(1,074)	(1,074)
Comprehensive income	-	-	<u>\$ 78,877</u>
Common dividends	(13,714)	-	
Preferred dividends	<u>(44)</u>	<u>-</u>	
Balances December 31, 2004	<u>\$ 493,979</u>	<u>\$ 1,793</u>	

(a) -- Charges to minimum pension liability adjustments in 2004, 2003 and 2002 are net of tax benefits of \$383, \$157, and \$38, respectively.

Components of accumulated other comprehensive income are as follows:

<i>(In thousands)</i>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Cumulative translation adjustments	\$ 4,010	\$ (4,894)	\$ (19,593)
Minimum pension liability adjustments	<u>(2,217)</u>	<u>(1,143)</u>	<u>(908)</u>
Accumulated other comprehensive income	<u>1,793</u>	<u>(6,037)</u>	<u>(20,501)</u>

See notes to consolidated financial statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### Note 1 – Significant Accounting Policies

**Use of Estimates**—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Principles of Consolidation**—The consolidated financial statements include the accounts of the company and all subsidiaries. Intercompany accounts and transactions are eliminated. Certain prior year amounts have been reclassified to conform with the current year presentation. Depreciation and amortization expense that was previously reported as a separate line in the consolidated statement of income is now reported in cost of products sold and operating expenses.

**Currency Translation**—The functional currency of all significant non-U.S. subsidiaries is the local currency. Assets and liabilities of those 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.

**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. 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 income and the cost and related depreciation are removed from the accounts.

**Goodwill and Other Intangible Assets**—Effective January 1, 2002, we adopted FAS No. 142, Goodwill and Other Intangible Assets. Under this standard, goodwill and intangible assets with indefinite lives are not amortized, but are subject to impairment write-down tests that must be performed at least annually. Other intangible assets are amortized on a straight-line basis over their useful lives.

We tested the goodwill attributable to each of our reporting units for impairment as of January 1, 2002, and concluded that none of our goodwill was impaired. For this purpose, we consider our reportable business segments to be our reporting units. We test the goodwill of each of our reporting units for impairment at least annually. Fair value is estimated using discounted cash flow methodologies and market comparable information.

**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. 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 Plans**—We apply the intrinsic value-based method in accordance with Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees. Accordingly, no compensation cost is recognized for stock option grants. Compensation cost for restricted stock awards is measured at the market value of the shares when awarded. Unearned stock compensation is reported in shareholders' equity and is charged to income over the restriction period.

If we had elected to recognize compensation cost based on the fair value of the options at the grant date as prescribed by FAS 123, Accounting for Stock-Based Compensation, net income and earnings per share would have been reduced to the pro forma amounts shown below:

	<i>(In thousands)</i>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income as reported	\$ 71,047	\$ 65,267	\$ 35,077
Fair value of stock options granted, net of tax	<u>(1,781)</u>	<u>(1,374)</u>	<u>(1,717)</u>
Pro forma net income	<u>69,266</u>	<u>63,893</u>	<u>33,360</u>
Basic earnings per share:			
As reported	\$ 1.91	\$ 1.78	\$ .96
Pro forma	1.87	1.74	.91
Diluted earnings per share:			
As reported	\$ 1.86	\$ 1.75	\$ .95
Pro forma	1.82	1.71	.90

The fair value of the options granted was estimated at the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2004, 2003, and 2002, respectively; risk-free interest rate of 4.1%, 4.0%, and 5.3%; dividend yield of 2.0%, 2.1%, and 2.0%; expected option life of 9.9 years, 9.9 years, and 9.9 years; and expected volatility factor of 29%, 23%, and 23%.

**Derivative Instruments**—We use derivative instruments to dampen the effects of changes in currency exchange rates and to achieve a targeted mix of fixed and floating interest rates on outstanding debt. 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 in the current period.

## Note 2 – Subsequent Event

On January 11, 2005, we repurchased 1,042,000 shares of common stock from a major shareholder for treasury at a cost of \$48.3 million (\$46.36 per share). This transaction represented approximately 2.8% of our shares outstanding on December 31, 2004, and reduced shares outstanding to approximately 36.3 million shares.

## Note 3 – Inventories

	<i>(In thousands)</i>	
	<u>2004</u>	<u>2003</u>
Finished products	\$ 50,728	\$ 34,660
Work in process	28,049	17,476
Raw materials and supplies	<u>46,069</u>	<u>37,967</u>
Total LIFO inventories	124,846	90,103
Excess of FIFO costs over LIFO costs	<u>38,653</u>	<u>39,083</u>
Total FIFO inventories	<u>163,499</u>	<u>129,186</u>

Inventories stated on the LIFO basis represent 44% and 40% of the total inventories at December 31, 2004 and 2003, respectively.

Reductions in certain inventory quantities during 2004 resulted in liquidations of LIFO inventories carried at lower costs prevailing in prior years. The effect of these liquidations reduced cost of sales by approximately \$0.3 million in 2004, and increased net income by approximately \$0.2 million.

## Note 4 – Capital Stock

- Common stock, no par value - 180,000,000 shares authorized
- Second cumulative preferred voting stock, \$10 par value - 1,000,000 shares authorized; none issued
- 4½% cumulative preferred nonvoting stock, \$50 par value - 100,000 shares authorized; 71,373 shares issued and 52,736 shares (\$1.7 million) held in treasury; treasury share purchases in 2004 and 2003 of 1,182 shares, \$56, and 1,241 shares, \$61, respectively (share purchase dollars in thousands)

Common stock activity is summarized as follows:

	Shares			Dollars (In thousands)		
	Shares Issued	Stock Compensation Trust	Shares in Treasury	Shares Issued	Stock Compensation Trust	Treasury Cost
Balances January 1, 2002	20,483,051	(1,415,373)	(6,966,951)	\$25,386	\$ (22,179)	\$(132,352)
Restricted stock awards	23,198	–	–	915	–	–
Stock options exercised	73,860	30,744	–	1,786	482	–
Tax benefit related to stock plans	–	–	–	539	–	–
Treasury shares purchased	–	–	(21,500)	–	–	(846)
Balances December 31, 2002	20,580,109	(1,384,629)	(6,988,451)	28,626	(21,697)	(133,198)
Restricted stock awards	–	27,235	–	517	427	–
Restricted stock awards forfeited	–	–	(1,000)	–	–	(37)
Stock options exercised	–	120,317	–	1,151	1,885	–
Tax benefit related to stock plans	–	–	–	893	–	–
Treasury shares purchased	–	–	(44,253)	–	–	(2,248)
Balances December 31, 2003	20,580,109	(1,237,077)	(7,033,704)	31,187	(19,385)	(135,483)
3-for-1 stock split (January 2004)	41,160,218	(2,474,154)	(14,067,408)	–	–	–
Adjusted balances December 31, 2003	61,740,327	(3,711,231)	(21,101,112)	31,187	(19,385)	(135,483)
Restricted stock awards	–	45,098	–	918	236	–
Stock options exercised	–	519,911	–	2,197	2,713	–
Tax benefit related to stock plans	–	–	–	4,946	–	–
Treasury shares purchased	–	–	(151,607)	–	–	(6,066)
Balances December 31, 2004	61,740,327	(3,146,222)	(21,252,719)	39,248	(16,436)	(141,549)

The Mine Safety Appliances Company Stock Compensation Trust was established to fund certain benefit plans, including employee and non-employee directors stock options and awards. 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 shares issued.

