

TENNECO INC
Form 10-K
February 26, 2010

Table of Contents

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2009

OR

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

Commission file number 1-12387

TENNECO INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

500 North Field Drive

Lake Forest, IL

(Address of principal executive offices)

76-0515284

(I.R.S. Employer
Identification No.)

60045

(Zip Code)

Registrant's telephone number, including area code: (847) 482-5000

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

Title of each class	Name of each Exchange on which registered
7.45% Debentures due 2025;	New York Stock Exchange
8.125% Debentures due 2015;	New York Stock Exchange
9.20% Debentures due 2012;	New York Stock Exchange
Common Stock, par value \$.01 per share	New York and Chicago Stock Exchanges

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

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

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

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was

required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

**Class of Common Equity and Number of Shares
held by Non-affiliates at June 30, 2009**

Market Value held by Non-affiliates*

Common Stock, 45,373,857 shares

\$480,962,884

* Based upon the closing sale price on the New York Stock Exchange Composite Tape for the Common Stock on June 30, 2009.

INDICATE THE NUMBER OF SHARES OUTSTANDING OF EACH OF THE REGISTRANT'S CLASSES OF COMMON STOCK, AS OF THE LATEST PRACTICABLE DATE. Common Stock, par value \$.01 per share, 59,459,360 shares outstanding as of February 22, 2010.

Documents Incorporated by Reference:

Document	Part of the Form 10-K into which incorporated
Portions of Tenneco Inc.'s Definitive Proxy Statement for the Annual Meeting of Stockholders to be held May 12, 2010	Part III

Table of Contents

CAUTIONARY STATEMENT FOR PURPOSES OF THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 concerning, among other things, our prospects and business strategies. These forward-looking statements are included in various sections of this report, including the section entitled Outlook appearing in Item 7 of this report. The words may, will, believe, should, could, plan, expect, anticipate, estimate, and similar (and variations thereof), identify these forward-looking statements. Although we believe that the expectations reflected in these forward-looking statements are based on reasonable assumptions, these expectations may not prove to be correct. Because these forward-looking statements are also subject to risks and uncertainties, actual results may differ materially from the expectations expressed in the forward-looking statements. Important factors that could cause actual results to differ materially from the expectations reflected in the forward-looking statements include:

general economic, business and market conditions, including without limitation the ongoing financial difficulties facing a number of companies in the automotive industry as a result of the difficult global economic environment, including the potential impact thereof on labor unrest, supply chain disruptions, weakness in demand and the collectability of any accounts receivable due to us from such companies;

changes in capital availability or costs, including increases in our cost of borrowing (i.e., interest rate increases), the amount of our debt, our ability to access capital markets at favorable rates, and the credit ratings of our debt;

the impact of the recent global economic crisis on the credit markets, which continue to be volatile and more restricted than they were previously;

our ability to source and procure needed materials, components and other products and services as the economy recovers from the recent global economic crisis;

changes in consumer demand, prices and our ability to have our products included on top selling vehicles, such as the recent shift in consumer preferences from light trucks, which tend to be higher margin products for our customers and us, to other vehicles, and other factors impacting the cyclical nature of automotive production and sales of automobiles which include our products, and the potential negative impact on our revenues and margins from such products;

changes in automotive manufacturers' production rates and their actual and forecasted requirements for our products, such as the significant production cuts during 2008 and 2009 by automotive manufacturers in response to difficult economic conditions;

the overall highly competitive nature of the automotive parts industry, and our resultant inability to realize the sales represented by our awarded book of business (which is based on anticipated pricing for the applicable program over its life, and is subject to increases or decreases due to changes in customer requirements, customer and consumer preferences, and the number of vehicles actually produced by customers);

the loss of any of our large original equipment manufacturer (OEM) customers (on whom we depend for a substantial portion of our revenues), or the loss of market shares by these customers if we are unable to achieve increased sales to other OEMs;

labor disruptions at our facilities or any labor or other economic disruptions at any of our significant customers or suppliers or any of our customers' other suppliers (such as the 2008 strike at American Axle, which disrupted our supply of products for significant General Motors platforms);

increases in the costs of raw materials, including our ability to successfully reduce the impact of any such cost increases through materials substitutions, cost reduction initiatives, low cost country sourcing, and price recovery efforts with aftermarket and OE customers;

the cyclical nature of the global vehicle industry, including the performance of the global aftermarket sector and the longer product lives of automobile parts;

Table of Contents

our continued success in cost reduction and cash management programs and our ability to execute restructuring and other cost reduction plans and to realize anticipated benefits from these plans;

costs related to product warranties;

the impact of consolidation among automotive parts suppliers and customers on our ability to compete;

operating hazards associated with our business;

changes in distribution channels or competitive conditions in the markets and countries where we operate, including the impact of changes in distribution channels for aftermarket products on our ability to increase or maintain aftermarket sales;

the negative impact of higher fuel prices and overall market weakness on discretionary purchases of aftermarket products by consumers;

the cost and outcome of existing and any future legal proceedings;

economic, exchange rate and political conditions in the foreign countries where we operate or sell our products;

customer acceptance of new products;

new technologies that reduce the demand for certain of our products or otherwise render them obsolete;

our ability to realize our business strategy of improving operating performance;

our ability to successfully integrate any acquisitions that we complete;

