

# The Safety Company

Annual Report 2006



## The Mission, Vision and Business of MSA

## Our Mission

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

## Our Vision

To be the leading innovator and provider of quality safety and instrument products and services that protect and improve people's health, safety and the environment.

To satisfy customer needs through
the efforts of motivated, involved,
highly trained employees dedicated
to continuous improvement in quality,
service, cost, value, technology
and delivery.

## The Business of MSA

MSA is in the business of developing,

manufacturing and selling innovative and sophisticated products that 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 the company to develop



a keen understanding of the customer safety requirements for a diverse range of markets, including the fire service, homeland security, construction, public utilities, mining, chemical, petroleum, HVAC, hazardous materials remediation, military and retail. MSA's principal products, each designed to serve the needs of these target markets, include respiratory protective equipment, thermal imaging cameras, gas detection instruments, ballistic protection, 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

markets served by MSA has expanded greatly over the years, the founding philosophy of

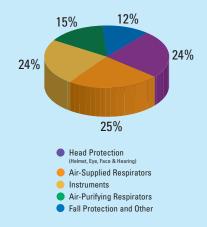
understanding customer safety needs and designing innovative safety equipment solutions remains unchanged.

MSA is headquartered in Pittsburgh, Pennsylvania, with operations employing 4,900 associates throughout the world. A publicly held company, MSA's stock is traded on the New York Stock Exchange under the symbol MSA.

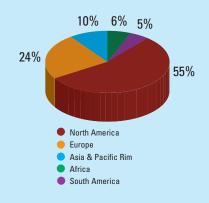
# Financial Highlights

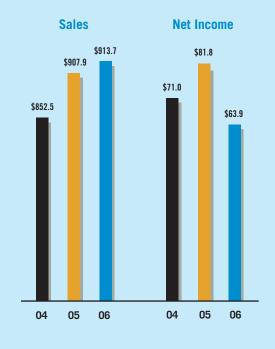
	2004	2005	2006
For The Year (thousands, except per share)			
Net sales	\$852,509	\$907,912	\$913,714
Net income	71,047	81,783	63,918
Basic earnings per common share	1.91	2.24	1.76
At Year End (thousands)			
Total assets	\$734,110	\$725,357	\$898,620
Working capital	270,593	246,367	289,424
Common shareholders' equity	376,679	381,470	436,926
Common Stock (thousands)			
Shares outstanding	37,341	36,546	36,015
Market capitalization	\$1,893,208	\$1,323,330	\$1,319,965

### **Annual Sales by Product Group**



### **Annual Sales by Region**





## To Our Shareholders



In 2006, MSA Europe achieved its best year in company history. Pictured with MSA chairman and CEO John T. Ryan III are members of MSA Europe's leadership team, including, from left to right, Alan DiGiovanni, Thomas Muschter, Mathieu Tijskens, Frank Mak, Stefan Zloczysti and James Baillie, president of MSA Europe.

In reviewing this letter from last year's report, I was struck by how many of the business factors and trends we see now remain consistent with what we have said a year ago and noted in communications since.

MSA has been the global leader in sophisticated safety equipment and we enhanced our position during this decade. Looking at the big picture, MSA's core industrial business worldwide, beyond the U.S. fire service and the U.S. military, has grown consistently during recent years and this continued in 2006, driven by our making long-term improvements in our business processes. During this period, our fire service sales grew very well. As has been frequently reported, our total business was turbo charged in the period 2002 to 2004 by exceptional business in protective products to the U.S. military and in commercial Homeland Security gas masks. We always knew that these two businesses would be volatile and we have had a plan for a transition to a more normal business mix which we communicated over the last year. Most of this transition happened in one year – 2006 – in which our U.S. military business fell by more than \$60 million, over 50 percent, due to the completion of a number of contracts and the U.S. Government's decision to split evenly the Advanced Combat Helmet (ACH) contract among multiple suppliers.

Our rather audacious objectives in this transition year of 2006 were, in spite of the above challenges, to reach a sales and operating profit level (less adjustment for accounting changes and restructuring costs) higher than that of 2005, even if just a small increase, by significantly growing our business in other areas. The disappointment of 2006 as a company was that, on a qualitative basis, "we almost made it." Indeed many of the goals in this transition year were accomplished. We actually did grow our sales, but we fell short on earnings due primarily to the timing of the U.S. Federal Government funding of the U.S. fire service.

We did gain significant sales growth in two-thirds of our global business – that is everything except the U.S. fire service, the U.S. Homeland Security gas mask market, and the U.S. military.

In 2006 MSA achieved strong double digit percentage growth in sales, and for the most part met our goals, in these key areas:

- the industrial business of our U.S. National Sales Force;
- the balance of our commercial sales efforts in North America;
- MSA Europe; and
- MSA International (with the help of Select PPE, a strategic acquisition in South Africa that expanded considerably as part of MSA in 2006.)

Instrument sales lead our North American business growth, and industrial head protection, with the industry leading V-Gard Helmet, was a strong contributor.

In particular, MSA Europe stepped into the breach and provided excellent growth to gain our best year there since the fall of the Berlin Wall. Our domestic sales in Germany were solid and well above plan. Eastern Europe business showed strong expansion and our plan was exceeded in each of the other regions of the continent. Fire service sales in Europe were also quite good, with breathing apparatus and fire helmets being well over plan. MSA sales also grew particularly well in China, Southeast Asia and Mexico.

The company brought out telemetry capabilities in our breathing apparatus; a new generation of Thermal Imaging Camera – the Evolution 5200 HD; successful new instruments such as the Altair Single Gas Portable Instrument; and the latest generation of the SAFESITE Multi-Threat Detection System. MSA also was a major participant in the first large production contract of the Mask 2000, the new standard gas mask for the German military. In the U.S., we are now beginning work on a distinctive new breathing apparatus for the United States Air Force.

Operating costs of the company were mostly on plan with the exception of a few special one-off issues. We were challenged because the areas in which we gained much of our sales growth were areas in which we are developing the market and these require higher than the average amount of selling and other supportive costs. The areas where our sales fell were those in which our marginal selling expenses are lower.

Safety is our middle name, and I was very pleased that our Murrysville factory received the prestigious VPP Star Award from the U.S. Occupational Safety and Health Administration for our safety program in this important factory. Our Global Manufacturing Council was our Process of the Year by its efforts to spread best practices throughout the manufacturing elements of the company. Project Outlook, which was the consolidation of our Instrument and Safety Products Divisions in the U.S., and a voluntary retirement program to reduce overall costs, went exceptionally well.

We also welcomed to the company the people of Paraclete Armor and Equipment of St. Pauls, N.C. Paraclete enhances our capabilities in ballistic vest protection for the military and law enforcement market. Paraclete has a distinctive business with the U.S. Special Forces – an area of growing importance in the U.S. military strategy – and is located close to Fort Bragg, N.C., where I spent a year and a half in my past life as a U.S. Army officer.

During the year, company management completed a five-year strategic plan, which was reviewed and approved by the Board of Directors. The establishment of a new sales operation in Egypt makes this the 40th country in which MSA has operating companies or sales representative offices. Egypt is one of the oldest civilizations on Earth so it was about time that we got there.

Even with all of this progress, we unfortunately did not make our earnings goals. The major factor that made the difference was the substantial delay in the release of U.S. Assistance to Firefighter Grants (AFG) funding, both directly and because its delay causes many municipalities to hold their own spending in the hopes that they would get money from still-open AFG requests. The impact on our business in 2006 was significant as only about half of the appropriated funds were released by calendar year end. While our U.S. military business declined from 2005 to 2006, we had a plan to overcome this by sales growth elsewhere. But on a net basis, the shortfall of sales to the U.S. fire service and the resulting impact on factory burden coverage caused us to miss our goals. This, along with the cost of restructuring, particularly Project Outlook, which was necessary for our future well being, and the accounting charge that required the expensing of stock-based compensation, were the main factors in the actual pre-tax earnings decline from 2005.

Our outlook for the year 2007 is that we want to complete the transition that we had hoped to finish in 2006. We will once again count on the strength of the broad cross section of our business – about two thirds of our sales that are in areas in which we have consistently done well in the decade – that is our North American industrial business and consumer business, MSA Europe and MSA International. We have taken more steps to reduce our cost of operations. Our initiatives over recent years have enabled us to produce more products with less floor space. Project Magellan, which was recently announced, will enable us to concentrate our manufacturing work in fewer sites and reduce our expenses, while we make the maximum effort to help the individual associates involved. In particular, the company expects to begin the consolidation of our two facilities in Mexico at a new plant in Querétaro. We are also beginning work on a new facility in China, primarily to serve that strongly growing market, and our expanding business in the rest of our International operations. Most of the benefits of these manufacturing projects will be realized in 2008 and beyond.

As you can expect, during this time of transition we will continue to be very careful with our expenses worldwide, while continuing to appropriately fund the important programs in new product development. Our objective in 2007 is to get back on the positive track, to increase sales and make a strong rebound in earnings to get us to earnings levels above that of the previous record of 2005. Once we achieve this, we would look forward to returning to a stable growth record going forward.

The major imponderable in the business in 2007 is the timing of the U.S. fire service business. There are six major factors here which, for the most part, reflect the timing of business and not their ultimate achievement. About half of the U.S. Federal Government AFG funding expected in calendar year 2006 has slipped until the first half of 2007. Should the AFG program return to its previous time parameters, we could have in the calendar year 2007 about a year and a half worth of normal funding, completing last years' and fully doing the current one. This, however, is dependent on whether or not there will be a third year of delays in AFG funding. Additional factors are the proportion of AFG grants going to personal protective equipment, the amount U.S. municipalities will spend from their own budgets, MSA's market share (of which I am confident), the impact of the new National Fire Protection Association (NFPA) standard for breathing apparatus, which must be met by all U.S. manufacturers by August 31, 2007, and the question of whether our customers would prefer to buy breathing apparatus in the U.S. according to current NFPA standards, for which we could sell product for the first eight months, or, whether they would like to buy equipment according to the new standard for shipment in the last third of the year. To solve this latter dilemma, MSA is offering its customers the best of all worlds – the MSA Promise Program. In this way, customers can buy new needed equipment now



Newly elected President and Chief Operating Officer William M. Lambert, left, with John T. Ryan III.

according to the current standard, and then we will upgrade them to the new standard once upgrade kits are approved and available.

Thus, I have strong confidence that the funding and the desire of U.S. fire service customers for breathing apparatus product in an 18-month period from January 2007 until June of 2008 (when currently appropriated AFG funding for 2007 needs to be released) will be good. What we do not know is when, during this 18 month period, most of the business will be placed. Going forward, there is a historical pattern that revenue from the fire service goes up in the year or two following a new NFPA standard.

Our goals in 2007 are to keep up our growth in the two-thirds of our business that has done well in recent years, including 2006, to handle the short term volatility in the U.S. fire service, to reach our sales objective in military protective products and to carefully watch our costs so as to generate sales and earnings that would be new records for the company.

I am pleased to announce the recent election of Mr. William M. Lambert as President and Chief Operating Officer of the company. Bill has excelled in his 25 years with the company in product design (inventing the Quick-Fill System – a key patented product for MSA), product management, division management and for the last four years as President of MSA North America. I look forward to working with Bill in his new role.

It is often said in sports that the way to handle a disappointing end to a winning streak is to go right out there in the next game and start a new winning streak all over again, and that is what we are about in the year 2007. We have confidence in our business and are investing in plants, new products and people to build it over the years to come.

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

## The Year In Review



FIFA World Cup
Security personnel charged with safeguarding the
2006 FIFA World Cup relied on MSA technology
to monitor a variety of safety-related conditions
and data.



Expansion in China
In 2006, MSA expanded breathing apparatus
production in China to meet the growing needs of
the Chinese fire service.

n 2006, MSA's growing global portfolio of businesses and safety products helped the company achieve solid results despite challenging market conditions in North America as MSA Europe and MSA International achieved record sales.

MSA achieved robust growth in many key global markets, completed strategic acquisitions in North America and South Africa to position the company for further growth, and launched innovative products that are meeting the ever-changing needs of customers around the world.

At the same time, MSA implemented a strategic reorganization initiative in North America to enhance its operational excellence and its future performance as the world's foremost provider of sophisticated safety products and systems.

The following is a snapshot of some of our most notable achievements in 2006.

## European and International Markets Drive Revenue Growth

MSA Europe and MSA International reported record sales in 2006, with double-digit growth in many countries. Sales in Europe rose 21% to \$219.2 million from \$180.5 million a year earlier. Delivering its best year in company history, MSA Europe achieved these record sales through higher shipments of breathing apparatus in Western European markets, strong sales growth in Eastern and Central Europe, and several successful new product launches. MSA Europe also got a boost from the FIFA World Cup Soccer matches and the 2006 Winter Olympic Games, both of which used MSA products such as the TecBOS.solutions Software Package and the Ultima® XE Monitoring System, respectively, to enhance safety and security at these high-profile sporting events.

Sales at MSA International rose 19% to a record \$191.1 million from \$160.9 million, reflecting the positive impact of the Select PPE acquisition in South Africa, sharply higher sales in China and Chile, and in two promising new markets: Indonesia and Malaysia. Five affiliates of MSA International recorded growth of more than 20%. During the year, MSA International also opened its first office in Egypt to pursue growth opportunities there.

In North America, sales dipped 11% to \$503.4 million from \$566.5 million a year earlier due to challenging military market conditions and delays in Federal fire service funding. However, MSA instrument sales continued a multi-year growth trend with sales increasing more than 20% for the year. In particular, MSA North America benefited from higher sales of gas-detection instruments such as the Altair® and Solaris® Series of handheld instruments and strong demand for MSA's SAFESITE® System, an advanced detection-and-warning system that was deployed at several high-profile events, including the Super Bowl, Major League Baseball's All-Star game and the NCAA Men's Final Four Basketball Championship.

### **Innovation Drives Major Contract Wins**

In North America, the U.S. Air Force awarded MSA a \$36 million contract in February 2006 to develop and supply a new versatile respiratory protection system for air base firefighters. It was the first military contract for a product based on MSA innovations in self-contained breathing apparatus for the fire service. The new system will protect Air Force personnel from a wide range of chemical, biological, radiological and nuclear contaminants.



2006 Winter Olympics

Underneath the bobsled venue of the 2006 Winter Olympics in Torino, Italy, MSA's Ultima<sup>®</sup> XE Monitoring System was on guard keeping an eye out for potentially hazardous refrigerant leaks.

In Europe, MSA won a \$9.3 million contract from the German military to supply a new gas mask system for air, ground and naval personnel. Under the contract, MSA will produce 50,000 masks and furnish filters, protective lenses and spare parts. The gas mask protects users from nuclear, biological and chemical threats and meets new performance specifications developed in cooperation with the German military.

In South Africa, MSA landed a \$2.1 million order from Anglo Platinum Amandelbult to supply mine safety products. Other major contracts included a \$2.3 million order from the Australian Navy for the LifeGard III Escape Breathing Apparatus and a \$1.1 million order in Brazil for fire service equipment.

### **Acquisitions Offer Growth Opportunities**

MSA acquired Paraclete Armor and Equipment of St. Pauls, N.C. in September, expanding the company's line of advanced ballistic body armor products while enhancing its ability to pursue new sales opportunities in both the global law enforcement and military markets. Paraclete is a leading maker of advanced ballistic body armor for customers including the Special Forces units of the U.S. military.