We have a Shareholder Rights Plan under which each outstanding share of common stock is granted one-ninth of a preferred share purchase right. The rights are exercisable for a fraction of a share of preferred stock, only if a person or group acquires or commences a tender offer for 15% or more of the company's common stock. In the event a person or group acquires 15% or more of the outstanding common stock, each right not owned by that person or group will entitle the holder to purchase that number of shares of common stock having a value equal to twice the \$225 exercise price. The Board of Directors may redeem the rights for \$.01 per right at any time until ten days after the announcement that a 15% position has been acquired. The rights expire on February 21, 2007.

On January 28, 2004, a three-for-one stock split of both the issued and authorized common stock was distributed to shareholders of record on January 16, 2004. Share and per share information in this report has been adjusted to reflect the split.

## Note 5 – Segment Information

We are organized into three geographic operating segments: North America, Europe, and International. We are engaged in the manufacture and sale of safety equipment, including respiratory protective equipment, head protection, eye and face protection, hearing protectors, safety clothing, industrial emergency care products, mining safety equipment, thermal imaging cameras, and monitoring instruments. Reportable segment information is presented in the following table:

<i>(In thousands)</i>	North America	Europe	International	Reconciling Items	Consolidated Totals
<b>2004</b>					
Sales to external customers	\$ 564,568	\$ 173,012	\$ 114,929	\$ –	\$ 852,509
Intercompany sales	29,654	57,453	3,883	(90,990)	–
Net income from continuing operations	55,616	6,747	8,485	199	71,047
Total assets	469,555	221,447	80,574	(37,466)	734,110
Interest income	1,613	187	387	527	2,714
Interest expense	3,622	61	162	–	3,845
Noncash items:					
Depreciation and amortization	18,682	5,212	1,602	–	25,496
Pension income (expense)	11,687	(4,002)	(529)	32	7,188
Equity in earnings of affiliates	–	–	56	–	56
Income tax provision	33,910	4,937	3,689	285	42,821
Investments in affiliates	366	–	209	–	575
Property additions	16,238	6,440	4,652	–	27,330
Fixed assets	90,121	23,505	10,090	–	123,716
<b>2003</b>					
Sales to external customers	452,567	146,162	97,744	–	696,473
Intercompany sales	24,215	49,499	3,061	(76,775)	–
Net income from continuing operations	39,131	2,795	6,349	649	48,924
Net income from discontinued operations	2,685	–	–	–	2,685
Gain on sale of discontinued operations	13,658	–	–	–	13,658
Total assets continuing operations	419,472	190,179	68,611	(36,688)	641,574
Assets held for sale	2,311	–	–	–	2,311
Interest income	576	115	278	102	1,071
Interest expense	4,357	123	84	–	4,564
Noncash items:					
Depreciation and amortization	17,071	4,972	1,144	21	23,208
Pension income (expense)	14,999	(3,847)	(307)	–	10,845
Equity in earnings of affiliates	–	–	(5)	–	(5)
Income tax provision	18,930	2,069	2,985	851	24,835
Investments in affiliates	366	–	153	–	519
Property additions	13,221	3,976	2,423	8	19,628
Fixed assets	93,296	19,918	7,319	27	120,560
<b>2002</b>					
Sales to external customers	369,728	122,377	72,206	115	564,426
Intercompany sales	21,472	35,733	3,116	(60,321)	–
Net income from continuing operations	25,933	2,519	2,372	389	31,213
Net income from discontinued operations	3,864	–	–	–	3,864
Total assets continuing operations	363,999	145,663	50,364	(25,323)	534,703
Assets held for sale	45,062	–	–	–	45,062
Interest income	424	142	281	106	953
Interest expense	4,501	67	201	–	4,769
Noncash items:					
Depreciation and amortization	16,012	4,446	1,047	20	21,525
Pension income (expense)	16,360	(3,123)	(112)	–	13,125
Equity in earnings of affiliates	–	–	23	–	23
Income tax provision	13,884	1,056	1,647	283	16,870
Investments in affiliates	1,374	–	158	–	1,532
Property additions	15,538	3,698	831	5	20,072
Fixed assets	100,213	25,329	4,824	41	130,407

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

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

	<i>(In thousands)</i>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
External sales			
United States	\$536,486	\$438,939	\$356,434
Germany	70,281	57,973	50,925
Other	<u>245,742</u>	<u>199,561</u>	<u>157,067</u>
 Total external sales	 <u>852,509</u>	 <u>696,473</u>	 <u>564,426</u>

### Note 6 – Earnings per Share

Basic earnings per share is computed on the weighted average number of common shares outstanding during the period. Diluted earnings per share includes the effect of the weighted average stock options outstanding during the period, using the treasury stock method. Antidilutive options are not considered in computing diluted earnings per share.

	<i>(In thousands)</i>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income from continuing operations	\$ 71,047	\$ 48,924	\$ 31,213
Preferred stock dividends	<u>(44)</u>	<u>(46)</u>	<u>(47)</u>
Income available to common shareholders	<u>71,003</u>	<u>48,878</u>	<u>31,166</u>
 Basic shares outstanding	 37,111	 36,730	 36,512
Stock options	<u>1,019</u>	<u>534</u>	<u>373</u>
Diluted shares outstanding	<u>38,130</u>	<u>37,264</u>	<u>36,885</u>
Antidilutive stock options	<u>—</u>	<u>—</u>	<u>552</u>

### Note 7 – Income Taxes

The U.S. and non-U.S. components of income before income taxes and provisions for income taxes are summarized as follows:

	<i>(In thousands)</i>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Income From Continuing Operations Before Income Taxes</b>			
U.S. income	\$ 84,896	\$ 64,289	\$ 47,850
Non-U.S. income	28,229	15,180	10,190
Currency translation gains (losses)	647	28	(317)
Eliminations	<u>96</u>	<u>(5,738)</u>	<u>(9,640)</u>
<b>Income Before Income Taxes</b>	<u>113,868</u>	<u>73,759</u>	<u>48,083</u>
<b>Provision For Income Taxes</b>			
Current			
Federal	24,016	9,608	8,115
State	4,566	2,526	610
Non-U.S.	<u>7,133</u>	<u>7,779</u>	<u>3,380</u>
Total current provision	<u>35,715</u>	<u>19,913</u>	<u>12,105</u>
Deferred			
Federal	3,403	5,251	4,101
State	1,025	937	936
Non-U.S.	<u>2,678</u>	<u>(1,266)</u>	<u>(272)</u>
Total deferred provision	<u>7,106</u>	<u>4,922</u>	<u>4,765</u>
<b>Provision for Income Taxes</b>	<u>42,821</u>	<u>24,835</u>	<u>16,870</u>

The following is a reconciliation of the U.S. Federal income tax rates to the effective tax rate for continuing operations:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
U.S. federal income tax rate	35.0%	35.0%	35.0%
State income taxes—U.S.	3.3	3.0	2.9
Taxes on non-U.S. income	(.1)	—	—
Research and development credits	(.9)	(1.1)	(.2)
Adjustment of prior years income taxes	1.0	(1.1)	(4.4)
Valuation allowances	(.5)	(1.6)	3.2
Other	(.2)	(.5)	(1.4)
Effective income tax rate	<u>37.6%</u>	<u>33.7%</u>	<u>35.1%</u>

	<i>(In thousands)</i>	
	<u>2004</u>	<u>2003</u>
Deferred tax assets		
Postretirement benefits	\$ 5,871	\$ 5,607
Inventory reserves	5,814	6,094
Vacation allowances	986	1,184
Net operating losses	5,568	7,407
Post employment benefits	2,246	2,156
Foreign tax credit carryforwards (expiring between 2009 and 2014)	1,321	1,901
Liability insurance	3,579	3,134
Basis of capital assets	5,745	6,413
Intangibles	1,248	1,409
Warranties	2,637	3,528
Other	<u>5,925</u>	<u>3,739</u>
Total deferred tax assets	40,940	42,572
Valuation allowance	<u>—</u>	<u>(587)</u>
Net deferred tax assets	<u>40,940</u>	<u>41,985</u>
Deferred tax liabilities		
Property, plant and equipment	(21,074)	(20,046)
Pension	(49,481)	(44,761)
Other	<u>(6,199)</u>	<u>(7,086)</u>
Total deferred tax liabilities	<u>(76,754)</u>	<u>(71,893)</u>
Net deferred taxes	<u>(35,814)</u>	<u>(29,908)</u>

During 2004 and 2003, we released \$0.6 million and \$1.2 million, respectively, of foreign tax credit carry forward valuation allowances based on the implementation of various tax planning strategies and an improved outlook for utilization of these credits in future years.

Net operating loss carryforwards of approximately \$13.5 million have no expiration date.

In October 2004, the President signed the American Jobs Creation Act of 2004, which provides a deduction for income from qualified domestic production activities, which will be phased in from 2005 through 2010. The act also provides for a two-year phase-out of the existing extra-territorial income exclusion for foreign sales that was viewed to be inconsistent with international trade protocols by the European Union. Based on current earnings levels, we expect that the net effect of the phase-out of the extra-territorial income exclusion and the phase-in of the new deduction will result in a decrease in our effective tax rate for 2005 and 2006 of approximately 0.5 percentage points and approximately 1 percentage point thereafter.

Under the guidance in FASB Staff Position No. FAS 109-1, the new deduction will be treated as a “special deduction” as described in FAS No. 109, Accounting for Income Taxes. Therefore, the special deduction has no effect on deferred tax assets and liabilities existing as of the enactment date. The impact of this deduction will be reported in the period in which the deduction is claimed on our tax return.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$112.8 million as of December 31, 2004. These earnings are considered to be reinvested for an indefinite period of time. It is not practicable to determine the deferred tax liability on these undistributed earnings. We are in the process of evaluating the impact of the provisions of the American Jobs Creation Act of 2004 dealing with the limited opportunity in 2005 to repatriate some of

these undistributed earnings at a U.S. tax cost that may be lower than the normal tax cost on such distributions. We are awaiting final guidance from the Internal Revenue Service (“IRS”) to complete that evaluation, which may result in our decision to remit a portion of these undistributed earnings in 2005; however, we cannot currently estimate the amount of such distribution that may be reasonably possible. The range of possible amounts that we are considering for repatriation under this provision is between zero and approximately \$50.0 million. The related potential range of income tax payable on amounts considered for repatriation is between zero and approximately \$3 million.

The determination of annual income tax expense takes into consideration amounts which may be needed to cover exposures for open tax years. Our federal income tax returns for the years 1995 through 2001 remain under audit with the only open issue relating to the calculation of research and development tax credits. We believe that we have made adequate provision for income taxes and interest which may become payable or receivable for the years not yet settled. We do not expect any material adverse impact on earnings to result from the resolution of matters related to open tax years and we are optimistic that we can reach resolution with the IRS during 2005. To the extent that we are successful in sustaining our position that no adjustment should be made to research and development credits claimed over the period covered by the examination, tax reserves previously established based upon the examining agent's disallowance of the claimed credits would be released, reducing tax expense in the period of settlement. Furthermore, such a final settlement would have a beneficial impact on interest costs.

## Note 8 – Stock Plans

The 1998 Management Share Incentive Plan provides for grants of restricted stock awards and stock options to eligible key employees through March 2008. The 1990 Non-Employee Directors’ Stock Option Plan, as amended April 1, 2001, provides for annual grants of stock options and restricted stock awards to eligible directors. As of December 31, 2004, there were 1,361,153 shares and 143,520 shares, respectively, reserved for future grants under these plans.

Restricted stock awards are granted without payment to the company in consideration of services to be performed in the ensuing three years (four years for employee awards prior to 2002). Restricted stock awards of 45,098 shares (fair value of \$1.2 million), 81,705 shares (fair value of \$0.9 million), and 69,594 shares (fair value of \$0.9 million) were granted in 2004, 2003, and 2002, respectively. Restricted stock awards expense charged to operations was approximately \$0.9 million in 2004, \$0.7 million in 2003, and \$0.8 million in 2002.

Stock options are generally granted at market value option prices and expire after ten years (limited instances of option prices in excess of market value and expiration after five years). Stock options granted in 2004 and 2003 are exercisable beginning one year after the grant date. Options granted prior to 2003 were exercisable six months after the grant date.

The weighted average fair value of options granted was \$8.63 per share in 2004, \$3.33 per share in 2003, and \$4.38 per share in 2002.

During November 2003, we made a special distribution of \$1.46 per common share to shareholders of record on November 14, 2003. For options outstanding as of November 12, 2003, the ex-distribution date, option shares and exercise prices were adjusted to reflect the change in intrinsic value that resulted from the special distribution. The adjustments were based on the ratio of the change in the market price of common stock that occurred as a result of the special distribution.

The following table summarizes information about options outstanding and exercisable at December 31, 2004:

	Range of Exercise		Weighted-Average	
	Price per Share	Shares	Exercise Price	Remaining Life
Outstanding	\$5.88 - \$9.03	478,828	\$ 7.35	5.7 years
	\$10.65 - \$13.57	1,016,811	11.29	7.7
	\$25.07 - \$28.06	297,065	25.21	9.1
	\$5.88 - \$28.06	1,792,704	12.55	7.4
Exercisable	\$5.88 - \$13.57	1,495,639	10.03	7.0

A summary of option activity under the two plans follows:

	<u>Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Exercisable at Year- end</u>
Outstanding January 1, 2002	1,240,461	\$ 7.52	
Granted	552,165	13.17	
Exercised	<u>(313,812)</u>	<u>7.23</u>	
Outstanding December 31, 2002	1,478,814	9.69	1,478,814
Granted	744,630	11.58	
Exercised before adjustment	(259,752)	8.16	
Adjustment for special distribution	153,057	(.77)	
Exercised after adjustment	<u>(101,199)</u>	<u>9.06</u>	
Outstanding December 31, 2003	2,015,550	9.88	1,270,920
Granted	297,065	25.21	
Exercised	<u>(519,911)</u>	<u>9.45</u>	
Outstanding December 31, 2004	<u>1,792,704</u>	<u>12.55</u>	1,495,639

### Note 9 – Accounts Receivable Securitization

In August 2004, we terminated our securitization arrangement with a financial institution under which Mine Safety Funding Corporation, a consolidated wholly-owned bankruptcy remote subsidiary of the company, could sell up to \$30.0 million of eligible accounts receivable to a multi-seller asset-backed commercial paper issuer. We terminated this arrangement because we no longer required the source of funding that the securitization provided.