#### Altair® Series Gas Monitors

The Altair Series of single gas monitors features sensor options for carbon monoxide, hydrogen sulfide and oxygen that operate for more than two years. This long life cycle, combined with MSA dependability, made the Altair monitor a key element of MSA's strong instrument sales performance in 2006.



#### **Building Ballistics**

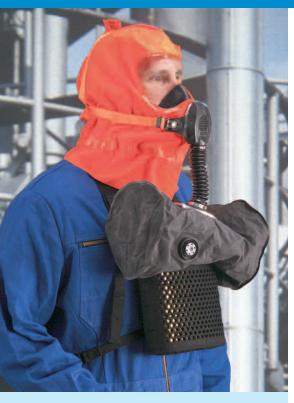
MSA's acquisition of Paraclete Armor and Equipment significantly enhances MSA's presence and brand in the global military and law enforcement markets.

#### **Connecting With Customers**

Around the world, MSA invested in training programs to enhance business performance and, in many cases, put MSA managers in the shoes of the customer. Below, members of MSA Europe's leadership team participate in required fire protection and safety training in Dortmund, Germany.



## The Year In Review



SavOxCap Self Rescuer

Introduced in the fourth quarter of 2006, MSA Europe's SavOxCap 60 SCSR is the only hood-style Oxygen Self Rescuer to provide a full 60 minutes of service time.



High Definition Imaging

With the introduction of the Evolution® 5200HD Thermal Imaging Camera, MSA reaffirmed its position as the leading innovator in TIC technology.

In South Africa, to create a platform for further growth, MSA formed a joint venture in January 2006 with Mineworkers Investment Company. The joint venture then acquired Select Personal Protective Equipment (Select PPE), a growing operator of safety supply stores serving the South African mining industry.

### **New Product Pipeline**

MSA continued to introduce new and innovative products to protect the health and safety of customers around the world. In North America, MSA launched the new Altair Series of single gas detectors and the SAFESITE Sentry Detector, a permanent instrument that provides enhanced capabilities with radiation protection, wireless communication and broader capabilities for toxic gas detection. Other product launches included:

- The Defender® Integrated Visor the first integrated, optically corrected visor for traditional-style fire helmets worn in the United States;
- The SmoothDome<sup>™</sup> Industrial Helmet —
   a low-cost polyethylene helmet for private labeling with large MSA distributor channel partners;
- The Category Leading Evolution<sup>®</sup> 5200HD
   (High Definition) a superior thermal imaging camera with enhanced picture quality display; and
- The Workman<sup>™</sup> Line of Fall Protection
   Products which provides construction
   personnel with broad new choices in fall
   arrest and prevention devices.

After launching more than 20 products in 2005, MSA Europe continued to innovate in 2006, introducing several new products while shifting its focus to manufacturing excellence to meet the growing demand for MSA products. Key product launches, which solidified MSA Europe's reputation as the leader in safety technology, included a new version of its best-selling

F1 SF fire service helmet and the SavOxCap 60 SCSR – a new hooded self-rescuer that provides a 60-minute oxygen supply for underground emergencies.

#### **Committed to Operational Excellence**

At the beginning of 2006, MSA North America implemented "Project Outlook," a strategic initiative to create a more streamlined and customer-focused business in North America. The reorganization plan aligned the company's resources with strategic priorities in North America while consolidating the business and support functions of the former Safety Products and Instrument Divisions and their management to form one integrated team – MSA North America – with the added benefit of achieving at least \$4 million in annual cost savings.

In the third year of its transformation plan, MSA International continued taking steps to enhance its operations and processes. A major focus in 2006 was the implementation of lean manufacturing through Demand Flow® Technology at its manufacturing sites to shorten cycle times, improve productivity and efficiency, enhance inventory turns and deliver greater consistency in its manufacturing processes. MSA International also launched an information technology initiative that will significantly enhance information sharing while fostering a truly integrated business approach across all of its affiliates. To drive the transformation, MSA International accelerated its focus on integration and teamwork by bringing together more than 380 associates from operations, finance, IT, sales and marketing at six conferences that were dedicated to empowering their participation in the transformation.

In Europe, MSA established Centers of Excellence encompassing engineering, manufacturing and product management



at its facilities in Germany, France and Sweden. At the same time, lean manufacturing efforts improved production rates, resulting in lower costs and higher output.

Overall, MSA took action in 2006 to strengthen the company in North America as it achieved record sales at MSA Europe and MSA International that reflected the success of its global growth strategy and strategic initiatives that have – and will continue – to transform the company. Across its balanced portfolio of global businesses, MSA is enhancing its productivity, performance, processes and products with a focus on what matters most – delivering value and protecting the health and safety of MSA customers worldwide.



#### ■ Investor Relations

In 2006, MSA hosted its first Investors' Day at its Cranberry Woods campus near Pittsburgh. The one-day event provided more than 20 key investors and analysts with an informative, first-hand look at the company's mission, operations, management depth and growth strategy.



To build relationships that will accelerate MSA product innovation and technology development, the company held a special event in cooperation with NASA and

Penn State University. PEN Called "MSA Technology Infusion," the conference helped MSA identify nine companies as potential technology partners.



#### **■ Excellence in Safety**

Being a leader in safety means practicing what you preach. In 2006, MSA's manufacturing facility in Murrysville, Pennsylvania was recognized as being one of the safest in the United States by the Occupational Safety and Health Administration. From left to right are Murrysville Plant Manager Steve Protzik, Acting Deputy Administrator for OSHA Marie Cassady, President and Chief Operating Officer Bill Lambert, Murrysville associates Jeremy Sowers and Bob Martin, and Director of Pittsburgh Operations Joe Murray.

# MSA Form 10K



## Principal Operations / Directors & Corporate Officers

#### **North America**

#### Mine Safety Appliances Company

Corporate Headquarters – Pittsburgh, Pa.
Manufacturing – Bowling Green, Ky; Clifton, N.J.;
Cranberry Twp., Pa.; Englewood, Co.; Evans City, Pa.;
Jacksonville, N.C.; Murrysville, Pa.; Newport, Vt.;
St. Pauls, N.C.; 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, Czech, s.r.o., Ostrava, Czech

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, Chatillon sur Chalaronne

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

MSA Italiana S.p.A., Milan

MSA Nederland, B.V., Hoorn

MSA Nordic, Malmo, Sweden

MSA SORDIN AB, Varnamo, Sweden

#### International

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 Egypt, Cairo

MSA Hong Kong Limited, Hong Kong

MSA (India) Limited, Calcutta

MSA Indonesia, Jakarta

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

Samsac Holding (Pty.) Limited, Johannesburg

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

#### **Board of Directors**

John T. Ryan III (1)

Chairman and Chief Executive Officer of the Company

#### Robert A. Bruggeworth

President and Chief Executive Officer, RF Micro Devices, Inc. (high-performance radio systems and solutions for applications that drive mobile communications); Director, RF Micro Devices, Inc.; and Director, Light Path Technologies, Inc.

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

Goodman Equipment Corporation, retired (2003); formerly Chairman, President and Chief Executive Officer, Goodman Equipment Corporation (mining and tunneling locomotives); Eastman Chemical Company (NYSE), Director 1994-2005; Cyprus Amax Minerals Company (NYSE), Director 1985-1994, Chairman 1991-1992; National Association of Manufacturers, Chairman 1998-1999, Honorary Vice Chairman for Life, 2001

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

Owner and President, Cederna International, Inc. (executive coaching)

#### Thomas B. Hotopp (1) (4)

Retired (2003); formerly President of the Company

#### Diane M. Pearse (2)

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

#### L. Edward Shaw, Jr.

Senior Managing Director, Richard C. Breeden & Co. (multi-disciplinary professional services firm); Director, HealthSouth Corporation

#### 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)

- (1) Member of Executive Committee
- (2) Member of Audit Committee
- (3) Member of Compensation Committee
- (4) Member of Nominating and Corporate Governance Committee

#### **Officers**

#### John T. Ryan III

Chairman of the Board and Chief Executive Officer

#### William M. Lambert

President and Chief Operating Officer\*

### James H. Baillie

Vice President; President, MSA Europe

#### Joseph A. Bigler

Vice President

#### Kerry M. Bove

Vice President

### Rob Cañizares M.

Vice President; President, MSA International

#### Ronald N. Herring, Jr.

Vice President

### Douglas K. McClaine

Vice President; Secretary and General Counsel

#### Stephen C. Plut

Vice President

#### Paul R. Uhler

Vice President

### Dennis L. Zeitler

Vice President; Chief Financial Officer and Treasurer

<sup>\*</sup> Effective March 15, 2007

# 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, 2006

Commission File No. 1-15579

## MINE SAFETY APPLIANCES COMPANY

(Exact I	name of registrant as specific	cu ii 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 offic		15238 (Zip Code)	
Registrant's teleph	one number, including	g area code: 412-967-3000	
Securities regi	stered pursuant to Sec	tion 12(b) of the Act:	
Title of each class		Name of each exchange on which registered	
Common Stock, no par valu	ie	New York Stock Exchange	
Indicate by check mark whether the Securities Act. Yes ⊠ No □	registrant is a well-know	vn seasoned issuer, as defined in Rule 405 o	of the
Indicate by check mark if the registr of the Act. Yes $\square$ No $\boxtimes$	ant is not required to file	e reports pursuant to Section 13 or Section 1	5(d)
•	934 during the preceding	Il reports required to be filed by Section 13 g 12 months and (2) has been subject to suc	
contained herein, and will not be contained	ed, to the best of registra	suant to Item 405 of Regulation S-K is not ant's knowledge, in the definitive proxy or any amendment to this Form 10-K.	
Indicate by check mark whether the non-accelerated filer (as defined in Rule 1	-	elerated filer, an accelerated filer, or a	
Large accelerated filer ⊠	Accelerated filer	Non-accelerated filer	
Indicate by check mark whether the Act). Yes ☐ No ⊠	registrant is a shell comp	pany (as defined in Rule 12b-2 of the	
including 2,749,012 shares held by the M	ine Safety Appliances C	shares of common stock, no par value, not Company Stock Compensation Trust. The of June 30, 2006 was approximately \$1.3 bill	lion
DOCUMEN	TS INCORPORATED	BY REFERENCE	

Portions of the Proxy Statement for the May 10, 2007 Annual Meeting of Shareholders are incorporated by reference into Part III.

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#### **Forward-Looking Statements**

This report may contain 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, but are not limited to, those listed in this report under "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and elsewhere in this report. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "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 1. 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, thermal imaging cameras, fall protection, and ballistic body armor. We also provide a broad offering of consumer and contractor safety products through retail channels.

We dedicate significant resources to research and development, which allows us to produce innovative, 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.

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 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, hazmat, and remediation workers who have longer term exposures to hazards in their work environment; and
- dust and pollen masks for maintenance workers, contractors, and at-home consumers exposed to nuisance dusts, allergens, and other particulates.
- 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 single- and multi-gas detectors provide portable solutions for detecting the presence of oxygen, hydrogen sulfide, carbon monoxide, and combustible gases, either singularly or all four gases at once. Our 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® 5200 and Evolution® 5200 HD² Thermal Imaging Cameras, which combine the functionality and durability required by the fire service with features and performance capabilities not found in other small format TICs.
- Multi-point permanently installed gas detection systems. Our comprehensive line of gas monitoring systems is 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 pulp and paper, refrigerant monitoring, petrochemical, and general industrial applications. One of our newest lines, 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 is 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 2006 sales. Similarly, our Gallet firefighting helmet has a number one market position in Europe based on 2006 sales.
- *Military helmets*. The Advanced Combat Helmet is used by the military for ballistic head protection. It was originally designed for the Special Forces of the U.S. military and has now been designated as the "basis of issue" by the U.S. Army.
- 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.
- Ballistic body armor. Our MSA Paraclete Releasable Assault Vest and Releasable Modular Vest are
  used primarily by the U.S. military, including Special Forces Units. Our ForceField™ Body Armor line
  features two concealable ballistic vests and one over-the-uniform tactical vest designed for SWAT
  applications.

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, accounted for approximately 8% of our 2006 sales. The year-end backlog of orders under contracts with U.S. government agencies was \$33.1 million in 2006, \$57.9 million in 2005, and \$80.8 million in 2004.

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

Products	Primary End-Users
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, and Hagemeyer. In North America, we distribute fire service products primarily through specially trained local and regional distributors who provide advanced training and service capabilities to volunteer and paid municipal fire departments. In our 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 distributor locations 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, including distributors, such as Orgill Bros., hardware and equipment rental outlets, such as United Rentals, and retail chains, such as The Home Depot and TrueValue.

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 \$13 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 or growing 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, safety products industry revenues reflect 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 2006, 2005, and 2004, on a global basis, we spent approximately \$26.0 million, \$21.9 million, and \$22.6 million, respectively, on research and development. Our engineering groups operate primarily in the United States and Germany, and to a lesser extent in France and Sweden. 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 Product Leadership Council, made up of 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 American, European, 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 a source of competitive advantage. Our approach to the new product development process allows us to tailor our product offerings and product line strategies to satisfy distinct customer preferences and industry regulations that vary across our three geographic segments.

We believe another important aspect of our approach to new product development is that our engineers and technical associates work closely with the safety industry's leading standards-setting groups and trade associations, 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 or acquired 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, hard hats, and circuit boards. The primary raw materials that we source from third parties include rubber, chemical filter media, eye and face protective lenses, air cylinders, certain metals, electronic components, and ballistic resistant and non-ballistic fabrics. We purchase these materials both domestically and internationally, and we believe our supply sources are both well established and reliable. We have close vendor relationship programs with the majority of our key raw material suppliers. Although we generally do not have long-term supply contracts, we have not experienced any significant problems in obtaining adequate raw materials.

**Employees**—As of December 31, 2006, we had approximately 4,900 employees, approximately 2,600 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 at www.msanet.com 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 1A. Risk Factors

## A reduction in the spending patterns of government agencies could materially and adversely affect our net sales, earnings and cash flow.

The demand for our products sold to the fire service market, the homeland security market, and to U.S. government agencies, including the Department of Defense, is, in large part, driven by available government funding. For example, the level of government funding in these areas increased significantly after the attacks of September 11, 2001, fueling the demand for many of our products such as SCBAs, gas masks, and Advanced Combat Helmets, and declined in 2005 and 2006, as government funding priorities changed. Approximately 8% of our net sales for the year ended December 31, 2006 were made directly to U.S. military customers. Government budgets are set annually and we cannot assure you that government funding will be sustained at the same level in the future. A significant reduction in available government funding in the future could materially and adversely affect our net sales, earnings and cash flow.

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

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

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

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

extensions, including development delays, the failure of new products and product line extensions to achieve anticipated levels of market acceptance, and the cost of failed product introductions.

## Product liability claims could have a materially adverse effect on our business, operating results, and financial condition.

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

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

Most of our products are required to meet performance and test standards designed to protect the health and safety of people around the world. Our inability to comply with these standards may materially and adversely affect our results of operations. Changes in regulations could reduce the demand for our products or require us to reengineer our products, thereby creating opportunities for our competitors. Regulatory approvals for our products may be delayed or denied for a variety of reasons that are outside of our control. Additionally, market anticipation of significant new standards, such as the National Fire Protection Association (NFPA) standard for breathing apparatus which was recently promulgated and is due to become effective August 31, 2007, can cause customers to accelerate or delay buying decisions.