At December 31, 2003, \$15.0 million of securitized accounts receivable had been removed from our balance sheet under this program and our retained interest in accounts receivable available for securitization was \$40.0 million.

### Note 10 – Long-Term Debt

	<i>(In thousands)</i>	
	<u>2004</u>	<u>2003</u>
U.S.		
Industrial development debt issues payable through 2022, 1.34%	\$10,750	\$ 10,750
Series B Senior Notes payable through 2006, 7.69%	8,000	12,000
Senior Notes payable through 2012, 8.39%	39,585	40,000
Other	100	150
International		
Various notes payable through 2006, 9.63% to 19.0%	<u>524</u>	<u>1,853</u>
Total	58,959	64,753
Amounts due within one year	<u>4,496</u>	<u>4,838</u>
Long-term debt	<u>54,463</u>	<u>59,915</u>

Approximate maturities of these obligations over the next five years are \$4.5 million in 2005, \$8.1 million in 2006, \$7.9 million in 2008, and \$9.7 million in 2009, and \$28.8 million thereafter. Some debt agreements require the company to maintain certain financial ratios and minimum net worth and contain restrictions on the total amount of debt. We were in compliance with our debt covenants as of December 31, 2004.

### Note 11 – Pensions and Other Postretirement Benefits

We maintain various defined benefit and defined contribution plans covering the majority of our employees. The 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.

A minimum liability is recognized for unfunded defined benefit plans for which the accumulated benefit obligation exceeds accrued pension costs. The amount of the minimum liability in excess of unrecognized prior service cost, net of tax benefit, is recorded as a reduction in shareholders' equity. Non-contributory plan benefits are generally based on years of service and employees' compensation during the last years of employment. Benefits are paid from funds previously provided to trustees or are paid by the company and charged to the book reserves.

We provide certain health care benefits and limited life insurance for retired employees and their eligible dependents.

We use a January 1 measurement date for our plans. Information pertaining to defined benefit pension plans and other postretirement benefits plans is provided in the following table.

(In thousands)

	Pension Benefits		Other Benefits	
	2004	2003	2004	2003
<b>Change in Benefit Obligations</b>				
Benefit obligations at January 1	\$ 244,340	\$ 218,010	\$ 22,873	\$ 20,677
Service cost	7,383	6,802	513	423
Interest cost	14,661	14,036	1,505	1,395
Employee contributions	698	223	–	–
Plan amendments	68	–	–	–
Actuarial losses	11,675	10,780	3,589	2,509
Benefits paid	(13,701)	(13,178)	(2,093)	(2,131)
Curtailments	(568)	(2,143)	–	–
Currency translation effects	5,489	9,810	–	–
Benefit obligations at December 31	270,045	244,340	26,387	22,873
<b>Change in Plan Assets</b>				
Fair value of plan assets at January 1	356,477	269,117	–	–
Actual return on plan assets	38,570	97,710	–	–
Employer contributions	3,865	3,822	143	231
Employee contributions	698	223	–	–
Benefits paid	(13,701)	(13,178)	(2,093)	(2,131)
Section 420 transfer to retiree medical plan	(1,950)	(1,900)	1,950	1,900
Reimbursement of German benefits	(1,881)	(1,759)	–	–
Currency translation effects	1,117	2,442	–	–
Fair value of plan assets at December 31	383,195	356,477	–	–
<b>Funded Status</b>				
Funded status at December 31	113,150	112,137	(26,387)	(22,873)
Unrecognized transition gains	325	342	–	–
Unrecognized prior service cost	1,103	1,323	(1,682)	(1,910)
Unrecognized net actuarial (gains) losses	(44,093)	(46,909)	11,447	8,686
Prepaid (accrued) benefit cost	70,485	66,893	(16,622)	(16,097)
<b>Amounts Recognized in the Balance Sheet</b>				
Prepaid benefit cost	131,496	121,290	–	–
Accrued benefit liability	(64,659)	(56,785)	(16,622)	(16,097)
Intangible asset	412	524	–	–
Minimum pension liability adjustments	3,236	1,864	–	–
Prepaid (accrued) benefit cost	70,485	66,893	(16,622)	(16,097)
<b>Accumulated Benefit Obligation for all Defined Benefit Plans</b>	222,297	202,856	–	–

(In thousands)

	Pension Benefits			Other Benefits		
	2004	2003	2002	2004	2003	2002
<b>Components of Net Periodic Benefit Cost (Credit)</b>						
Service cost	\$ 7,383	\$ 6,802	\$ 5,378	\$ 513	\$ 423	\$ 392
Interest cost	14,661	14,036	12,917	1,505	1,395	1,404
Expected return on plan assets	(29,123)	(27,785)	(27,332)	–	–	–
Amortization of transition amounts	28	(509)	(592)	–	–	–
Amortization of prior service cost	299	310	298	(228)	(228)	(138)
Recognized net actuarial (gains) losses	(661)	(1,677)	(3,794)	828	590	552
Settlement loss	225	–	–	–	–	–
Curtailement gain	–	(2,022)	–	–	–	–
Net periodic benefit (credit) cost	(7,188)	(10,845)	(13,125)	2,618	2,180	2,210



	<u>Pension Benefits</u>		<u>Other Benefits</u>	
	<u>2004</u>	<u>2003</u>	<u>2004</u>	<u>2003</u>
<b>Assumptions used to determine benefit obligations</b>				
Discount rate	5.8%	6.1%	6.0%	6.3%
Rate of compensation increase	3.4%	3.5%	—	—
<b>Assumptions used to determine net periodic benefit cost</b>				
Discount rate	6.1%	6.3%	6.3%	6.5%
Expected return on plan assets	8.5%	8.5%	—	—
Rate of compensation increases	3.5%	3.5%	—	—

The expected return on assets for the 2004 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.

Asset Category	<b>Plan Assets at</b>	
	<b>December 31</b>	
	<u>2004</u>	<u>2003</u>
Equity securities	75.5%	79.2%
Debt securities	22.0%	15.3%
Real estate	0.2%	0.3%
Cash/other	<u>2.3%</u>	<u>5.2%</u>
Total	100.0%	100.0%

Investment policies 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. No target asset allocations are set forth in the Investment Policy.

We expect to make net contributions of \$1.6 million to our pension plans in 2005.

For measurement purposes, a 7.5% increase in the costs of covered health care benefits was assumed for the year 2004, decreasing by .5% for each successive year to 4% in 2011 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 \$0.2 million, respectively.

Expense for defined contribution pension plans was \$3.8 million in 2004, \$3.4 million in 2003, and \$3.0 million in 2002.

On December 31, 2003, the U.S. defined benefit pension plan owned 2,533,500 shares (market value \$67.1 million) of our common stock. During 2004, the pension plan sold all shares of our common stock. During 2004 and 2003, the pension plan received dividends of approximately \$0.2 million and \$4.5 million, respectively, on these shares.

The estimated pension benefits to be paid under our defined benefit pension plans during the next five years are \$13.2 million in 2005, \$13.1 million in 2006, \$13.3 million in 2007, \$13.7 million in 2008, \$14.1 million in 2009, and are expected to aggregate \$83.2 million for the five years thereafter. The estimated other postretirement benefits to be paid during the next five years are \$1.7 million in 2005, \$1.6 million in 2006, \$1.6 million in 2007, \$1.6 million in 2008, \$1.6 million in 2009, and are expected to aggregate \$9.1 million for the five years thereafter.

In December 2003, Congress enacted the Medicare Prescription Drug, Improvement and Modernization Act of 2003. The act introduces a prescription drug benefit under Medicare that provides several options for Medicare eligible participants and employers, including a federal subsidy payable to companies that elect to provide a retiree prescription drug benefit that is at least actuarially equivalent to Medicare Part D. The act did not have any effect on our postretirement benefit costs because our plans generally do not provide medical benefits to Medicare eligible retirees.

## Note 12 – Other Income

	<i>(In thousands)</i>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Interest	\$ 2,714	\$ 1,071	\$ 953
Rent	-	532	710
Dividends	610	1,048	725
Dispositions of assets	1,008	(826)	(864)
Other, net	<u>672</u>	<u>(101)</u>	<u>747</u>
Total	<u>5,004</u>	<u>1,724</u>	<u>2,271</u>

## Note 13 – Leases

We lease office space, manufacturing and warehouse facilities, automobiles and other equipment under operating lease arrangements. Rent expense was \$9.9 million in 2004, \$9.1 million in 2003, and \$6.9 million in 2002. Minimum rental commitments under noncancelable leases are \$6.4 million in 2005, \$4.8 million in 2006, \$3.9 million in 2007, \$3.2 million in 2008, and \$3.3 million in 2009, and \$7.0 million thereafter.

## Note 14 – Goodwill and Intangible Assets

During 2002, we adopted FAS No. 142, Goodwill and Other Intangible Assets. Under this standard, goodwill and other intangible assets with indefinite lives are not amortized, but are subject to impairment tests that must be performed at least annually. Transitional impairment tests performed as of January 1, 2002 indicated that no goodwill impairment existed and as a result we did not recognize a transitional impairment loss. Annual goodwill impairment tests performed during the fourth quarters of 2003 and 2004 also indicated that no goodwill impairment existed and as a result we have not recognized an impairment loss.

Changes in goodwill and intangible assets, net of accumulated amortization, during the year ended December 31, 2004 were as follows:

	<i>(In thousands)</i>	
	<b>Goodwill</b>	<b>Intangibles</b>
Net balances at January 1, 2004	\$ 44,810	\$ 3,307
Goodwill acquired	3,504	-
Intangibles acquired	-	-
Amortization expense	-	(702)
Currency translation and other	<u>1,181</u>	<u>-</u>
Net balances at December 31, 2004	<u>49,495</u>	<u>2,605</u>

At December 31, 2004, goodwill of approximately \$35.1 million and \$14.4 million related to the North American and European operating segments, respectively. Approximately \$2.9 million of the goodwill acquired during 2004 related to the Sordin acquisition, the remainder related primarily to additional consideration paid on previous acquisitions.

Intangible assets include patents and license agreements that will be fully amortized in 2005 and 2008, respectively. These items are included in other noncurrent assets. At December 31, 2004, intangible assets totaled \$2.6 million, net of accumulated amortization of \$3.6 million. Intangible asset amortization expense is expected to be approximately \$0.7 million annually from 2005 through 2008.

## Note 15 – Short-Term Debt

Short-term bank lines of credit amounted to \$20.6 million of which \$18.7 million was unused at December 31, 2004. Generally, these short-term lines of credit are renewable annually, and there are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the current portion of long-term debt, were \$1.9 million and \$0.8 million at December 31, 2004 and 2003, respectively. The average month-end balance of total short-term borrowings during 2004 was \$0.9 million while the maximum month-end balance of \$1.9 million occurred at December 31, 2004. The weighted average interest rates on short-term borrowings at December 31, 2004 and 2003, were 7% and 3%, respectively.

## Note 16 – Derivative Financial Instruments

On April 6, 2004, we entered into an eight year interest rate swap agreement. Under the terms of the agreement, we receive a fixed interest rate of 8.39% and pay a floating interest rate based on LIBOR. The notional amount of the swap is initially \$20.0 million and declines \$4.0 million per year beginning in 2008. The interest rate swap has been designated as a fair value hedge of a portion of our fixed rate 8.39% Senior Notes.

In order to account for these derivatives as hedges, the interest rate swap must be highly effective at offsetting changes in the fair value of the hedged debt. We have assumed that there is no ineffectiveness in the hedge, since all of the critical terms of the hedge match the underlying terms of the hedged debt.

The fair value of the interest rate swap at December 31, 2004, has been recorded as a liability of \$0.4 million that is included in other noncurrent liabilities, with an offsetting reduction in the carrying value of the long-term debt.

As a result of entering into the interest rate swap, we have increased our exposure to interest rate fluctuations. Differences between the fixed rate amounts received and the variable rate amount paid are recognized in interest expense on an ongoing basis. This rate difference resulted in a reduction in interest expense of approximately \$0.3 million during 2004.

On March 5, 2004, we terminated an interest rate swap agreement which we had entered into on December 2, 2003. The termination of this agreement resulted in a realized gain of approximately \$0.7 million, which was reported as a reduction of interest expense during 2004.

## Note 17 – Acquisitions

On June 30, 2004, we acquired Sordin AB of Varnamo, Sweden, a leading manufacturer of passive and electronic hearing protection designed for the industrial, law enforcement and military markets. We believe the acquisition of Sordin enhances our position as a provider of modern, leading-edge hearing protective devices. Many of Sordin's products are compatible with our other safety products, including our flagship V-Gard® Hard Hat. Sordin also developed the modular integrated communications system currently being used with the Advanced Combat Helmet that we manufacture for the U.S. Army.

The initial purchase price was approximately \$4.3 million of cash and includes amounts paid to the previous owners and other direct external costs associated with the acquisition. The acquisition was recorded using the purchase method of accounting and, accordingly, the purchase price was allocated to assets acquired and liabilities assumed based on their estimated fair values at the acquisition date.

The following table summarizes the estimated fair values of the Sordin assets acquired and the liabilities assumed at the date of acquisition:

	<b>June 30</b>
	<b>2004</b>
(In thousands)	
Current assets	\$ 3,890
Property	845
Goodwill	<u>2,855</u>
Total assets acquired	<u>7,590</u>
Current liabilities	2,320
Other liabilities	<u>957</u>
Total liabilities assumed	<u>3,277</u>
Net assets acquired	<u>4,313</u>

Goodwill related to the Sordin acquisition, which is included in the European operating segment, is not expected to be deductible for tax purposes.

The acquisition agreement provides for additional consideration, not to exceed approximately \$5.4 million, to be paid to the former owners annually based on Sordin's earnings during the period from July 1, 2004 through June 30, 2009. Approximately 40 percent of the additional consideration, which will be paid to former owners who comprise the current Sordin management team, will be recognized as compensation expense. The remainder will be charged to goodwill.