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

We have business operations in over 30 foreign countries. In 2006, approximately 47% of our net sales were made by operations located outside the United States. Our international operations are subject to various political, economic, and other risks and uncertainties, which could adversely affect our business. These risks include the following:

- unexpected changes in regulatory requirements;
- · currency exchange rate fluctuations;
- changes in trade policy or tariff regulations;
- · changes in tax laws and regulations;
- intellectual property protection difficulties;
- difficulty in collecting accounts receivable;
- complications in complying with a variety of foreign laws and regulations, some of which conflict with U.S. laws;
- trade protection measures and price controls;
- trade sanctions and embargos;
- nationalization and expropriation;
- increased international instability or potential instability of foreign governments;

- the need to take extra security precautions for our international operations; and
- costs and difficulties in managing culturally and geographically diverse international operations.

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

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

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

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

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

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

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. These laws impose penalties for noncompliance and liability for response costs and certain damages resulting from past and current spills, disposals, or other releases of hazardous materials. We could incur substantial costs as a result of noncompliance with or liability for cleanup pursuant to these environmental laws. We have identified several known and potential environmental liabilities, which we do not believe are material. Environmental laws have changed rapidly in recent years, and we may be subject to more stringent environmental laws in the future. If more stringent environmental laws are enacted, these future laws could have a materially adverse effect on our results of operations.

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

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

- failure of the acquired businesses to achieve the results we expect;
- diversion of our management's attention from operational matters;
- our inability to retain key personnel of the acquired businesses;

- risks associated with unanticipated events or liabilities;
- · potential disruption of our existing business; and
- customer dissatisfaction or performance problems at the acquired businesses.

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

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

For the year ended December 31, 2006, our operations in our Europe and International segments accounted for 24% and 21% of our net sales, respectively. The results of our foreign operations are reported in the local currency and then translated into U.S. dollars at the applicable exchange rates for inclusion in our consolidated financial statements. The exchange rates between some of these currencies and the U.S. dollar have fluctuated significantly in recent years, and may continue to do so in the future. In addition, because our financial statements are stated in U.S. dollars, such fluctuations may affect our results of operations and financial position, and may affect the comparability of our results between financial periods. We cannot assure you that we will be able to effectively manage our exchange rate risks or that any volatility in currency exchange rates will not have a materially adverse effect on our results of operations and financial condition.

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

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

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

#### **Item 1B. Unresolved Staff Comments**

None.

### **Item 2. Properties**

Our principal executive offices are located at 121 Gamma Drive, RIDC Industrial Park, O'Hara Township, Pittsburgh, Pennsylvania 15238 in a 93,000 square-foot building owned by us. We own or lease our primary facilities located in seven states in the United States and in a number of other countries. We believe that all of our facilities, including the manufacturing facilities, are in good repair and in suitable condition for the purposes for which they are used. See Note 20 to the consolidated financial statements for information concerning certain planned facility consolidations.

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

Location	Function	Square Feet	Owned or Leased
North America	<del></del>		
Murrysville, PA	Manufacturing	295,000	Owned
Cranberry Twp., PA	Office, Research and Development, and Manufacturing	212,000	Owned
Evans City, PA	Manufacturing	194,000	Leased
St. Pauls, NC	Manufacturing	144,000	Leased
Jacksonville, NC	Manufacturing	107,000	Owned
Pittsburgh, PA	Office	93,000	Owned
Pittsburgh, PA	Distribution	81,000	Leased
Cranberry Twp., PA	Research and Development	68,000	Owned
Sparks, MD	Office, Research and Development, and Manufacturing	52,000	Leased
Englewood, CO	Manufacturing	41,000	Leased
Clifton, NJ	Manufacturing	41,000	Owned
Mexico City, Mexico	Distribution and Manufacturing	41,000	Leased
Englewood, CO	Distribution	15,000	Leased
Newport, VT	Manufacturing	12,000	Leased
Bowling Green, KY	Office, Research and Development, and Manufacturing	7,000	Leased
Toronto, Canada	Distribution	5,000	Leased
Europe			
Berlin, Germany	Office, Research and Development, Manufacturing, and Distribution	340,000	Leased
Chatillon sur Chalaronne, France	Office, Research and Development, Manufacturing, and Distribution	94,000	Owned
Glasgow, Scotland	Office and Manufacturing	25,000	Leased
Milan, Italy	Office, Research and Development, and Distribution	25,000	Owned
Mohammedia, Morocco	Manufacturing	24,000	Owned
Vernamo, Sweden	Office, Research and Development, Manufacturing, and Distribution	17,000	Leased
Glasgow, Scotland	Distribution	6,000	Leased
International			
Wuxi, China	Office, Research and Development, Manufacturing, and Distribution	92,000	Owned
Johannesburg, South Africa	Office, Manufacturing, and Distribution	89,000	Leased
Sao Paulo, Brazil	Office, Research and Development, Manufacturing, and Distribution	60,000	Owned
Sydney, Australia	Office, Research and Development, Manufacturing, and Distribution	57,000	Owned
Lima, Peru	Office and Distribution	34,000	Owned
Buenos Aires, Argentina	Office and Distribution	8,600	Owned

#### **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 2,500 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 16,750 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, in recent years 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 evaluate our exposures on an ongoing basis and make adjustments to the reserve 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 the normal course of business, we make payments to settle product liability claims and related legal fees that are covered by insurance. We record receivables for the portion of these payments that we believe to be probable of recovery from insurance carriers. The net balance of receivables from insurance carriers was \$18.4 million and \$5.0 million at December 31, 2006 and 2005, respectively. We evaluate the collectibility of these receivables on an ongoing basis and make adjustments as appropriate.

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

No matters were submitted to a vote of our security holders during the fourth quarter of 2006.

### **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:

Name	Age	Principal Occupations or Employment During Past Five Years
John T. Ryan III	63	Chairman of the Board of Directors; Chief Executive Officer since October 1991.
James H. Baillie	60	Vice President; President, MSA Europe since March 1999.
Joseph A. Bigler	57	Vice President since January 1998; primarily responsible for North American sales and distribution.
Kerry M. Bove	48	Vice President since August 2000; primarily responsible for North American manufacturing operations and materials management and the optimization of global manufacturing operations.
Rob Cañizares M	57	Vice President; President, MSA International since January 2003. Prior to that time, Mr. Cañizares was senior vice president of global sales and service group of Trane Company.
Ronald N. Herring, Jr	46	Vice President since January 2004; primarily responsible for North American marketing, research and engineering, and quality assurance. Prior to that time, Mr. Herring served as the general manager of the safety products division, and as the director of marketing for the safety products division.
William M. Lambert	48	Vice President; President, MSA North America since January 2003. Prior to that time, Mr. Lambert was vice president and general manager of the safety products division.
Douglas K. McClaine	49	Vice President, Secretary and General Counsel since May 2005; and served as secretary and general counsel since July 2002. Prior to that time, Mr. McClaine was associate general counsel.
Stephen C. Plut	47	Vice President, Chief Information Officer since May 2005. Prior to that time, Mr. Plut was chief information officer.
Paul R. Uhler	48	Vice President since May 2006. Prior to that time, Mr. Uhler served as director of human resources and corporate communications, and as manager of the Murrysville, PA Plant.
Dennis L. Zeitler	58	Vice President; Chief Financial Officer, and Treasurer since November 2000.

#### **PART II**

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

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

	Price Range of Our Common Stock			
	High	Low	Dividends	
Year ended December 31, 2005				
First Quarter	\$53.00	\$36.25	\$0.10	
Second Quarter	47.29	33.89	0.14	
Third Quarter	50.18	38.13	0.14	
Fourth Quarter	42.60	35.18	0.14	
Year ended December 31, 2006				
First Quarter	\$44.16	\$36.18	\$0.14	
Second Quarter	44.00	38.62	0.18	
Third Quarter	41.19	34.05	0.18	
Fourth Quarter	39.09	34.98	0.18	

On February 16, 2007, there were 391 registered holders of our shares of common stock.

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**

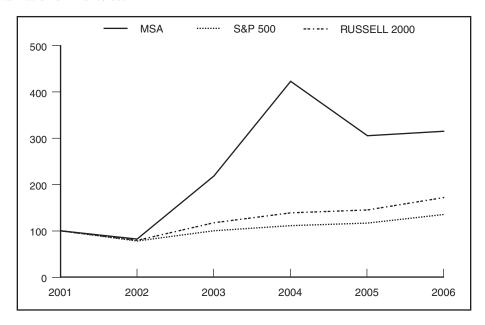
Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 - October 31, 2006	_	_		2,114,802
November 1 - November 30, 2006	140,000	\$36.62	140,000	2,072,982
December 1 - December 31, 2006	60,000	36.81	60,000	1,982,179

On November 2, 2005, the Board of Directors authorized the purchase of up to \$100 million of common stock from time to time in private transactions and on the open market. The share purchase program has no expiration date. The maximum shares that may yet be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price.

We do not have any other share purchase programs.

### **Comparison of Five-Year Cumulative Total Return**

Set forth below is a line graph and table comparing the cumulative total returns (assuming reinvestment of dividends) for the five years ended December 31, 2006 of \$100 invested on December 31, 2001 in each of Mine Safety Appliances Company's common stock, the Standard & Poor's 500 Composite Index, and the Russell 2000 Index. Because our competitors are principally privately held concerns or subsidiaries or divisions of corporations engaged in multiple lines of business, we do not believe it feasible to construct a peer group comparison on an industry or line-of-business basis. The Russell 2000 Index, while including corporations both larger and smaller than MSA in terms of market capitalization, is composed of corporations with an average market capitalization similar to us.



	Value at December 31,					
	2001	2002	2003	2004	2005	2006
MSA	\$100.00	\$81.71	\$218.14	\$421.90	\$305.06	\$314.35
S&P 500	100.00	77.90	100.26	111.19	116.63	135.10
Russell 2000	100.00	79.50	117.10	138.53	144.91	171.68

### 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.

	2006	2005	2004	2003	2002
		(In thou	sands, except	as noted)	
Statement of Income Data:					
Net sales	\$913,714	\$907,912	\$852,509	\$696,473	\$564,426
Other income	5,384	4,058	5,004	1,724	2,271
Cost of products sold	568,410	558,921	518,174	427,632	349,936
Selling, general and administrative	215,663	201,367	198,714	174,701	144,641
Research and development	26,037	21,928	22,648	20,897	19,459
Restructuring and other charges	6,981	_	_		_
Interest	6,228	5,484	3,845	4,564	4,769
Currency exchange losses (gains)	3,139	474	264	(3,356)	(191)
Provision for income taxes	28,722	42,013	42,821	24,835	16,870
Net income from continuing operations	63,918	81,783	71,047	48,924	31,213
Net income from discontinued operations				2,685	3,864
Gain on sale of discontinued operations—after tax	_	_	_	13,658	_
Net income	63,918	81,783	71,047	65,267	35,077
Earnings per Share Data:					
Basic per common share continuing operations (in					
dollars)	\$ 1.76	\$ 2.24	\$ 1.91	\$ 1.33	\$ .85
Diluted per common share continuing operations (in					
dollars)	1.73	2.19	1.86	1.31	.85
Dividends paid per common share (in dollars)	.68	.52	.37	.26	.22
Weighted average common shares					
outstanding—basic	36,366	36,560	37,111	36,730	36,512
Balance Sheet Data:					
Working capital	\$289,424	\$246,367	\$270,593	\$207,216	\$138,182
Working capital ratio	3.3	2.9	3.1	2.8	2.4
Net property	120,651	116,209	123,716	120,560	130,407
Total assets	898,620	725,357	734,110	643,885	579,765
Long-term debt	112,541	45,834	54,463	59,915	64,350
Common shareholders' equity	436,926	381,470	376,679	306,867	288,009
Equity per common share (in dollars)	12.13	10.44	10.09	8.31	7.86
Note:					
Cost of products sold, selling, general and administrative expenses, and research and development expenses include noncash pension income.					
Noncash pension income, pre-tax	\$ 4,147	\$ 6,104	\$ 7,188	\$ 8,845	\$ 13,125
Troneasii pension meome, pre-tax	ψ +,1+/	ψ 0,104	ψ /,100	Ψ 0,043	ψ 13,123

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 may contain forward-looking statements that involve risks and uncertainties. The forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions, and projections about our industry, business, and future financial results. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in the sections of this annual report entitled "Forward-Looking Statements" and "Risk Factors."

#### **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 lines 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:

- identifying and developing promising new markets;
- focusing 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 2006, approximately 55%, 24%, and 21% of our net sales 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 European 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.

We believe that our financial performance in recent years is the result of initiatives that have allowed us to anticipate and respond quickly to market requirements, particularly in the North American fire service, homeland security, construction and industrial markets, as well as the military, and reflects our ability to quickly bring to market products that comply with changing industry standards and to create new market demand with innovative products.

#### **ACQUISITIONS**

In September 2006, we acquired Paraclete Armor and Equipment, Inc. (Paraclete) of St. Pauls, North Carolina. Paraclete is a rapidly growing innovator and developer of advanced ballistic body armor used by military personnel, including Special Forces units of the U.S. military. Paraclete's most recent product development—the AV2007 Tactical Body Armor System—represents the next generation of advanced body armor. The vest features a modular design that allows 23 vest configurations, enabling users to tailor the degree of protection based on specific mission or task requirements. The vest employs state-of-the-art materials for enhanced protection against fragmentation and small arms projectiles. We believe that the acquisition of Paraclete enhances our existing line of ballistic body armor and strategically positions us to provide a broad range of ballistic protective equipment to both the military and law enforcement markets.

In January 2006, we took steps to ensure our compliance with South African Black Economic Empowerment (BEE) requirements by forming a new South African holding company in which Mineworkers Investment Company (MIC) of Johannesburg, South Africa holds a 25.1% ownership interest. Compliance with BEE, a South African government program similar to Affirmative Action in the United States, is key to achieving meaningful growth in South Africa, particularly in the mining industry. At the same time, we acquired Select Personal Protective Equipment (Select PPE) of South Africa, an established supplier of multi-brand safety equipment and solutions to the South African mining industry. Our existing South African company, MSA Africa, and Select PPE are operating independently under the newly-established South African holding company. We believe that our new South African operating structure significantly improves our market presence and expertise in serving the mining industry and provides significant growth opportunities in the region.

In September 2005, we acquired Microsensor Systems, Inc. of Bowling Green, Kentucky. Microsensor Systems is a world leader in surface acoustic wave-based chemical sensing technology used to detect chemical warfare agents. We believe the acquisition of Microsensor Systems significantly strengthens our position as a premier provider of leading edge detection technology, while expanding our product offerings in the homeland security, emergency responder, law enforcement, military and industrial markets.

In June 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<sup>®</sup> 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.

#### **RESULTS OF OPERATIONS**

### Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

*Net sales*. Net sales for the year ended December 31, 2006 were \$913.7 million, an increase of \$5.8 million, or 1%, from \$907.9 million for the year ended December 31, 2005.

	2006	2005 (In millions	Dollar Increase (Decrease)	Percent Increase (Decrease)
North America	\$503.4	\$566.5	\$(63.1)	(11)%
Europe	219.2	180.5	38.7	21
International	191.1	160.9	30.2	19

Net sales of the North American segment were \$503.4 million for the year ended December 31, 2006, a decrease of \$63.1 million, or 11%, compared to \$566.5 million for the year ended December 31, 2005. Our shipments of Advanced Combat Helmets and communications systems to the military were approximately \$48.3 million lower than in the 2005, reflecting the completion of certain contracts. Gas mask sales were approximately \$28.8 million lower in the year ended December 31, 2006, on lower shipments of military masks, as well as commercial masks to the homeland security market. Our 2006 sales of self-contained breathing apparatus and thermal imaging cameras were \$11.1 million and \$6.6 million lower, respectively, than in the prior year reflecting ongoing delays in the release of fire department funding made available through the U.S. Assistance to Firefighters Grant (AFG) program. The first grants under the 2006 AFG program were not announced until early October and less than half of the expected funds were released by year-end. In 2005, AFG grants were announced in August and were mostly completed by the end of the year. Our sales of instruments and head protection improved approximately \$18.4 million and \$7.5 million, respectively, on increased demand in construction and industrial markets. Sales of ballistic protection products, including those made by Paraclete, which we acquired in September 2006, were \$7.0 million higher than in the year ended December 31, 2005.