On April 30, 2002, we acquired CGF Gallet of Lyon, France, the leading European manufacturer of protective helmets for the fire service, as well as head protection for the police and military. The acquisition was recorded using the purchase method of accounting. The purchase price of \$16.6 million was allocated to assets acquired and liabilities assumed based on estimated fair values and included \$7.9 million in goodwill, which is included in the European operating segment.

Sordin and Gallet operating results have been included in our consolidated financial statements from the acquisition dates. The following pro forma summary presents our consolidated results as if the Sordin and Gallet acquisitions had occurred at the beginning of 2002. The pro forma information does not necessarily reflect the actual results that would have occurred and is not necessarily indicative of future results of operations for the combined companies.

	<b>Year ended December 31</b>		
	<b><u>2004</u></b>	<b><u>2003</u></b>	<b><u>2002</u></b>
<i>(In thousands, except per share amounts)</i>			
Net sales	\$856,546	\$705,273	\$584,018
Net income from continuing operations	71,514	49,728	32,715
Basic earnings per share – continuing operations	1.93	1.35	0.89
Diluted earnings per share – continuing operations	1.87	1.33	0.89

### **Note 18 – Discontinued Operations**

On September 12, 2003, we sold certain assets of the Callery Chemical Division to BASF Corporation for \$64.6 million. The operating results of the Callery Chemical Division and the gain on the sale of the division, as summarized below, have been classified as discontinued operations for all periods presented.

	<i>(In thousands)</i>	
	<b><u>2003</u></b>	<b><u>2002</u></b>
Net sales	\$ 21,345	\$ 29,473
Income before income taxes	4,210	6,147
Provision for income taxes	<u>1,525</u>	<u>2,283</u>
Net income from discontinued operations	<u>2,685</u>	<u>3,864</u>
Gain on sale of discontinued operations	\$ 22,390	
Provision for income taxes	<u>8,732</u>	
Gain on sale of discontinued operations – after tax	<u>13,658</u>	

At December 31, 2003, approximately \$2.3 million of trade receivables and other current assets related to the Callery Chemical Division operation were reported as assets held for sale. These amounts were received during the first quarter of 2004.

### **Note 19 – Contingencies**

Various lawsuits and claims arising in the normal course of business are pending against us. These lawsuits are primarily product liability claims. We are presently named as a defendant in approximately 2,400 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 32,000 plaintiffs. Approximately 90% of these lawsuits involve plaintiffs alleging they suffer from silicosis, with the remainder alleging they suffer from other or combined injuries, including asbestosis. These lawsuits typically allege that these conditions resulted in part from respirators that were negligently designed or manufactured by us. Consistent with the experience of other companies involved in silica and asbestos-related litigation, there has been an increase in the number of asserted claims that could potentially involve us. We cannot determine our potential maximum liability for such claims, in part because the defendants in these lawsuits are often numerous, and the claims generally do not specify the amount of damages sought.

With some limited exceptions, we maintain insurance against product liability claims. We also maintain a reserve for uninsured product liability based on expected settlement charges for pending claims and an estimate of unreported claims derived from experience, sales volumes, and other relevant information. We reevaluate our exposures on an ongoing basis and make adjustments to reserves as appropriate. Based on information currently available, we believe that the disposition of matters that are pending will not have a materially adverse effect on our financial condition.

In connection with our sale of the Callery Chemical facility in Evans City, Pennsylvania, we have retained responsibility for certain environmental costs at this site, where relatively low levels of contamination are known to exist. Under the terms of the asset purchase agreement with BASF, our maximum liability for these matters is capped at \$50.0 million. Based on environmental studies performed prior to the sale of the division, we do not believe that our potential exposure under the terms of this agreement will materially affect our financial condition.

## Note 20 – Recently Issued Accounting Standards

In November 2004, the Financial Accounting Standards Board (FASB) issued FAS No. 151, Inventory Costs, an Amendment of ARB No. 43, Chapter 4. FAS No. 151 requires the exclusion of certain costs from inventories and the allocation of fixed production overheads to inventories to be based on the normal capacity of the production facilities. The provisions of this Statement are effective for costs incurred after December 31, 2005. We are currently evaluating the effect of the adoption of this standard, however, we do not expect it will have a material effect on our consolidated results of operations or financial condition.

In December 2004, the FASB issued FAS No. 123R, Share-Based Payment, which is a revision of FAS No. 123, Accounting for Stock-Based Compensation, and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, and its related implementation guidance. FAS No. 123R establishes standards for accounting for transactions in which an entity exchanges its equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. FAS No. 123R requires an entity to recognize the cost of employee services received in share-based payment transactions, thereby reflecting the economic consequences of those transactions in the financial statements. This Statement applies to all awards granted on or after July 1, 2005, and to awards modified, repurchased, or cancelled after that date. We will recognize compensation cost on a prospective basis beginning July 1, 2005, for the portion of outstanding awards for which the requisite service has not yet been rendered, based on the grant-date fair value of these awards calculated under FAS No. 123 for pro forma disclosures. We expect that adopting this Statement will not have a material effect on our 2005 results.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-1, Application of FASB Statement No. 109, Accounting for Income Taxes, to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004, which states that the FASB staff believes that the qualified production activities deduction provided by the American Jobs Creation Act of 2004 should be accounted for as a special deduction in accordance with FASB Statement No. 109. This Statement was effective upon issuance.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2, Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004, which states that the FASB staff believes that the lack of clarification of certain provisions within the Act and the timing of the enactment necessitate a practical exemption from the FAS 109 requirement to reflect in the period of enactment the effect of a new tax law. Accordingly, an enterprise is allowed time beyond the financial reporting period of enactment to evaluate the effect of the Act on its plan for reinvestment or repatriation of foreign earnings for purposes of applying FAS 109.

## Note 21 – Quarterly Financial Information (Unaudited)

	2004					2003				
	Quarters					Quarters				
	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
(In thousands, except earnings per share)										
Net sales	\$ 194,490	\$ 213,114	\$ 219,962	\$ 224,943	\$ 852,509	\$ 160,391	\$ 175,939	\$ 171,927	\$ 188,216	\$ 696,473
Gross profit	81,803	84,931	88,374	85,312	340,420	63,091	68,998	66,246	75,865	274,200
Net income from continuing operations	16,138	18,118	19,111	17,680	71,047	10,499	12,192	10,984	15,249	48,924
Net income from discontinued operations	–	–	–	–	–	1,514	1,273	(102)	–	2,685
Gain on sale of discontinued operations – after tax	–	–	–	–	–	–	–	13,658	–	13,658
Net income	16,138	18,118	19,111	17,680	71,047	12,013	13,465	24,540	15,249	65,267
Basic earnings per share:										
Continuing operations	0.44	0.49	0.51	0.47	1.91	.29	.33	.30	.41	1.33
Discontinued operations	–	–	–	–	–	.04	.04	.37	–	.45
Total	0.44	0.49	0.51	0.47	1.91	.33	.37	.67	.41	1.78
Diluted earnings per share:										
Continuing operations	0.43	0.48	0.50	0.46	1.86	.29	.33	.29	.40	1.31
Discontinued operations	–	–	–	–	–	.04	.04	.36	–	.44
Total	0.43	0.48	0.50	0.46	1.86	.33	.37	.65	.40	1.75

## **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 recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.
- (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 and Executive Officers of the Registrant**

### **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**

### **Item 14. Principal Accountant Fees and Services**

Incorporated by reference herein pursuant to Rule 12b - 23 are (1) "Election of Directors," (2) "Other Information Concerning Directors and Officers" (except as excluded below), (3) "Stock Ownership," and (4) "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 10, 2005. The information appearing in such Proxy Statement under the captions "Compensation Committee Report on Executive Compensation," "Audit Committee Report" and the other information appearing in such Proxy Statement and not specifically incorporated by reference herein is not incorporated herein. 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 Internet site at [www.MSANet.com](http://www.MSANet.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.

The following table sets forth information as of December 31, 2004 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	1,792,704	\$ 12.55	1,504,673
Equity compensation plans not approved by security holders	None	—	None
Total	1,792,704	\$ 12.55	1,504,673

\* Includes 1,361,153 shares available for issuance under the Company's 1998 Management Share Incentive Plan (MSIP) and 143,520 shares available for issuance under the Company's 1990 Non-Employee Directors' Stock Option Plan (DSOP). In addition to stock options, the DSOP authorizes the issuance of restricted stock awards, and the MSIP authorizes the issuance of stock appreciation rights, restricted stock, performance awards and other stock and stock-based awards.

## 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.

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Management's Report on Internal Control Over Financial Reporting	24
Report of Independent Registered Public Accounting Firm	25
Consolidated Statement of Income - three years ended December 31, 2004	26
Consolidated Balance Sheet - December 31, 2004 and 2003	27
Consolidated Statement of Cash Flows - three years ended December 31, 2004	28
Consolidated Statement of Changes in Retained Earnings and Accumulated Other Comprehensive Income - three years ended December 31, 2004	29
Notes to Consolidated Financial Statements	30

(a) 2. The following additional financial information for the three years ended December 31, 2004 is filed with the report and should be read in conjunction with the above financial statements:

Report of Independent Registered Public Accounting Firm on Financial Statement Schedule  
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 to January 16, 2004, filed as Exhibit 3(i) to Form 10-K on March 15, 2004, is incorporated herein by reference.
- (3)(ii) By-laws of the registrant, as amended on October 26, 2004, filed as Exhibit 3.1 to Form 8-K on October 27, 2004, is incorporated herein by reference.
- (4) Rights Agreement dated as of February 10, 1997 between the registrant and Norwest Bank Minnesota, N.A., as Rights Agent, filed as Exhibit (4) to Form 10-K on March 27, 2002, is incorporated herein by reference.
- (10)(a) \* 1998 Management Share Incentive Plan, filed as Exhibit 10(b) to Form 10-K on March 28, 2003, is incorporated herein by reference.
- (10)(b) \* Retirement Plan for Directors, as amended effective April 1, 2001, filed as Exhibit 10(c) to Form 10-K on March 27, 2001, 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) \* 1990 Non-Employee Directors' Stock Option Plan as amended effective April 29, 2004, filed herewith.
- (10)(e) \* Executive Insurance Program as Amended and Restated as of January 1, 2001, filed as Exhibit 10(g) to Form 10-K on March 27, 2001, is incorporated herein by reference.



- (10)(f) \* 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)(g) \* Form of Severance Agreement as of May 20, 1998 between the registrant and John T. Ryan III, filed as Exhibit 10(h) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
- (10)(h) \* Form of Severance Agreement between the registrant and the other executive officers filed as Exhibit 10(i) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
- (10)(i) \* First Amendment to the 1998 Management Share Incentive Plan as of March 10, 1999, filed as Exhibit 10(i) to Form 10-Q on August 6, 2004, is incorporated herein by reference.
- (10)(j) Trust Agreement as of June 1, 1996 between the registrant and PNC Bank, N.A. re the Mine Safety Appliances Company Stock Compensation Trust filed as Exhibit 10(k) to Form 10-K on March 28, 2003, is incorporated herein by reference.
- (10)(k) \* MSA Supplemental Savings Plan, as amended and restated effective January 1, 2003, filed as Exhibit 10(l) to Form 10-K on March 28, 2003, is incorporated herein by reference.
- (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 J. T. Ryan III pursuant to Rule 13a-14(a) is filed herewith.
- (31)(2) Certification of D. L. Zeitler 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.

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\* 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 10 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

March 14, 2005

(Date)

By /s/ John T. Ryan III

John T. Ryan III  
Chairman of the Board and  
Chief Executive Officer

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ John T. Ryan III</u> John T. Ryan III	Director; Chairman of the Board and Chief Executive Officer	March 14, 2005
<u>/s/ Dennis L. Zeitler</u> Dennis L. Zeitler	Vice President - Finance; Principal Financial and Accounting Officer	March 14, 2005
<u>/s/ Calvin A. Campbell, Jr.</u> Calvin A. Campbell, Jr.	Director	March 14, 2005
<u>/s/ James A. Cederna</u> James A. Cederna	Director	March 14, 2005
<u>/s/ Thomas B. Hotopp</u> Thomas B. Hotopp	Director	March 14, 2005
<u>/s/ Diane M. Pearse</u> Diane M. Pearse	Director	March 14, 2005
<u>/s/ L. Edward Shaw, Jr.</u> L. Edward Shaw, Jr.	Director	March 14, 2005
<u>/s/ John C. Unkovic</u> John C. Unkovic	Director	March 14, 2005
<u>/s/ Thomas H. Witmer</u> Thomas H. Witmer	Director	March 14, 2005

## MINE SAFETY APPLIANCES COMPANY

The registrant's present affiliates include the following:

<b><u>Name</u></b>	<b><u>State or Other Jurisdiction of Incorporation</u></b>
Compañía MSA de Argentina S.A.	Argentina
MSA (Aust.) Pty. Limited	Australia
MSA-Auer Sicherheitstechnik Vertriebs GmbH	Austria
MSA Export Limited	Barbados
MSA Belgium NV	Belgium
MSA do Brasil Ltda.	Brazil
MSA Canada	Canada
MSA de Chile Ltda.	Chile
Wuxi-MSA Safety Equipment Co. Ltd.	China
MSA International, Inc.	Delaware
MSA de France	France
MSA Gallet	France
MSA Auer	Germany
MSA Europe	Germany
MSA-Auer Hungaria Safety Technology	Hungary
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
MSA Africa (Pty.) Ltd.	South Africa
MSA Española S.A.	Spain
MSA Nordic	Sweden
Sordin AB	Sweden
Aritron Instrument A.G.	Switzerland
MSA Zimbabwe (Pvt.) Limited	Zimbabwe

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

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 33-22284, No. 33-43696, No. 333-51983 and No. 333-121196) of Mine Safety Appliances Company of our reports dated March 7, 2005 relating to the financial statements, financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appear in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania  
March 14, 2005

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

I, John T. Ryan III, 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 annual 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(s) 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 annual 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(s) 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.