Net sales by European operations were \$219.2 million for the year ended December 31, 2006, an increase of \$38.7 million, or 21%, from \$180.5 million for the year ended December 31, 2005. Local currency sales in Europe for the year ended December 31, 2006 were \$35.9 million higher than in 2005. The increase reflects strong shipments of disposable respirators in Germany and France, gas masks and self-rescuer canisters to the German Army, chemical suits to the Slovakian Army, and breathing apparatus and fire helmets in Western European markets. The favorable effect of a stronger euro increased sales when stated in U.S. dollars by approximately \$2.8 million.

Net sales by International operations were \$191.1 million for the year ended December 31, 2006 compared to \$160.9 million for the year ended December 31, 2005, an increase of \$30.2 million, or 19%. The sales increase was primarily in South Africa, where local currency sales were up \$27.2 million, primarily from Select PPE, which we acquired in January 2006. Local currency sales were up approximately \$5.8 million in our South American companies, reflecting improved economic conditions and focused sales initiatives. Our sales in the Middle East were approximately \$3.6 million lower than in the year ended December 31, 2005. In 2005, our Middle East sales benefited from a large one-time breathing apparatus order. Currency exchange effects on International segment sales when stated in U.S. dollars were not significant.

*Cost of products sold.* Cost of products sold was \$568.4 million for the year ended December 31, 2006, an increase of \$9.5 million, or 2%, from \$558.9 million for the year ended December 31, 2005.

Cost of products sold and operating expenses include net periodic pension benefit costs and credits. Excluding \$4.8 million in special termination benefits, which is reported in restructuring and other charges, pension credits, combined with pension costs, resulted in net pension credits for the year ended December 31, 2006 of \$4.1 million, of which approximately \$2.2 million was included in cost of products sold, \$1.6 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, 2005 were \$6.1 million, of which approximately \$3.7 million was included in cost of products sold, \$2.2 million in selling, general and administrative expenses, and \$0.2 million in research and development expenses. The recognition of pension income in the years ended December 31, 2006 and 2005 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 as computed by Yanni Partners, an independent investment consulting firm. 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, 2006 was \$345.3 million, a decrease of \$3.7 million, or 1%, from \$349.0 million for the year ended December 31, 2005. The ratio of gross profit to sales decreased to 37.8% in 2006 compared to 38.4% in 2005. The lower gross profit ratio in 2006 was primarily related to lower margins in the International and European segments where sales grew significantly.

Selling, general and administrative expenses. Selling, general and administrative expenses for the year ended December 31, 2006 were \$215.7 million, an increase of \$14.3 million, or 7%, from \$201.4 million for the year ended December 31, 2005. Selling, general and administrative expenses were 23.6% of sales in 2006 compared to 22.2% of sales in 2005. The increase in selling, general and administrative expenses includes \$2.3 million of incremental stock compensation expense in the North American segment, related to our adoption of FAS No. 123R, Share Based Payment, on January 1, 2006. FAS No. 123R requires the recognition of compensation expense for the estimated fair value of stock option grants and immediate expense recognition for restricted stock awards and stock options that are granted to participants who are eligible for retirement. The incremental stock compensation expense relates to restricted stock awards and stock option grants made to officers, key management employees, and directors in 2006. The fair value of the 2006 stock option grants and restricted stock awards was \$4.9 million, of which \$2.8 million was expensed during the year ended December 31, 2006. The remaining \$2.1 million of fair value will generally be expensed over the remainder of the three year vesting periods. Excluding the incremental stock compensation expense, selling, general and administrative expenses in North America were down \$0.8 million, reflecting the absence of depreciation expense in 2006 on computer systems that were fully depreciated during the fourth quarter of 2005, partially offset by higher selling and administrative expenses. Local currency selling, general and administrative expenses in the European and International segments were up \$12.2 million, including a \$4.9 million increase in South Africa, related to the January 2006 acquisition of Select PPE. The remainder of the selling, general and administrative expense increase in the European and International segments was primarily due to additional selling expenses associated with generating and supporting higher sales and currency exchange rate effects, when stated in U.S. dollars.

**Research and development expenses.** Research and development expenses were \$26.0 million for the year ended December 31, 2006, an increase of \$4.1 million, or 19%, from \$21.9 million for the year ended December 31, 2005. Higher research and development expenses during the year ended December 31, 2006 occurred in North America and reflect our continued focus on developing innovative new 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 \$22.1 million for the year ended December 31, 2006, a decrease of \$2.2 million, or 9%, from \$24.3 million for the year ended December 31, 2005. The primary reason for lower depreciation expense was the previously-discussed decrease in depreciation of computer systems.

Restructuring and other charges. During the year ended December 31, 2006, we recorded charges of \$7.0 million, primarily related to our Project Outlook reorganization in North America. Project Outlook was designed to ensure that our North American management teams, employees, product design processes, and operational functions are fully aligned with our strategic goals and the needs of our customers. The plan, which was largely completed by the end of the second quarter, included the reorganization of business and support functions in our North American operations that is resulting in a higher degree of collaboration, focus and efficiency. A significant portion of the Project Outlook cost reductions has been realized through a focused voluntary retirement incentive program (VRIP). In February 2006, approximately 60 employees retired under the terms of the VRIP. Project Outlook charges include \$5.3 million for VRIP retirees (including \$4.8 million in non-cash special termination benefits), \$0.7 million in severance costs related to additional staffing reductions, and \$0.5 million related to the relocation of various employee work groups within the new organizational structure. The remaining \$0.5 million of charges in 2006 was severance costs related to our plan to discontinue manufacturing operations in Britain.

*Interest expense.* Interest expense for the year ended December 31, 2006 was \$6.2 million, an increase of \$0.7 million, or 14%, from \$5.5 million for the year ended December 31, 2005. The increase reflects higher borrowings during the current year.

*Currency exchange adjustments.* During the year ended December 31, 2006, we recorded currency exchange losses of \$3.1 million compared to losses of \$0.5 million for the year ended December 31, 2005. The currency exchange losses during the current year were primarily related to the South African rand. Currency exchange losses during the year ended December 31, 2005 were primarily due to the weakening of the euro.

*Other income.* Other income for the year ended December 31, 2006 was \$5.4 million, an increase of \$1.3 million, or 33%, from \$4.1 million in 2005. The increase was primarily due to gains on the sale of real property and higher interest income.

Income tax provision. The provision for income taxes as a percent of income before taxes was 31.0% for the year ended December 31, 2006 compared to 33.9% for the year ended December 31, 2005. Our provision for income taxes for the year ended December 31, 2006 includes one-time benefits of \$1.2 million and \$0.8 million related to adjustments to prior year additional extra-territorial income exclusions and research and development credits, respectively. Our 2005 provision for income taxes included a one-time benefit of approximately \$2.0 million, primarily related to the release of previously-established reserves taken on research and development credits claimed for the years 1995 through 2001. Excluding these discrete items, our effective tax rate for the years ended December 31, 2006 and 2005 were 33.2% and 35.6%, respectively. The effective tax rate in both years was lower than the statutory rate primarily due to research and development credits, extraterritorial income exclusions, and non-U.S. income. Compared to prior years, the 2006 effective tax rate also benefits from a more favorable state income tax apportionment.

We have not provided deferred U.S. income taxes on undistributed earnings of non-U.S. subsidiaries, which amounted to \$137.2 million as of December 31, 2006. 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.

The American Jobs Creation Act of 2004 provided a limited opportunity through 2005 to repatriate the undistributed earnings of non-U.S. subsidiaries at a U.S. tax cost that could be lower than the normal tax cost on such distributions. During 2005, we repatriated \$23.2 million of dividends, \$21.0 million of which qualified under these provisions. The resulting impact of these dividends on our income tax expense was not material.

The determination of annual income tax expense takes into consideration amounts which may be needed to cover exposures for open tax years. We have resolved all matters with the IRS related to our federal income tax returns through 2002. We believe that we have made adequate provision for income taxes and interest which may

become payable or receivable for years not yet settled. We do not expect any materially adverse impact on earnings to result from the resolution of matters related to open tax years.

*Net income.* Net income for the year ended December 31, 2006 was \$63.9 million, a decrease of \$17.9 million, or 22%, from net income for the year ended December 31, 2005 of \$81.8 million. Basic earnings per share of common stock was \$1.76 in 2006 compared to \$2.24 in 2005.

North American segment net income for the year ended December 31, 2006 was \$42.7 million, a decrease of \$21.4 million, or 34%, from \$64.1 million for the year ended December 31, 2005. The decrease in North American net income was primarily due to lower sales.

European segment net income for the year ended December 31, 2006 was \$8.9 million, an increase of \$2.6 million, or 40%, from \$6.3 million for the year ended December 31, 2005. The increase was primarily related to the previously-discussed sales improvement.

International segment net income for the year ended December 31, 2006 was \$13.1 million, an increase of \$1.4 million, or 12%, from \$11.7 million for the year ended December 31, 2005. The improvement in International segment net income was primarily related to the previously-discussed sales growth.

### Year Ended December 31, 2005 Compared to Year Ended December 31, 2004

*Net sales.* Net sales for the year ended December 31, 2005 were \$907.9 million, an increase of \$55.4 million, or 6%, from \$852.5 million for the year ended December 31, 2004. Our net sales increased in all segments as follows:

	2005	2004	Dollar Increase	Percent Increase
		(In millions)		
North America	\$566.5	\$557.1	\$ 9.4	2%
Europe	180.5	167.3	13.2	8
International	160.9	128.1	32.8	26

Net sales of the North American segment were \$566.5 million for the year ended December 31, 2005, an increase of \$9.4 million, or 2%, compared to \$557.1 million for the year ended December 31, 2004. The sales increase in the year ended December 31, 2005 was due to higher shipments of Advanced Combat Helmets and related communication systems, head protection, and instruments, partially offset by lower shipments of SCBAs and gas masks. Our shipments of Advanced Combat Helmets and communications systems to the military improved during 2005 by approximately \$8.3 million and \$11.5 million, respectively, reflecting continued government funding to support the war on terrorism. Our sales of head protection, instruments, and fall protection were up approximately \$10.7 million, \$6.5 million, and \$3.4 million, respectively, on increased demand in construction and industrial markets. In the fire service market, our SCBA sales were down approximately \$13.3 million compared to 2004. We believe that the decrease in SCBA sales was primarily due to delays in 2005 federal funding to local fire departments under the Assistance to Firefighters Grant Program. Our 2005 SCBA sales rebounded late in the year after this funding was released to local fire departments. Gas mask sales were approximately \$17.1 million lower than in 2004. The decrease in gas mask sales in 2005 reflects lower shipments of military masks, as well as commercial masks to the homeland security market, following very strong demand in 2004. During 2004, we saw significant demand for gas masks in the homeland security market. Although we saw significant interest and demand for the Evolution 5200 thermal imaging camera, sales of TICs were flat year-to-year due to production delays caused by a parts supply issue with a key vendor that was not resolved until the third quarter of 2005.

Net sales by European operations were \$180.5 million for the year ended December 31, 2005, an increase of \$13.2 million, or 8%, from \$167.3 million for the year ended December 31, 2004. Approximately \$6.1 million of

the sales increase related to hearing protection sales by MSA Sordin, which we acquired in June 2004. Local currency sales by other companies throughout Europe improved approximately \$4.1 million during 2005, on several large breathing apparatus orders for the fire service and police markets. Approximately \$3.0 million of the European segment sales increase was due to favorable exchange rate effects on the translation of local currency sales to U.S. dollars.

Net sales by International operations were \$160.9 million for the year ended December 31, 2005 compared to \$128.1 million for the year ended December 31, 2004, an increase of \$32.8 million, or 26%. Local currency sales were up approximately \$6.0 million in our South American companies, reflecting improved economic conditions and focused sales initiatives. Our sales in the Middle East were approximately \$5.8 million higher during 2005, primarily due to a large breathing apparatus order. Operations in China and Australia reported sales increases of approximately \$5.4 million and \$4.5 million, respectively, for the year. Approximately \$5.5 million of the 2005 increase in International segment sales, when stated in U.S. dollars, was related to the favorable effect of stronger international currencies, particularly the Brazilian real, Australian dollar, and South African rand.

*Cost of products sold.* Cost of products sold was \$558.9 million for the year ended December 31, 2005, an increase of \$40.7 million, or 8%, from \$518.2 million for the year ended December 31, 2004.

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, 2005 of \$6.1 million, of which approximately \$3.7 million was included in cost of products sold, \$2.2 million in selling general and administrative expenses, and \$0.2 million in research and development expenses. Net pension credits for the year ended December 31, 2004 were \$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.

*Gross profit.* Gross profit for the year ended December 31, 2005 was \$349.0 million, an increase of \$14.7 million, or 4%, from \$334.3 million for the year ended December 31, 2004. The ratio of gross profit to sales decreased to 38.4% in 2005 compared to 39.2% in 2004. The lower gross profit ratio in 2005 was primarily due to sales mix changes in North America, on proportionately lower sales of higher margin SCBAs and gas masks and proportionately higher sales of Advanced Combat Helmets and communication systems to the U.S. military at gross margins that are generally lower than our margins on commercial sales.

Selling, general and administrative expenses. Selling, general and administrative expenses for the year ended December 31, 2005 were \$201.4 million, an increase of \$2.7 million, or 1%, from \$198.7 million for the year ended December 31, 2004. Selling, general and administrative expenses were 22.2% of sales in 2005 compared to 23.3% of sales in 2004. North American segment selling, general and administrative expenses for the year ended December 31, 2005 were approximately \$3.7 million lower than in 2004, reflecting the favorable effect of cost control efforts. Exchange effects related to the strengthening of international currencies, particularly the euro, Brazilian real, and Australian dollar, increased selling, general and administrative expenses for the year ended December 31, 2005 by approximately \$2.8 million. The remainder of the increase during 2005 reflects higher local currency expenses in the European and International segments, on higher sales volumes, and includes an increase of approximately \$1.3 million at MSA Sordin, which was acquired in June 2004.

**Research and development expenses.** Research and development expenses were \$21.9 million for the year ended December 31, 2005, a decrease of \$0.7 million, or 3%, from \$22.6 million for the year ended December 31, 2004. The decrease occurred primarily in North America and was due to the previously-mentioned cost control efforts.

**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 \$24.3 million

for the year ended December 31, 2005, a decrease of \$1.2 million, or 5%, from \$25.5 million for the year ended December 31, 2004. The decrease was primarily due to lower depreciation on Advanced Combat Helmet production equipment and our enterprise-wide system software.

*Interest expense*. Interest expense for the year ended December 31, 2005 was \$5.5 million, an increase of \$1.7 million, or 43%, from \$3.8 million for the year ended December 31, 2004. The increase was primarily related to higher short term borrowings during the year ended December 31, 2005. Interest expense in 2004 was favorably affected by a realized gain of \$0.7 million on an interest rate swap transaction that we terminated.

Currency exchange adjustments. During the year ended December 31, 2005, we recorded currency exchange losses of \$0.5 million compared to losses of \$0.3 million for the year ended December 31, 2004. Currency exchange losses in 2005 were primarily related to euro-denominated assets held by us, and reflected a weakening of that currency during 2005. The currency exchange loss during 2004 was primarily due to losses on forward exchange contracts that we entered into to hedge our exposure to movements in euro exchange rates, partially offset by some strengthening of the euro.

*Other income.* Other income for the year ended December 31, 2005 was \$4.1 million, a decrease of \$0.9 million, or 19%, from \$5.0 million in 2004. During the year ended December 31, 2005, we recognized a gain of approximately \$0.7 million on the sale of idle production equipment in Germany and interest income of approximately \$0.5 million related to settled issues in the IRS audits of tax years 1995 through 2001. In 2004, we recognized approximately \$1.1 million of interest income with respect to settled issues in the audits of tax years 1995 through 2001.

Income tax provision. Our effective income tax rate for the year ended December 31, 2005 was 33.9% compared to 37.6% for the year ended December 31, 2004. In June 2005, we received communication from the Internal Revenue Service indicating that their audits of our federal income tax returns for the years 1995 through 2001 were substantially complete, with no adverse adjustments to research and development credits that we claimed during the period covered by the examinations. On the basis of this communication, our provision for income taxes for the year ended December 31, 2005 included a one-time benefit of approximately \$2.0 million, primarily related to the release of previously-established reserves taken on research and development credits claimed in those years. In 2004, we made unfavorable adjustments to prior years' taxes at approximately \$1.1 million.

The American Jobs Creation Act of 2004 provided a limited opportunity through 2005 to repatriate the undistributed earnings of non-U.S. subsidiaries at a U.S. tax cost that could be lower than the normal tax cost on such distributions. During 2005, we repatriated \$23.2 million of dividends, \$21.0 million of which qualified under these provisions. The resulting impact of these dividends on our income tax expense was not material.

*Net income.* Net income for the year ended December 31, 2005 was \$81.8 million, an increase of \$10.8 million, or 15%, over net income for the year ended December 31, 2004 of \$71.0 million. Basic earnings per share of common stock improved to \$2.24 in 2005 compared to \$1.91 in 2004.

North American segment net income for the year ended December 31, 2005 was \$64.1 million, an increase of \$7.5 million, or 13%, from \$56.6 million for the year ended December 31, 2004. The improvement in North American net income was primarily due to the previously-discussed sales growth, cost controls and a lower effective income tax rate.

European segment net income for the year ended December 31, 2005 was \$6.3 million, an increase of \$2.5 million, or 68%, from \$3.8 million for the year ended December 31, 2004. The increase included approximately \$1.1 million of income related to Sordin which we acquired in June 2004. The remainder of the improvement was primarily related to the previously-discussed sales improvement.

International segment net income for the year ended December 31, 2005 was \$11.7 million, an increase of \$1.1 million, or 10%, from \$10.6 million for the year ended December 31, 2004. The improvement in International segment net income was primarily related to the previously-discussed sales growth.

#### 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, acquisitions, and principal and interest payments on outstanding indebtedness.

Cash and cash equivalents increased \$16.5 million during 2006 compared to decreasing \$31.7 million during 2005.

Operations provided cash of \$62.8 million in 2006 compared to providing \$80.6 million in 2005. Lower cash flow from operations during 2006 was primarily due to the decrease in net income and an increase in noncurrent assets. Trade receivables were \$174.6 million at December 31, 2006 and \$169.4 million at December 31, 2005. The increase in trade receivables during 2006 was primarily related to acquisitions and currency translation. Trade receivables expressed in number of days sales outstanding were 70 days at December 31, 2006 and 68 days at December 31, 2005. Inventories were \$137.2 million at December 31, 2006 and \$119.7 million at December 31, 2005. Over two-thirds of the increase in inventory was related to currencies translation and acquisitions. On a FIFO basis, inventories measured against cost of products sold turned 3.2 times in 2006 and 3.5 times in 2005. Cash flow from operations in 2005 was \$31.7 million higher than in 2004, reflecting less use of cash for working capital, particularly inventory.

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.

Our investing activities used cash of \$50.1 million in 2006, compared with using \$37.3 million in 2005. During 2006 and 2005, we used cash of approximately \$22.7 million and \$21.7 million, respectively, for property additions, primarily production equipment in the U.S. Acquisitions and other investing activities during 2006 and 2005 used cash of \$31.3 million and \$17.0 million, respectively. In 2006, we used net cash of approximately \$21.8 million to acquire Paraclete and \$7.9 million to acquire Select PPE. In 2005, we used net cash of approximately \$12.8 million for the acquisition of Microsensor Systems Inc. and \$2.2 million for additional consideration on the Sordin acquisition.

Financing activities provided cash of \$1.4 million in 2006 compared to using cash of \$72.6 million in 2005. In December 2006, we borrowed \$60.0 million in private placement debt, primarily to replace short term borrowing made during the year to fund acquisitions and treasury stock purchases. During 2006 and 2005, we used cash of \$29.9 million and \$58.0 million, respectively, to purchase treasury shares. In the current year, we made dividend payments of \$24.8 million, compared to \$19.1 million in 2005. Dividends paid on our common stock during 2006 (our 89th consecutive year of dividend payment) were \$0.68 per share. Dividends paid on our common stock in 2005 and 2004 were \$0.52 and \$0.37, per share, respectively.

In April 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, 2006, has been recorded as a liability of \$0.9 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 an increase in interest expense of approximately \$0.3 million during the year ended December 31, 2006 and reductions in interest expense of \$0.1 million during 2005 and \$0.3 million during 2004.

Long-term debt, including the current portion at December 31, 2006 was \$114.6 million, or 21% 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.

Our long-term debt obligations at December 31, 2006 and 2005 were as follows:

	2006	2005
	(In thousands)	
U.S.		
Industrial development debt issues payable through 2022, 5.46%	\$ 6,750	\$10,750
Series B Senior Notes payable through 2006, 7.69%		4,000
Senior Notes payable through 2012, 8.39%	39,089	39,070
Senior Notes payable through 2022, 5.41%	60,000	_
Notes payable through 2011, net of unamortized discount of \$1,306	8,694	_
Other		50
International		
Various notes payable through 2008, 5.80%	38	98
Total	114,571	53,968
Amounts due within one year	2,030	8,134
Long-term debt	112,541	45,834

Approximate maturities of these obligations are \$2.0 million in 2007, \$10.0 million in 2008, \$10.8 million in 2009, \$12.0 million in 2010, \$8.7 million in 2011, and \$71.1 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, 2006.

Short-term bank lines of credit amounted to \$80.6 million of which \$80.3 million was unused at December 31, 2006. Generally, these short-term lines of credit are renewable annually. 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 \$0.3 million and \$0.7 million at December 31, 2006 and 2005, respectively. The average month-end balance of total short-term borrowings during 2006 was \$19.7 million. The maximum month-end balance of \$62.6 million occurred at October 31, 2006. The weighted average interest rates of short-term borrowings at December 31, 2006 and 2005 were 5% and 6%, 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, 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.

#### **CUMULATIVE TRANSLATION ADJUSTMENTS**

The year-end position of the U.S. dollar relative to international currencies resulted in a translation gain of \$10.1 million being credited to the cumulative translation adjustments shareholders' equity account in 2006, compared to a loss of \$11.1 million in 2005 and a gain of \$8.9 million in 2004. Translation gains in 2006 were primarily related to the strengthening of the euro. Translation losses in 2005 were primarily due to a weakening of the euro. Translation gains in 2004 were primarily due to the strengthening of the euro, Australian dollar, and South African rand.

#### COMMITMENTS AND CONTINGENCIES

We are obligated to make future payments under various contracts, including debt and lease agreements. Our significant cash obligations as of December 31, 2006 were as follows:

	Total	2007	2008	2009	2010	2011	Thereafter
				(In million	ıs)		
Long-term debt*	\$114.6	\$ 2.0	\$10.0	\$10.8	\$12.0	\$ 8.7	\$71.1
Operating leases	27.0	7.9	5.8	4.7	4.2	2.8	1.6
Take or pay supply contract	2.5	1.5	1.0	_	_	_	_
Totals	144.1	11.4	16.8	15.5	16.2	11.5	72.7

<sup>\*</sup> Future interest payments are not included in the table above.

We expect to make net contributions of \$1.7 million to our pension plans in 2007.

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

In September 2006, we acquired Paraclete. Under the terms of the asset purchase agreement, we issued a \$10.0 million note payable to the former owners of Paraclete. The note is non-interest bearing and is payable in five annual installments of \$2.0 million beginning September 1, 2007. We recorded the note at a fair value of \$8.5 million at the time of issuance. The discount of \$1.5 million is being amortized over the term of the note.

During 2003, we sold our real property in Berlin, Germany for \$25.7 million, resulting in a gain of \$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 the gain was deferred and is being amortized over the term of the lease.

In 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 2006, we exercised our third 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 2,500 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 16,750 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, in recent years 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 evaluate our exposures on an ongoing basis and make adjustments to the reserve 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 the normal course of business, we make payments to settle product liability claims and related legal fees that are covered by insurance. We record receivables for the portion of these payments that we believe to be probable of recovery from insurance carriers. The net balance of receivables from insurance carriers was \$18.4 million and \$5.0 million at December 31, 2006 and 2005, respectively. We evaluate the collectibility of these receivables on an ongoing basis and make adjustments as appropriate.

## 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 during the three years ended December 31, 2006.

**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, 2006.

*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, 2006.

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. The discount rate assumptions used in determining projected benefit obligations are based on published long-term bond indices. We increased the assumed discount rates in 2006, reflecting an increase in long-term bond rates.

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 September 2006, the FASB issued FAS No. 157, Fair Value Measurements. FAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The provisions of this standard apply to other accounting pronouncements that require or permit fair value measurements. FAS No. 157 becomes effective on January 1, 2008. Upon adoption, the provisions of FAS No. 157 are to be applied prospectively with limited exceptions. We do not expect that the adoption of this statement will have a material effect on our consolidated results of operations or financial condition.

In June 2006, the FASB issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes (an interpretation of FASB Statement No. 109). This interpretation was issued to clarify the accounting for uncertainty in income taxes recognized in the financial statements by prescribing a recognition threshold and

measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This interpretation is effective beginning January 1, 2007, with the cumulative effect of the change in accounting principle recorded as an adjustment to opening retained earnings. We are currently evaluating our tax positions and do not anticipate that this interpretation should have a significant effect on our results.

#### 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, 2006 by approximately \$41.0 million and \$2.2 million, respectively. When appropriate, we may attempt to limit our transactional exposure to changes in currency exchange rates through contracts or other actions intended to reduce existing exposures by creating offsetting currency exposures. At December 31, 2006, 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, 2006, the swap agreement had a notional amount of \$20.0 million and a fair market value in favor of the bank of \$0.9 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 \$0.4 million in the fair value of the interest rate swap.

We have \$100.0 million of fixed rate debt which matures at various dates through 2022. The incremental increase in the fair value of fixed rate long-term debt resulting from a hypothetical 10% decrease in interest rates would be approximately \$2.1 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 Reports**

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

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

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

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

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

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

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2006. 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, 2006.

Our management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2006 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 Office

/s/ DENNIS L. ZEITLER

Dennis L. Zeitler

Vice President and Treasurer
Chief Financial Officer

February 28, 2007

#### Report of Independent Registered Public Accounting Firm

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

We have completed integrated audits of Mine Safety Appliances Company's consolidated financial statements and of its internal control over financial reporting as of December 31, 2006, 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 sheets and the related consolidated statements of income, cash flows, and changes in retained earnings and other comprehensive income present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries at December 31, 2006 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2006 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.

As discussed in Notes 8 and 11 to the consolidated financial statements, Mine Safety Appliances Company changed the manner in which it accounts for stock-based compensation and defined benefit pension and postretirement benefit plans in 2006.

#### 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, 2006 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, 2006, 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 February 28, 2007

## CONSOLIDATED STATEMENT OF INCOME

(In thousands, except per share amounts)

Year Ended December 31	2006	2005	2004
Net sales	\$913,714	\$907,912	\$852,509
Other income	5,384	4,058	5,004
	919,098	911,970	857,513
Costs and expenses			
Cost of products sold	568,410	558,921	518,174
Selling, general and administrative	215,663	201,367	198,714
Research and development	26,037	21,928	22,648
Restructuring and other charges	6,981	_	_
Interest	6,228	5,484	3,845
Currency exchange losses	3,139	474	264
	826,458	788,174	743,645
Income before income taxes	92,640	123,796	113,868
Provision for income taxes	28,722	42,013	42,821
Net income	63,918	81,783	71,047
Basic earnings per common share	\$ 1.76	\$ 2.24	\$ 1.91
Diluted earnings per common share	\$ 1.73	\$ 2.19	\$ 1.86

## CONSOLIDATED BALANCE SHEET

(In thousands, except share amounts)

December 31		2006	2005
Assets Current Assets	Cash and cash equivalents	\$ 61,296	\$ 44,797
	\$5,574 and \$6,041  Inventories  Deferred tax assets  Prepaid expenses and other current assets	174,569 137,230 18,577 25,187	169,436 119,731 17,868 25,394
	Total current assets	416,859	377,226
Property	Land	4,448 85,269 281,965 7,279	4,815 83,929 268,167 4,686
	Total	378,961 (258,310)	361,597 (245,388)
Other Assets	Net property Prepaid pension cost Deferred tax assets Goodwill Other pension costs	120,651 211,018 29,676 79,360	116,209 140,575 19,364 55,654
	Other noncurrent assets	41,056	16,329
	Total	898,620	725,357
Liabilities			
Current Liabilities	Notes payable and current portion of long-term debt Accounts payable Employees' compensation Insurance and product liability Taxes on income Other current liabilities	\$ 2,340 39,441 20,931 15,588 8,654	\$ 8,808 40,935 18,483 13,807 7,063
		40,481	41,763
Y	Total current liabilities	127,435	130,859
Long-Term Debt		112,541	45,834
Other Liabilities	Pensions and other employee benefits  Deferred tax liabilities  Other noncurrent liabilities	110,966 100,969 8,856	80,656 75,511 10,100
	Total liabilities	460,767	342,960
Shareholders' Equity			
	Preferred stock, 4½% cumulative, \$50 par value (callable at \$52.50)	3,569	3,569
	2006—36,015,416 & 2005—36,545,984)	57,826	50,887
	Stock compensation trust	(14,350)	(15,667)
	Treasury shares, at cost	(231,299)	(201,312)
	Deferred stock compensation	(1,836) 28,090	(2,218) (9,571)
	Earnings retained in the business	595,853	556,709
	Total shareholders' equity	437,853	382,397
	Total	898,620	725,357

See notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands)

Year Ended December 31	2006	2005	2004
Operating Activities			
Net income	\$ 63,918	\$ 81,783	\$ 71,047
Depreciation and amortization	22,147	24,345	25,496
Pensions	(4,147)	(6,104)	(7,188)
Net (gain) loss on sale of investments and assets	(2,081)	(408)	63
Restructuring and other charges	4,843		
Stock-based compensation	3,934	1,356	895
Deferred income taxes	(1,932)	2,294	7,106
Other noncurrent assets and liabilities	(17,883)	(1,674)	(1,159)
Other, net	905	(1,388)	836
Operating cash flow before changes in working capital	69,704	100,204	97,096
Receivables	4,176	(17,080)	(23,519)
Inventories	(5,374)	(1,348)	(27,422)
Accounts payable and accrued liabilities	(6,362)	5,057	5,070
Prepaids and other current assets	699	(6,190)	(4,390)
Increase in working capital	(6,861)	(19,561)	(50,261)
Cash flow from continuing operations	62,843	80,643	46,835
Cash flow from discontinued operations			2,061
Cash Flow From Operating Activities	62,843	80,643	48,896
Investing Activities			
Property additions	(22,734)	(21,664)	(27,330)
Property disposals	3,887	1,320	883
Acquisitions, net of cash acquired and other investing	(31,301)	(16,955)	(6,391)
Cash Flow From Investing Activities	(50,148)	(37,299)	(32,838)
Financing Activities			
Proceeds from long-term debt	59,819	_	_
Payments on long-term debt	(8,134)	(4,120)	(5,023)
Proceeds from (payments on) short-term debt	(230)	(1,473)	566
Cash dividends	(24,774)	(19,053)	(13,758)
Company stock purchases	(29,893)	(58,012)	(6,122)
Exercise of stock options	1,900	4,707	4,910
Excess tax benefit related to stock plans	2,703	5,361	4,946
Cash Flow From Financing Activities	1,391	(72,590)	(14,481)
Effect of exchange rate changes on cash	2,413	(2,502)	1,724
Increase (decrease) in cash and cash equivalents	16,499	(31,748)	3,301
Beginning cash and cash equivalents	44,797	76,545	73,244
Ending cash and cash equivalents	61,296	44,797	76,545
Supplemental cash flow information:		<del></del>	
Interest payments	\$ 5,650	\$ 5,315	\$ 4,632
Income tax payments	17,099	34,060	37,329

See notes to consolidated financial statements.