Date: March 14, 2005

/s/ John T. Ryan III  
\_\_\_\_\_  
John T. Ryan III  
Chief Executive Officer

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

I, Dennis L. Zeitler, 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(s) 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 annual 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 officers 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.

Date: March 14, 2005

/s/ Dennis L. Zeitler  
\_\_\_\_\_  
Dennis L. Zeitler  
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, 2004 (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.

Dated: March 14, 2005

/s/ John T. Ryan III

Name: John T. Ryan III

Title: Chief Executive Officer

/s/ Dennis L. Zeitler

Name: Dennis L. Zeitler

Title: Chief Financial Officer

**Report of Independent Registered Public Accounting Firm on  
Financial Statement Schedule**

To the Board of Directors  
of Mine Safety Appliances Company:

Our audits of the consolidated financial statements, of management's assessment of the effectiveness of internal control over financial reporting and of the effectiveness of internal control over financial reporting referred to in our report dated March 7, 2005 appearing on page 25 of this Annual Report on Form 10-K also included an audit of the financial statement schedule listed in Item 15(a)(2) of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania  
March 7, 2005



MINE SAFETY APPLIANCES COMPANY AND AFFILIATES  
 VALUATION AND QUALIFYING ACCOUNTS  
 THREE YEARS ENDED DECEMBER 31, 2004  
 (IN THOUSANDS)

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Allowance for doubtful accounts:			
Balance at beginning of year	\$ 6,418	\$ 4,134	\$ 2,956
Additions—			
Charged to costs and expenses	1,703	2,718	1,538
Deductions—			
Deductions from reserves (1)	<u>573</u>	<u>434</u>	<u>360</u>
Balance at end of year	<u>\$ 7,548</u>	<u>\$ 6,418</u>	<u>\$ 4,134</u>

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

## PRINCIPAL OPERATIONS

### North America

#### Mine Safety Appliances Company,

Corporate Headquarters – Pittsburgh, Pa.  
Manufacturing – Clifton, N.J.; Cranberry Twp., Pa.;  
Englewood, Co.; Evans City, Pa.;  
Jacksonville, N.C.; Murrysville, Pa.;  
Newport, Vt.; Sparks, Md.  
Research – John T. Ryan Memorial Laboratory,  
Cranberry Twp., Pa.

**MSA Canada**, Toronto; **MSA Gallet**, Quebec

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

### Europe

**MSA Europe (Headquarters)**, Berlin, Germany

**Aritron Instrument A.G.**, Forch, Switzerland

**MSA-Auer Almay**, Almaty, Kazakhstan (Service Center/Office)

**MSA Auer, Berlin**, Germany

**MSA-Auer GmbH, Czech o.z.**, Praha, Czech (Service Center)

**MSA-Auer Polska Sp. z o.o.**, Warsaw, Poland

**MSA-Auer Poznan**, Poznan, Poland (Service Center)

**MSA-Auer Hungaria Safety Technology**, Budapest, Hungary

**MSA-Auer Kiev**, Kyiv, Ukraine (Representative Office)

**MSA-Auer Miskolc**, Tiszaujvaros, Hungary (Service Center)

**MSA-Auer GmbH Romania, o.z.**, Bucuresti, Romania (Branch)

**MSA-Auer Petrosani**, Petrosani, Romania (Service Center)

**MSA-Auer Moscow**, Moscow, Russia (Representative Office)

**MSA-Auer Sicherheitstechnik Vertriebs GmbH**,

Absdorf, Austria

**MSA-Auer GmbH, Slovakia o.z.**, Pezinok, Slovakia

(Service Center)

**MSA-Auer Szczecin**, Szczecin, Poland (Service Center)

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

**MSA (Britain) Limited**, Glasgow

**MSA Española, S.A.**, Barcelona

**MSA de France**, Paris

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

Mohammedia, Morocco

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

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

**MSA Nordic**, Malmo, Sweden

### International

**MSA Africa (Pty.) Ltd.**, Johannesburg

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

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

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

**MSA do Brasil Ltda.**, São Paulo

**MSA de Chile Ltda.**, Santiago

**MSA Hong Kong Limited**, Hong Kong

**MSA (India) Limited**, Calcutta

**MSA Indonesia**, Jakarta, Indonesia

**MSA Japan Ltd.**, Tokyo

**MSA Safety Malaysia Snd Bhd**, Kuala Lumpur

**MSA Middle East, Abu Dhabi**, U.A.E.

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

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

**MSA Zimbabwe (Pvt.) Limited**, Harare

**Wuxi-MSA Safety Equipment Co., Ltd.**, Wuxi, China

## DIRECTORS AND CORPORATE OFFICERS

### Board of Directors

#### John T. Ryan III (1)

Chairman and Chief Executive Officer  
of the Company

#### Calvin A. Campbell, Jr. (2) (3) (4)

Retired (2003); formerly Chairman, President and Chief  
Executive Officer, Goodman Equipment Corporation  
(manufactured underground mining and tunneling  
locomotives and parts and services for plastics injection  
molding machinery); Director of Eastman Chemical Company

#### James A. Cederna (2) (3) (4)

Founder and owner, Cederna International, Inc.  
(executive coaching)

#### Thomas B. Hotopp (1)

Retired (2003); formerly President of the Company

#### Diane M. Pearse (2)

Chief Financial Officer, Crate and Barrel  
(home furnishings retailer)

#### L. Edward Shaw, Jr.

Of Counsel, Gibson, Dunn & Crutcher LLP  
(full service law firm)

#### John C. Unkovic (3) (4)

Partner and General Counsel, Reed Smith LLP  
(full service law firm)

#### Thomas H. Witmer (1) (2) (3)

Retired (1998); formerly President and Chief Executive  
Officer, Medrad, Inc. (manufacturer of medical devices);  
Chairman of the Board, Granite State Log Homes  
(log home construction)

(1) Member of Executive Committee

(2) Member of Audit Committee

(3) Member of Compensation Committee

(4) Member of Nominating and Corporate  
Governance Committee

### Director Emeritus

#### Eugene W. Merry

### Officers

#### John T. Ryan III

Chairman of the Board and Chief Executive Officer

#### James H. Baillie

Vice President; President, MSA Europe

#### Joseph A. Bigler

Vice President

#### Kerry M. Bove

Vice President

#### Roberto Cañizares

Vice President; President, MSA International

#### Benedict DeMaria

Vice President

#### Ronald N. Herring, Jr.

Vice President

#### William M. Lambert

Vice President; President, MSA North America

#### Douglas K. McClaine

Secretary and General Counsel

#### Dennis L. Zeitler

Vice President; Chief Financial Officer and Treasurer

### **Shareholders' Inquiries**

Additional copies of the company's 2004 Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by shareholders after April 1, 2005.

Printed and electronic versions are available. Requests should be directed to the Vice President-Finance, who can be reached at one of the following:

**Phone:** 412-967-3046

**Fax:** 412-967-3367

**Internet:** [MSAnet.com](http://MSAnet.com)

**U.S. Mail:** MSA

Vice President-Finance

P. O. Box 426

Pittsburgh, PA 15230



**Mine Safety Appliances Company**

121 Gamma Drive  
RIDC Industrial Park  
O'Hara Township  
Pittsburgh, PA 15238

412-967-3000  
[www.MSAnet.com](http://www.MSAnet.com)