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

(In thousands)

	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income
Balances January 1, 2004	\$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	_	_	78,877
Common dividends	(13,714)	_	
Preferred dividends	(44)		
Balances December 31, 2004	493,979	1,793	
Net income	81,783	_	\$ 81,783
Cumulative translation adjustments	_	(11,070)	(11,070)
Minimum pension liability adjustments (a)	_	(294)	(294)
Comprehensive income	_	_	70,419
Common dividends	(19,011)	_	
Preferred dividends	(42)		
Balances December 31, 2005	556,709	(9,571)	
Net income	63,918		\$ 63,918
Cumulative translation adjustments		10,083	10,083
Minimum pension liability adjustments (a)	_	1,027	1,027
Adoption of FAS No. 158, net of tax of \$16,932	_	26,551	
Comprehensive income	_	_	75,028
Common dividends	(24,732)	_	
Preferred dividends	(42)		
Balances December 31, 2006	595,853	28,090	

<sup>(</sup>a) —Minimum pension liability adjustments in 2006, 2005, and 2004 are net of income taxes of \$260, \$189, and \$383, respectively.

Components of accumulated other comprehensive income are as follows:

	2006	2005	2004
Cumulative translation adjustments	\$ 3,023	\$(7,060)	\$ 4,010
Minimum pension liability adjustments			
Adoption of FAS No. 158	25,067		
Accumulated other comprehensive income	28,090	(9,571)	1,793

See notes to consolidated financial statements.

# MINE SAFETY APPLIANCES COMPANY 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.

**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—Goodwill and intangible assets with indefinite lives are not amortized, but are subject to impairment write-down tests. We test the goodwill of each of our reporting units for impairment at least annually. For this purpose, we consider our reportable business segments to be our reporting units. Fair value is estimated using discounted cash flow methodologies and market comparable information. Other intangible assets are amortized on a straight-line basis over their useful lives.

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.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

**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—On January 1, 2006, we adopted Statement of FAS No. 123R, Share-Based Payment, which requires that we recognize compensation expense for stock-based compensation based on the grant date fair value. Except for retirement-eligible employees, for whom there is no requisite service period, this expense is recognized ratably over the requisite service periods following the date of grant. For retirement-eligible employees, this expense is recognized at the grant date. We elected the modified prospective application method for adoption and prior period financial statements have not been restated. Prior to January 1, 2006, we accounted for stock-based compensation in accordance with the provisions of APB Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, using the intrinsic value method, which resulted in no compensation expense for stock options.

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—Restructuring and Other Charges

During the year ended December 31, 2006, we recorded charges of \$7.0 million (\$4.4 million after tax), primarily related to the Project Outlook reorganization plan in North America, which was completed during the first half of the year.

Project Outlook was designed to ensure that our North American management teams, employees, product design processes, and operational functions are fully aligned with our strategic goals and the needs of our customers. The reorganization of business and support functions in our North American operations is expected to result in cost reductions and a higher degree of collaboration, focus, and efficiency. A significant portion of the cost reductions resulting from Project Outlook is being realized from a focused voluntary retirement incentive program (VRIP) that was completed during the first quarter of 2006. In January 2006, approximately 60 employees elected to retire at the end of February under the terms of the VRIP. Restructuring charges for 2006 include \$5.3 million for VRIP retirees, primarily special termination benefits, \$0.7 million in severance costs related to additional staffing reductions that were made at the end of January 2006, and \$0.5 million related to the relocation of various employee work groups within the new organizational structure.

During the year ended December 31, 2006, we recorded \$0.5 million (\$0.3 million after tax) in severance costs related to our plan to discontinue manufacturing operations in Britain.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### **Note 3—Inventories**

	December 31		
	2006	2005	
	(In tho	usands)	
Finished products	\$ 55,764	\$ 49,073	
Work in process	24,203	24,096	
Raw materials and supplies	57,263	46,562	
Total LIFO inventories	137,230	119,731	
Excess of FIFO costs over LIFO costs	42,514	41,604	
Total FIFO inventories	179,744	161,335	

Inventories stated on the LIFO basis represent 36% of the total inventories at both December 31, 2006 and 2005.

Reductions in certain inventory quantities during 2006 and 2005 resulted in liquidations of LIFO inventories carried at lower costs prevailing in prior years. The effect of these liquidations on cost of sales and net income was not significant in either year.

## 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 52,841 shares (\$1.8 million) held in treasury; no treasury share purchases in 2006, treasury share purchases in 2005 and 2004 of 105 shares, \$5, and 1,182 shares, \$56, respectively (share purchase dollars in thousands).

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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, 2004	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  Tax benefit related to stock	_	519,911	_	2,197	2,713	_	
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)	
Restricted stock awards	42,440	10,438	_	2,286	54		
Restricted stock awards forfeited	_	_	(161)	_	_	(6)	
Stock options exercised	298,624	134,659	(101) —	3,992	715		
Tax benefit related to stock	2,0,02	10 1,000		ŕ	, 10		
plans	_	_	(1.291.402)	5,361	_	(59,007)	
Treasury shares purchased			(1,281,402)			(58,007)	
Balances December 31, 2005	62,081,391	(3,001,125)	(22,534,282)	50,887	(15,667)	(199,562)	
Restricted stock awards	_	47,738	_	1,674	249	_	
Restricted stock awards forfeited	_	_	(2,346)	_	_	(94)	
Stock options exercised		204,375		832	1,068	_	
Stock option expense	_	_		1,730	_	_	
Tax benefit related to stock				ŕ			
plans	_	_	(780,335)	2,703	_	(20 803)	
Treasury shares purchased						(29,893)	
Balances December 31, 2006	62,081,391	(2,749,012)	(23,316,963)	57,826	(14,350)	(229,549)	

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.

The Shareholder Rights Plan, under which each outstanding share of common stock was granted one-ninth of a preferred share purchase right, expired on February 21, 2007. Under the terms of the Plan, the rights were exercisable for a fraction of a share of preferred stock, only if a person or group acquired or commenced a tender offer for 15% or more of our common stock.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

## **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 protection, safety clothing, industrial emergency care products, mining safety equipment, thermal imaging cameras, and monitoring instruments. Reportable segment information is presented in the following table:

	North America	Europe	International (In thousands)	Reconciling Items	Consolidated Totals
2006			(In inousunus)		
Sales to external customers	\$503,357	\$219,241	\$191,116	\$ —	\$913,714
Intercompany sales	39,888	82,936	5,676	(128,500)	_
Net income	42,658	8,851	13,087	(678)	63,918
Total assets	609,913	249,073	109,027	(69,393)	898,620
Interest income	1,436	458	937	231	3,062
Interest expense	5,998	88	141	1	6,228
Noncash items:	3,770	00	111	-	0,220
Depreciation and amortization	14,200	5,456	2,491	_	22,147
Pension income (expense)	4,697	(4,569)	(824)		(696)
Equity in earnings of affiliates	(277)	(1,50)	109		168
Income tax provision	17,844	4,908	5.111	859	28,722
Investments in affiliates	221		410		631
Property additions	11,734	6,791	4,209		22,734
Net property	83,540	24,358	12,753		120,651
2005	03,5 10	21,550	12,755		120,051
Sales to external customers	566,501	180,493	160,918	_	907,912
Intercompany sales	39,083	70,099	4,831	(114,013)	
Net income	64,149	6,321	11,659	(346)	81,783
Total assets	492,964	200,611	87,513	(55,731)	725,357
Interest income	1,067	301	526	566	2,460
Interest expense	5,295	74	115	_	5,484
Noncash items:	0,2>0	, .	110		0,.0.
Depreciation and amortization	17,138	5,286	1.921	_	24,345
Pension income (expense)	10,542	(3,762)	(676)	_	6,104
Equity in earnings of affiliates	(210)		78	_	(132)
Income tax provision	30,578	7,138	4,663	(366)	42,013
Investments in affiliates	344		301	_	645
Property additions	12,764	5,924	2.976	_	21,664
Net property	85,236	20,464	10,509	_	116,209
2004	,	-, -	- ,		-,
Sales to external customers	557,109	167,300	128,100		852,509
Intercompany sales	29,654	57,453	3,883	(90,990)	_
Net income	56,594	3,771	10,571	111	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
Net property	90,121	23,505	10,090	_	123,716

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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:

	2006	2005	2004
		(In thousands)	
United States	\$500,398	\$560,107	\$544,707
Germany	99,955	73,903	70,281
Other	313,361	273,902	237,521
Total	913,714	907,912	852,509

## 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.

	2006	2005	2004	
	(In thousands, except per share amounts)			
Net income	\$63,918	\$81,783	\$71,047	
Preferred stock dividends	(42)	(42)	(44)	
Income available to common shareholders	63,876	81,741	71,003	
Basic earnings per common share	\$ 1.76	\$ 2.24	\$ 1.91	
Diluted earnings per common share	\$ 1.73	\$ 2.19	\$ 1.86	
Basic shares outstanding	36,366	36,560	37,111	
Stock options	562	741	1,019	
Diluted shares outstanding	36,928	37,301	38,130	
Antidilutive stock options	376	195		

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

## **Note 7—Income Taxes**

Twee 7—Income Taxes	2006	2005	2004
		In thousands	
Components of income before income taxes	,	(In inousunus	,
U.S. income	\$53,488	\$112,731	\$ 84,896
Non-U.S. income	42,527	40,764	28,229
Currency translation gains	2,880	106	647
Eliminations	(6,255)	(29,805)	96
Income before income taxes	92,640	123,796	113,868
Provision for income taxes			
Current			
Federal	13,653	23,259	24,016
State	2,663	6,352	4,566
Non-U.S.	14,338	10,108	7,133
Total current provision	30,654	39,719	35,715
Deferred			
Federal	391	461	3,403
State	(1,161)	219	1,025
Non-U.S.	(1,162)	1,614	2,678
Total deferred provision	(1,932)	2,294	7,106
Provision for income taxes	28,722	42,013	42,821
December of the U.S. feedered in comments are not of the street of the s			
Reconciliation of the U.S. federal income tax rates to our effective tax rate			
	2006	2005	2004
U.S. federal income tax rate	. 35.09	6 35.0%	35.0%
State income taxes—U.S	. 1.3	3.4	3.3
Taxes on non-U.S. income	. (0.5)	(1.0)	(0.1)
Research and development credits	. (1.0)	(0.9)	(0.9)
Extra-territorial income exclusion	. (0.6)	(0.4)	(0.2)
Adjustment of prior years income taxes		(1.6)	1.0
Valuation allowances	. —	_	(0.5)
Other	. (1.0)	(0.6)	_
Effective income tax rate	. 31.09	<sup>7</sup> 6 33.9%	37.6%

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

	December 31	
	2006	2005
	(In thous	sands)
Components of deferred tax assets and liabilities		
Deferred tax assets		
Postretirement benefits	\$ 17,112	\$ 6,684
Inventory reserves	8,180	6,424
Vacation allowances	1,408	1,272
Net operating losses	1,154	3,803
Post employment benefits	2,150	1,950
Foreign tax credit carryforwards (expiring between 2009 and 2016)	2,789	1,736
Liability insurance	4,318	3,522
Basis of capital assets	4,197	4,383
Intangibles	1,424	1,138
Warranties	2,607	2,593
Other	3,968	4,178
Total deferred tax assets	49,307	37,683
Deferred tax liabilities		
Property, plant and equipment	(20,229)	(18,647)
Pension	(80,365)	(52,647)
Other	(1,946)	(5,134)
Total deferred tax liabilities	(102,540)	(76,428)
Net deferred taxes	(53,233)	(38,745)

Net operating loss carryforwards of approximately \$2.9 million, all in non-U.S. tax jurisdictions, have no expiration date.

No deferred U.S. income taxes have been provided on undistributed earnings of non-U.S. subsidiaries, which amounted to \$137.2 million as of December 31, 2006. 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.

The American Jobs Creation Act of 2004 provided a limited opportunity through 2005 to repatriate the undistributed earnings of non-U.S. subsidiaries at a U.S. tax cost that could be lower than the normal tax cost on such distributions. During 2005, we repatriated \$23.2 million of dividends, \$21.0 million of which qualified under these provisions. The resulting impact of these dividends on our income tax expense was not material.

The determination of income tax expense takes into consideration amounts which may be needed to cover exposures for open tax years. We have resolved all matters with the IRS related to our federal income tax returns through 2002. We believe that we have made adequate provision for income taxes and interest which may become payable or receivable for years not yet settled. We do not expect any materially adverse impact on earnings to result from the resolution of matters related to open tax years.

#### Note 8—Stock Plans

The 1998 Management Share Incentive Plan provides for grants of stock options and restricted stock awards to eligible key employees through March 2008. The 1990 Non-Employee Directors' Stock Option Plan, as amended April 29, 2004, provides for annual grants of stock options and restricted stock awards to eligible

directors. Stock options are 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 2006 are exercisable beginning three years after the grant date. Stock options granted in 2005 and earlier years were fully vested as of December 31, 2005. Restricted stock awards are granted without payment to the company and vest three years after the grant date. As of December 31, 2006, there were 916,004 shares and 111,740 shares, respectively, reserved for future grants under the management and directors' plans. We issue Stock Compensation Trust shares or new shares for stock option exercises and restricted stock awards.

On January 1, 2006, we adopted Statement of FAS No. 123R, Share-Based Payment, which requires that we recognize compensation expense for stock-based compensation based on the grant date fair value. Except for retirement-eligible employees, for whom there is no requisite service period, this expense is recognized ratably over the requisite service periods following the date of grant. For retirement-eligible employees, this expense is recognized at the grant date. We have elected the modified prospective application method for adoption and prior periods financial statements have not been restated. Prior to January 1, 2006, we accounted for stock-based compensation in accordance with the provisions of APB Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, using the intrinsic value method, which resulted in no compensation expense for stock options.

Stock-based compensation expense was as follows:

	2006	2005	2004
	(In	thousands	)
Restricted stock awards	\$2,204	\$1,356	\$895
Stock option grants	1,730		
Total compensation expense before income taxes	3,934	1,356	895
Income tax benefit	1,434	529	349
Total compensation expense, net of income tax benefit	2,500	827	546

We did not capitalize any stock-based compensation expense in 2006, 2005, or 2004.

Prior to January 1, 2006, we did not recognize stock-based compensation expense for stock options. If we had elected to recognize compensation cost based on the fair value of the options at the grant date as prescribed by FAS No. 123, Accounting for Stock-Based Compensation, net income and earnings per share for 2005 and 2004 would have been reduced to the pro forma amounts shown below.

	2005	2004
	(In tho	usands)
Net income as reported	\$81,783	\$71,047
Fair value of stock options granted, net of tax	(2,565)	(1,781)
Pro forma net income	79,218	69,266
Basic earnings per share:		
As reported	\$ 2.24	\$ 1.91
Pro forma	2.17	1.87
Diluted earnings per share:		
As reported	\$ 2.19	\$ 1.86
Pro forma	2.12	1.82

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Stock option expense for 2006 and the pro forma effect as if FAS No. 123 had been applied for 2005 and 2004 are based on the fair value of stock option grants estimated on the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2006 and 2005:

	2006	2005	2004
Fair value per option	\$16.38	\$16.58	\$8.63
Risk-free interest rate	4.6%	4.3%	4.1%
Expected dividend yield	1.4%	2.0%	2.0%
Expected volatility	41%	34%	29%
Expected life (years)	5.7	9.9	9.9

The risk-free interest rate is based on the U.S. Treasury Constant Maturity rates as of the grant date converted into an implied spot rate yield curve. Expected dividend yield is based on the most recent annualized dividend divided by the one year average closing share price. Expected volatility is based on the ten year historical volatility using daily stock prices. Expected life in years for 2006 is based on historical stock option exercise data. Prior to 2006, expected life approximated contractual life.

A summary of option activity under the two plans follows:

	Shares	Average Exercise Price	Exercisable at Year-end
Outstanding at January 1, 2004	2,015,550	\$ 9.88	
Granted	297,065	25.21	
Exercised	(519,911)	9.45	
Outstanding December 31, 2004	1,792,704	12.55	1,495,639
Granted	194,786	45.68	
Exercised	(433,283)	10.86	
Outstanding December 31, 2005	1,554,207	17.17	1,554,207
Granted	181,527	40.20	
Exercised	(204,375)	9.29	
Outstanding December 31, 2006	1,531,359	20.95	1,349,832

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For various exercise price ranges, characteristics of outstanding and exercisable stock options at December 31, 2006 were as follows:

	Stock Options Outstanding		
		Weighted	d-Average
Range of Exercise Prices	Shares	Exercise Price	Remaining Life
\$ 7.07 - \$ 9.03	264,963	\$ 7.83	4.1 years
\$10.65 - \$13.57	619,287	11.29	5.7
\$25.07 - \$28.06	270,796	25.17	7.2
\$40.08 - \$50.25	376,313	43.04	8.5
\$ 7.07 - \$50.25	1,531,359	20.95	6.4

Weighted

	Stock Options Exercisable		
	Wei		d-Average
Range of Exercise Prices	Shares	Exercise Price	Remaining Life
\$ 7.07 - \$ 9.03	264,963	\$ 7.83	4.1 years
\$10.65 - \$13.57	619,287	11.29	5.7
\$25.07 - \$28.06	270,796	25.17	7.2
\$44.36 - \$50.25	194,786	45.68	7.9
\$ 7.07 - \$50.25	1,349,832	18.36	6.0

The aggregate intrinsic values of stock options outstanding and stock options exercisable at December 31, 2006 were \$24.5 million and \$25.7 million, respectively.

A summary of restricted stock award activity follows:

	Shares	Average Grant Date Fair Value
Unvested at January 1, 2004	137,559	\$12.16
Granted	45,098	25.59
Vested	(3,474)	11.47
Unvested at December 31, 2004	179,183	15.57
Granted	52,878	44.27
Vested	(62,009)	13.83
Forfeited	(161)	39.16
Unvested at December 31, 2005	169,891	25.10
Granted	47,738	40.29
Vested	(76,813)	12.18
Forfeited	(2,346)	40.08
Unvested at December 31, 2006	138,470	37.26

During the years ended December 31, 2006, 2005, and 2004, the total intrinsic value of stock options exercised (i.e. the difference between the market price at exercise and the option price paid to exercise the option) was \$6.3 million, \$14.5 million, and \$15.9 million, respectively. The fair values of restricted stock

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

awards vested during the years ended December 31, 2006, 2005, and 2004 were \$2.9 million, \$2.1 million, and \$1.6 million, respectively.

As of December 31, 2006, there was \$3.1 million of total future unvested stock-based compensation expense, and the weighted average period over which this expense is expected to be recognized was approximately 1.7 years.

#### **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.

### Note 10—Long-Term Debt

	December 31	
	2006	2005
	(In thousands)	
U.S.		
Industrial development debt issues payable through 2022, 5.46%	\$ 6,750	\$10,750
Series B Senior Notes payable through 2006, 7.69%	_	4,000
Senior Notes payable through 2012, 8.39%	39,089	39,070
Senior Notes payable through 2022, 5.41%	60,000	_
Note payable through 2011, net of unamortized discount of \$1,306	8,694	_
Other	_	50
International		
Various notes payable through 2008, 5.80%	38	98
Total	114,571	53,968
Amounts due in one year	2,030	8,134
Long-term debt	112,541	45,834

Approximate maturities of these obligations over the next five years are \$2.0 million in 2007, \$10.0 million in 2008, \$10.8 million in 2009, \$12.0 million in 2010, \$8.7 million in 2011, and \$71.1 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, 2006.

#### 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.

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

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

We adopted FAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, effective December 31, 2006. FAS No. 158 requires an employer to recognize the funded status of each of its defined pension and postretirement benefit plans as a net asset or liability in its statement of financial position with an offsetting amount in accumulated other comprehensive income, and to recognize changes in that funded status in the year in which changes occur through comprehensive income. Upon the adoption of FAS No. 158, additional minimum pension liabilities and related intangible assets are no longer recognized. The provisions of FAS No. 158 are to be applied on a prospective basis; therefore, prior periods presented are not restated. The adoption of FAS No. 158 resulted in the following impacts at December 31, 2006: an increase of \$67.5 million in prepaid pension costs, an increase of \$23.4 million in accrued pension and other postretirement benefit liabilities, and an increase of \$43.5 million (\$26.6 million after-tax) in accumulated other comprehensive income. Additionally, FAS No. 158 requires that we measure the funded status of each of our plans as of year-end beginning December 31, 2008.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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.

	Pension Benefits		Other Benefits	
	2006	2005	2006	2005
Character Book (% Obligations		(In thou	sands)	
Change in Benefit Obligations Benefit obligations at January 1	\$286,094	\$270,045	\$ 28,518	\$ 26,387
Service cost	9,597	7,843	614	543
Interest cost	16,066	14,985	1,399	1,609
Employee contributions	254	554	(1.210)	_
Plan amendments Actuarial losses (gain)	<u></u>	44 14,515	(1,310) (1,832)	1,949
Benefits paid	(18,189)	(13,716)	(2,483)	(1,970)
Curtailments	(22)	_	_	_
Settlements	(393)	_	_	_
Termination benefits	4,843	(9 176)	_	_
Currency translation effects	8,280	(8,176)		
Benefit obligations at December 31	306,594	286,094	24,906	28,518
Change in Plan Assets	395,291	383,195		
Fair value of plan assets at January 1	54,574	25,162		
Employer contributions	2,454	4,029	583	470
Employee contributions	254	554	_	_
Benefits paid	(15,619)	(13,716)	(2,483)	(1,970)
Section 420 transfer to retiree medical plan	(1,900) (2,570)	(1,500) (1,868)	1,900	1,500
Settlements	(520)	(1,000)	_	
Currency translation effects	1,627	(565)	_	_
Fair value of plan assets at December 31	433,591	395,291		
Funded Status				
Funded status at December 31	126,997	109,197	(24,906)	(28,518)
Unrecognized transition losses	264 690	300	(2.527)	(1.444)
Unrecognized prior service cost	(49,160)	888 (26,527)	(2,527) 9,650	(1,444) 12,401
Net amount recognized	78,791	83,858	(17,783)	(17,561)
Amounts Recognized in the Balance Sheet			(17,705)	(17,501)
Before the Adoption of FAS No. 158				
Prepaid pension cost	143,546	140,575	_	_
Accrued benefit liability	(67,705)	(60,447)	(17,783)	(17,561)
Intangible asset	550 2,400	334 3,396	_	_
1			(17.792)	(17,561)
Net amount recognized	78,791	83,858	(17,783)	(17,301)
After the Adoption of FAS No. 158 Noncurrent assets	211,018		_	
Current liabilities	(3,724)		(1,637)	_
Noncurrent liabilities	(80,297)	_	(23,269)	_
Net amount recognized	126,997		(24,906)	
Amounts Recognized in Accumulated Other				
Comprehensive Income				
Net actuarial loss (gain)	(49,160)	_	9,650	_
Prior service cost (credit)	690	_	(2,527)	_
Unrecognized net initial obligation (asset)	264			
Total (before tax effects)	(48,206)		7,123	
Accumulated Benefit Obligations for all Defined	254.069	222 227		
Benefit Plans	254,968	233,337	_	_

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

	Before Application of FAS No. 158 (a)	FAS No. 158 Adjustments	After Application of FAS No. 158
Change due to the adoption of FAS No. 158			
Prepaid pension costs	\$143,546	\$ 67,472	\$211,018
Intangible asset	550	(550)	_
Pension liability	(67,705)	(16,316)	(84,021)
Other benefits liability	(17,783)	(7,123)	(24,906)
Accumulated other comprehensive income before taxes	2,400	(43,483)	(41,083)
Deferred taxes, net	(916)	16,932	16,016
Accumulated other comprehensive income after taxes	1,484	(26,551)	(25,067)

<sup>(</sup>a) Includes additional minimum pension liability adjustment under previous guidance of \$1,287, which credited accumulated other comprehensive income by \$1,027 after-tax.

	<b>Pension Benefits</b>		Other Benefits			
	2006	2005	2004	2006	2005	2004
			(In thousan	nds)		
<b>Components of Net Periodic Benefit Cost</b>						
(Credit)						
Service cost	\$ 9,597	\$ 7,843	\$ 7,383	\$ 614	\$ 543	\$ 513
Interest cost	16,066	14,985	14,661	1,399	1,609	1,505
Expected return on plan assets	(31,287)	(30,001)	(29,123)	_	_	_
Amortization of transition amounts	44	43	28	_	_	_
Amortization of prior service cost	198	270	299	(227)	(227)	(228)
Recognized net actuarial losses (gains)	1,089	496	(661)	820	984	828
Settlement loss	146	260	225	_	_	_
Termination benefits	4,843					
Net periodic benefit (credit) cost	696	(6,104)	(7,188)	2,606	2,909	2,618
			Pension B	enefits	Other Bei	nefits
			2006	2005	2006	2005
Assumptions used to determine benefit obligati	ons					
Discount rate			5.7%	5.5%	6.0%	5.8%
Rate of compensation increase			4.4%	3.4%	_	_
Assumptions used to determine net periodic ber						
Discount rate			5.5%	5.7%	5.8%	6.0%
Expected return on plan assets			8.4%	8.4%	_	_
Rate of compensation increases			4.4%	3.4%	_	_

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The expected return on assets for the 2006 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.

	Plan Assets at December 31	
	2006	2005
Asset Category		
Equity securities	78.8%	76.8%
Debt securities	17.9%	19.5%
Real estate	0.3%	0.2%
Cash/other	3.0%	3.5%
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 \$1.7 million to our pension plans in 2007.

For measurement purposes, a 7.5% increase in the costs of covered health care benefits was assumed for the year 2006, decreasing by 0.5% for each successive year to 4.0% in 2013 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 \$1.4 million and \$0.2 million, respectively.

Expense for defined contribution pension plans was \$4.0 million in 2006, \$3.9 million in 2005, and \$3.8 million in 2004.

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 those shares.

The estimated pension benefits to be paid under our defined benefit pension plans during the next five years are \$14.3 million in 2007, \$15.3 million in 2008, \$15.6 million in 2009, \$16.6 million in 2010, \$17.2 million in 2011, and are expected to aggregate \$104.9 million for the five years thereafter. The estimated other postretirement benefits to be paid during the next five years are \$1.6 million in 2007, \$1.6 million in 2008, \$1.7 million in 2009, \$1.9 million in 2010, \$2.0 million in 2011, and are expected to aggregate \$10.7 million for the five years thereafter.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### Note 12—Other Income

	2006	2005	2004
	(In thousands)		
Interest	\$3,062	\$2,460	\$2,714
Dividends	_	_	610
Dispositions of assets	2,865	1,604	1,008
Other, net	(543)	(6)	672
Total	5,384	4,058	5,004

#### Note 13—Leases

We lease office space, manufacturing and warehouse facilities, automobiles, and other equipment under operating lease arrangements. Rent expense was \$11.2 million in 2006, \$10.9 million in 2005, and \$9.9 million in 2004. Minimum rent commitments under noncancelable leases are \$7.9 million in 2007, \$5.8 million in 2008, \$4.7 million in 2009, \$4.2 million in 2010, \$2.8 million in 2011, and \$1.6 million thereafter.

## Note 14—Goodwill and Intangible Assets

Changes in goodwill and intangible assets, net of accumulated amortization, during the year ended December 31, 2006 were as follows:

	Goodwill	Intangibles
	(In thousands)	
Net balances at January 1, 2006	\$55,654	\$ 9,353
Goodwill acquired	22,356	_
Intangibles acquired	_	9,445
Amortization expense		(1,795)
Currency translation and other	1,350	93
Net balances at December 31, 2006	79,360	17,096

At December 31, 2006, goodwill of approximately \$59.4 million, \$16.9 million, and \$3.1 million related to the North American, European, and International operating segments, respectively. Approximately \$18.6 million and \$3.0 million of the goodwill acquired during 2006 related to the Paraclete Armor and Equipment, Inc. and Select Personal Protective Equipment acquisitions. The remainder related primarily to additional consideration paid on previous acquisitions.

Intangible assets include patents, license agreements, copyrights, and trademarks. These items are included in other noncurrent assets. At December 31, 2006, intangible assets totaled \$17.1 million, net of accumulated amortization of \$6.2 million. Intangible asset amortization expense over the next five years is expected to be approximately \$3.5 million in 2007, \$3.5 million in 2008, \$2.5 million in 2009, \$1.9 million in 2010, and \$1.7 million in 2011.

#### Note 15—Short-Term Debt

Short-term bank lines of credit amounted to \$80.6 million, of which \$80.3 million was unused at December 31, 2006. Generally, these short-term lines of credit are renewable annually. There are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

current portion of long-term debt, were \$0.3 million and \$0.7 million at December 31, 2006 and 2005, respectively. The average month-end balance of total short-term borrowings during 2006 was \$19.7 million, while the maximum month-end balance of \$62.6 million occurred at October 31, 2006. The weighted average interest rates on short-term borrowings at December 31, 2006 and 2005 were 5% and 6%, respectively.

#### **Note 16—Derivative Financial Instruments**

In April 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, 2006, has been recorded as a liability of \$0.9 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 an increase in interest expense of \$0.3 million during 2006 and reductions in interest expenses of \$0.1 million during 2005 and \$0.3 million during 2004.

In March 2004, we terminated an interest rate swap agreement which we had entered into in December 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

In September 2006, we acquired Paraclete Armor and Equipment, Inc. (Paraclete) of St. Pauls, North Carolina. Paraclete is a rapidly growing innovator and developer of advanced ballistic body armor used by military personnel, including Special Forces units of the U.S. military. The purchase price of \$30.3 million included a note payable and cash paid to the previous owners and other direct external costs associated with the acquisition. The note is non-interest bearing and is payable in five annual installments of \$2.0 million beginning September 1, 2007. We recorded the note at a fair value of \$8.5 million at the time of issuance. The note discount of \$1.5 million is being recognized as interest expense over its term. Goodwill related to the Paraclete acquisition, which is included in the North American segment, is expected to be deductible for tax purposes.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table summarizes the preliminary estimated fair value of the Paraclete assets acquired and liabilities assumed at the date of acquisition:

	September 2006
	(In thousands)
Current assets	\$ 2,640
Property	2,414
Intangibles	6,680
Goodwill	18,554
Total assets acquired	30,288

In January 2006, we took steps to ensure our compliance with South African Black Economic Empowerment (BEE) requirements by forming a new South African holding company in which Mineworkers Investment Company (MIC) of Johannesburg, South Africa holds a 25.1% ownership interest. Compliance with BEE, a South African government program similar to Affirmative Action in the United States, is key to achieving meaningful growth in South Africa, particularly in the mining industry. At the same time, we acquired Select Personal Protective Equipment (Select PPE) of South Africa, an established supplier of multi-brand safety equipment and solutions to the South African mining industry. The purchase price of \$7.9 million in cash included amounts paid to the previous owners and other direct costs associated with the acquisition. Goodwill related to Select PPE, which is included in the International segment, is not expected to be deductible for tax purposes. Our existing South African company, MSA Africa, and Select PPE are operating independently under the newly-established South African holding company. We believe that our new South African operating structure significantly improves our market presence and expertise in serving the mining industry and provides significant growth opportunities in the region.

The following table summarizes the estimated fair value of the Select PPE assets acquired and liabilities assumed at the date of acquisition:

	January 2006
	(In thousands)
Current assets	\$ 7,751
Property	420
Intangibles	1,645
Goodwill	2,999
Total assets acquired	
Current liabilities	4,920
Net assets acquired	7,895

In September 2005, we acquired Microsensor Systems, Inc. of Bowling Green, Kentucky. Microsensor Systems is a world leader in surface acoustic wave based chemical sensing technology used to detect chemical warfare agents. The initial purchase price of \$12.8 million in cash included amounts paid to the previous owners and other direct external costs associated with the acquisition. Goodwill related to the Microsensor Systems acquisition, which is included in the North American segment, is expected to be deductible for tax purposes. The acquisition agreement provides for additional consideration of up to \$2.3 million to be paid to the former owners based on sales of certain Microsensor Systems products during the five year period from September 1, 2005 through August 31, 2010. Additional consideration will be charged to goodwill. Through December 31, 2006, no additional consideration has been paid under the terms of Microsensor Systems acquisition agreement.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In June 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. The \$4.3 million initial purchase price was allocated to assets acquired and liabilities assumed based on estimated fair values and included \$2.9 million of goodwill, which is included in the European segment. The acquisition agreement provided for additional consideration of up to \$5.4 million to be paid to the former owners based on Sordin's earnings performance during the five year period from July 1, 2004 through June 30, 2009. In October 2005, the acquisition agreement was amended to satisfy our additional consideration obligation to 60% of the former shareholders with a lump sum payment of \$2.2 million, which was charged to goodwill. The additional consideration due to the remaining 40% of the former shareholders, who comprise the current Sordin management team, is being recognized as compensation expense over the five year earn out period, as specified in the acquisition agreement.

The operating results of all acquisitions have been included in our consolidated financial statements from their respective acquisition dates. Pro forma consolidated results, as if the acquisitions had occurred at the beginning of 2004, would not be materially different from the results reported.

#### **Note 18—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 2,500 lawsuits primarily involving respiratory protection products allegedly manufactured and sold by us. Collectively, these lawsuits represent a total of approximately 16,750 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, in recent years 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 evaluate our exposures on an ongoing basis and make adjustments to the reserve 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 the normal course of business, we make payments to settle product liability claims and related legal fees that are covered by insurance. We record receivables for the portion of these payments that we expect to recover from insurance carriers. The net balance of receivables from insurance carriers was \$18.4 million and \$5.0 million at December 31, 2006 and 2005, respectively. We evaluate the collectibility of these receivables on an ongoing basis and make adjustments as appropriate.

#### **Note 19—Recently Issued Accounting Standards**

In September 2006, the FASB issued FAS No. 157, Fair Value Measurements. FAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The provisions of this standard apply to other accounting

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

pronouncements that require or permit fair value measurements. FAS No. 157 becomes effective on January 1, 2008. Upon adoption, the provisions of FAS No. 157 are to be applied prospectively with limited exceptions. We do not expect that the adoption of this statement will have a material effect on our consolidated results of operations or financial condition.

In June 2006, the FASB issued FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes (an interpretation of FASB Statement No. 109). This interpretation was issued to clarify the accounting for uncertainty in income taxes recognized in the financial statements by prescribing a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This interpretation is effective beginning January 1, 2007, with the cumulative effect of the change in accounting principle recorded as an adjustment to opening retained earnings. We are currently evaluating our tax positions and do not anticipate that this interpretation should have a significant effect on our results.

#### Note 20—Subsequent Events

On January 30, 2007, we announced Project Magellan, a multi-year strategic plan to improve the efficiency of our North American manufacturing operations by more effectively using available factory space. Project Magellan is expected to result in the relocation of certain manufacturing activities and the closure of certain facilities. We expect that Project Magellan will reduce operating expenses by as much as \$10 million a year once completed.

In the first stage of Project Magellan, we expect to move fire helmet manufacturing from our Clifton, N.J. plant to our Jacksonville, N.C. plant. The Clifton plant, which employs about 70 associates, will then be closed. Many Clifton associates will be offered an opportunity to relocate to Jacksonville or another MSA location. Costs associated with this closure are not expected to be significant.

In addition, we will move our manufacturing operations in Mexico from Mexico City and Torreon to a new factory in Queretaro, a city approximately 130 miles northwest of Mexico City. The plant consolidation in Mexico is expected to begin in the second half of 2007 and be completed in 2008. We currently employ about 100 associates at our Mexico City and Torreon facilities. Many MSA Mexico manufacturing personnel will be provided with an opportunity to relocate to the new Queretaro plant.

Finally, we expect to vacate our plant in Evans City, Pa. by August 2009, when our lease on the property expires. Beginning in late 2007 and continuing into 2008, we expect to transfer certain production activities from our Evans City plant to other MSA plants in the United States. We intend to maintain employment for as many affected associates as possible by offering opportunities at other MSA locations. The Evans City facility currently employs approximately 125 associates.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### **Note 21—Quarterly Financial Information (Unaudited)**

				2006		
		Quarters				
	1st	2	2nd	3rd	4th	Year
		(In thousands, except earnings per share)				
Net sales	\$228,350	\$21	8,623 \$2	209,802	\$256,939	\$913,714
Gross profit	92,574	. 8	7,289	78,150	87,291	345,304
Net income	15,738	1	6,081	12,601	19,498	63,918
Basic earnings per share	.43		.44	.35	.54	1.76
Diluted earnings per share	.42		.43	.34	.53	1.73
				2005		
			Qua	rters		
	1	st	2nd	3rd	4th	Year
		(In	n thousands,	, except earn	ings per shar	e)
Net sales	\$228	3,048	\$220,124	\$217,879	\$241,861	\$907,912
Gross profit	92	1,774	85,800	79,609	91,808	348,991
Net income	21	1,353	19,201	17,052	24,177	81,783
Basic earnings per share		.58	.53	.47	.66	2.24

# 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, Executive Officers and Corporate Governance

#### **Item 11. Executive Compensation**

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

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

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

Incorporated by reference herein pursuant to Rule 12b—23 are (1) "Election of Directors," (2) "Executive Compensation," (3) "Other Information Concerning the Board of Directors," (4) "Stock Ownership," and (5) "Selection of Independent Registered Public Accounting Firm," appearing in the Proxy Statement filed pursuant to Regulation 14A in connection with the registrant's Annual Meeting of Shareholders to be held on May 10, 2007. The information appearing in such Proxy Statement under the caption "Audit Committee Report" and the other information appearing in such Proxy Statement and not specifically incorporated by reference herein is not incorporated herein. 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. 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, 2006 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)	remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security	1 521 250	¢20.05	1 007 744*
holders Equity compensation plans not approved by	1,531,359	\$20.95	1,027,744*
security holders	None	_	None
Total	1,531,359	\$20.95	1,027,744

Number of committee

<sup>\*</sup> Includes 916,004 shares available for issuance under the Company's 1998 Management Share Incentive Plan (MSIP) and 111,740 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.

	Page
Management's Report on Responsibility for Financial Reporting and Management's Report on Internal Control Over Financial Reporting	32
Report of Independent Registered Public Accounting Firm	33
Consolidated Statement of Income—three years ended December 31, 2006	35
Consolidated Balance Sheet—December 31, 2006 and 2005	36
Consolidated Statement of Cash Flows—three years ended December 31, 2006	37
Consolidated Statement of Changes in Retained Earnings and Other Comprehensive Income—three years ended December 31, 2006	38
Notes to Consolidated Financial Statements	39

(a) 2. The following additional financial information for the three years ended December 31, 2006 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.
- (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(a) to Form 10-Q on May 10, 2006, is incorporated herein by reference.
- (10)(c)\* Supplemental Pension Plan as of May 5, 1998, filed as Exhibit 10(d) to Form 10-Q on August 12, 2003, is incorporated herein by reference.
- (10)(d)\* 1990 Non-Employee Directors' Stock Option Plan as amended effective April 29, 2004, filed as Exhibit 10(d) to Form 10-K on March 14, 2005, is incorporated herein by reference.
- (10)(e)\* Executive Insurance Program as Amended and Restated as of January 1, 2001, filed as Exhibit 10(b) to Form 10-Q on May 10, 2006, 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.
- (10)(l)\* CEO Annual Incentive Award Plan filed as Appendix A to the registrant's definitive proxy statement dated March 29, 2005, is incorporated herein by reference.
- (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.

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.

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

# **SIGNATURES**

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

# MINE SAFETY APPLIANCES COMPANY

February 28, 2007	Bv/s/ John T. Ryan III	
(Date)	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.

Signature	<u>Title</u>	<u>Date</u>
/s/ JOHN T. RYAN III  John T. Ryan III	Director; Chairman of the Board and Chief Executive Officer	February 28, 2007
/s/ DENNIS L. ZEITLER  Dennis L. Zeitler	Vice President—Finance; Principal Financial and Accounting Officer	February 28, 2007
	Director	
Robert A. Bruggeworth		
/s/ CALVIN A. CAMPBELL, JR. Calvin A. Campbell, Jr.	_ Director	February 28, 2007
/s/ JAMES A. CEDERNA  James A. Cederna	_ Director	February 28, 2007
/s/ THOMAS B. HOTOPP Thomas B. Hotopp	_ Director	February 28, 2007
/s/ DIANE M. PEARSE  Diane M. Pearse	Director	February 28, 2007
L. Edward Shaw, Jr.	_ Director	
/s/ JOHN C. UNKOVIC  John C. Unkovic	_ Director	February 28, 2007
/s/ THOMAS H. WITMER Thomas H. Witmer	_ Director	February 28, 2007

# 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 February 28, 2007 appearing in the 2006 Annual Report to Shareholders of Mine Safety Appliances Company (which report, consolidated financial statements and assessment are included in 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

PricewaterhouseCoopers LLP Pittsburgh, Pennsylvania February 28, 2007

# MINE SAFETY APPLIANCES COMPANY AND AFFILIATES VALUATION AND QUALIFYING ACCOUNTS THREE YEARS ENDED DECEMBER 31, 2006 (IN THOUSANDS)

	2006	2005	2004
Allowance for doubtful accounts:			
Balance at beginning of year	\$6,041	\$7,548	\$6,418
Additions—			
Charged to costs and expenses	1,063	474	1,703
Deductions—			
Deductions from reserves (1)	1,530	1,981	573
Balance at end of year	5,574	6,041	7,548

<sup>(1)</sup> Bad debts written off, net of recoveries.

# MINE SAFETY APPLIANCES COMPANY

The registrant's present affiliates include the following:

Name	State or Other Jurisdiction of Incorporation
Compañia MSA de Argentina S.A.	Argentina
MSA (Aust.) Pty. Limited	Australia
MSA-Auer Sicherheitstechnik Vertriebs GmbH	Austria
MSA Belgium NV	Belgium
MSA do Brasil Ltda.	Brazil
MSA Canada	Canada
MSA de Chile Ltda.	Chile
Wuxi-MSA Safety Equipment Co. Ltd.	China
MSA International, Inc.	Delaware
Microsensor Systems, Inc.	Kentucky
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. 33-43696, No. 333-51983, and No. 333-121196) of Mine Safety Appliances Company of our reports dated February 28, 2007 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

PricewaterhouseCoopers LLP Pittsburgh, Pennsylvania February 28, 2007

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

February 28, 2007

/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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a–15(e) and 15d–15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2007

/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, 2006 (the "Report") fully complies with the requirements of Section 13 (a) or 15 (d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2007

/s/ John T. Ryan III

John T. Ryan III Chief Executive Officer

/s/ Dennis L. Zeitler

Dennis L. Zeitler Chief Financial Officer

# Shareholders' Inquiries and Organization

#### Section 302 Certifications and NYSE CEO Certification

In June 2006, the Company's Chief Executive Officer submitted to the New York Stock Exchange the annual certification as to compliance with the Exchange's Corporate Governance Listing Standards required by Section 303A.12(a) of the Exchange's Listed Company Manual. The certification was unqualified.

The Company's reports filed with the Securities and Exchange Commission during the past year, including the Annual Report on Form 10-K for the year ended December 31, 2006, have contained the certifications of the Company's Chief Executive Officer and Chief Financial Officer regarding the quality of the Company's public disclosure required by Section 302 of the Sarbanes-Oxley Act.

#### **Shareholders' Inquiries**

Additional copies of the company's 2006 Annual Report, including Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by shareholders after April 1, 2007. 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

U.S. Mail: MSA

Vice President-Finance

P. O. Box 426

Pittsburgh, PA 15230

# **Organization**

Continuing to add depth to its executive management team in 2006, the Board of Directors elected Paul R. Uhler a Vice President of the company. With more than 22 years of operations expertise and HR experience, Paul joined the company in 1984 and has held various positions in both the human resources and manufacturing arenas. Paul has also contributed to MSA's global



success by taking both a leadership and consultant role on the company's Global Manufacturing Council. Most recently, Paul was instrumental in implementing a comprehensive reorganization of MSA's HR department. The HR transformation was implemented to better align the department's programs, initiatives and people processes with MSA's strategic business goals.



# **Mine Safety Appliances Company**

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

412-967-3000 www.MSAnet.com