changes by the Financial Accounting Standards Board or the Securities and Exchange Commission of authoritative generally accepted accounting principles or policies;

changes in accounting estimates and assumptions, including changes based on additional information;

potential legislation, regulatory changes and other governmental actions, including the ability to receive regulatory approvals and the timing of such approvals;

the impact of changes in and compliance with laws and regulations, including environmental laws and regulations, environmental liabilities in excess of the amount reserved, the adoption of the current mandated timelines for worldwide emission regulation and any changes to the timing of the funding requirements for our pension and other postretirement benefit liabilities;

decisions by federal, state and local governments to provide (or discontinue) incentive programs related to automobile purchases;

the potential impairment in the carrying value of our long-lived assets and goodwill or our deferred tax assets;

potential volatility in our effective tax rate;

acts of war and/or terrorism, including, but not limited to, the current military action in Iraq and Afghanistan, the current situation in North Korea, and the continuing war on terrorism, as well as actions taken or to be taken by the United States and other governments as a result of further acts or threats of terrorism, and the impact of these acts on economic, financial and social conditions in the countries where we operate; and

the timing and occurrence (or non-occurrence) of other transactions, events and circumstances which may be beyond our control.

The risks included here are not exhaustive. Refer to Part I, Item 1A Risk Factors of this report for further discussion regarding our exposure to risks. Additionally, new risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor to assess the impact such risk factors might have on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

TABLE OF CONTENTS

PART I

<u>Item 1.</u>	<u>Business</u>	1
	<u>Tenneco Inc</u>	1
	<u>Contributions of Major Businesses</u>	4
	<u>Description of Our Business</u>	5
<u>Item 1A.</u>	<u>Risk Factors</u>	21
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u>	30
<u>Item 2.</u>	<u>Properties</u>	30
<u>Item 3.</u>	<u>Legal Proceedings</u>	30
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u>	32
<u>Item 4.1.</u>	<u>Executive Officers of the Registrant</u>	32

PART II

<u>Item 5.</u>	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	34
<u>Item 6.</u>	<u>Selected Financial Data</u>	36
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	38
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	66
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>	67
<u>Item 9.</u>	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	132
<u>Item 9A.</u>	<u>Controls and Procedures</u>	132
<u>Item 9B.</u>	<u>Other Information</u>	132

PART III

<u>Item 10.</u>	<u>Directors, Executive Officers and Corporate Governance</u>	133
<u>Item 11.</u>	<u>Executive Compensation</u>	133
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	133
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions, and Director Independence</u>	134
<u>Item 14.</u>	<u>Principal Accountant Fees and Services</u>	134

PART IV

<u>Item 15.</u>	<u>Exhibits and Financial Statement Schedules</u>	135
<u>EX-10.70</u>		
<u>EX-10.71</u>		
<u>EX-10.72</u>		
<u>EX-10.73</u>		
<u>EX-10.74</u>		
<u>EX-12</u>		
<u>EX-21</u>		
<u>EX-23</u>		
<u>EX-24</u>		
<u>EX-31.1</u>		
<u>EX-31.2</u>		
<u>EX-32.1</u>		

Table of Contents

PART I

ITEM 1. BUSINESS.

TENNECO INC.

General

Our company, Tenneco Inc., is one of the world's largest producers of automotive emission control and ride control products and systems. Our company serves both original equipment vehicle manufacturers (OEMs) and the repair and replacement markets, or aftermarket, worldwide. As used herein, the term Tenneco, we, us, our, or the Company refers to Tenneco Inc. and its consolidated subsidiaries.

Tenneco was incorporated in Delaware in 1996. In 2005, we changed our name from Tenneco Automotive Inc. back to Tenneco Inc. The name Tenneco better represents the expanding number of markets we serve through our commercial and specialty vehicle businesses. Building a stronger presence in these markets complements our core businesses of supplying ride control and emission control products and systems for light vehicles to automotive original equipment and aftermarket customers worldwide. Our common stock is traded on the New York Stock Exchange under the symbol TEN.

Corporate Governance and Available Information

We have established a comprehensive corporate governance plan for the purpose of defining responsibilities, setting high standards of professional and personal conduct and assuring compliance with such responsibilities and standards. As part of its annual review process, the Board of Directors monitors developments in the area of corporate governance. Listed below are some of the key elements of our corporate governance plan.

For more information about these matters, see our definitive Proxy Statement for the Annual Meeting of Stockholders to be held on May 12, 2010.

Independence of Directors

Eight of our ten directors are independent under the New York Stock Exchange (NYSE) listing standards.

Independent directors are scheduled to meet separately in executive session after every regularly scheduled Board of Directors meeting.

We have a lead independent director, Mr. Paul T. Stecko.

Audit Committee

All members meet the independence standards for audit committee membership under the NYSE listing standards and applicable Securities and Exchange Commission (SEC) rules.

Two members of the Audit Committee, Messrs. Charles Cramb and Dennis Letham, have been designated by the Board as audit committee financial experts, as defined in the SEC rules, and the remaining members of the Audit Committee satisfy the NYSE's financial literacy requirements.

The Audit Committee operates under a written charter which governs its duties and responsibilities, including its sole authority to appoint, review, evaluate and replace our independent auditors.

The Audit Committee has adopted policies and procedures governing the pre-approval of all audit, audit-related, tax and other services provided by our independent auditors.

Compensation/Nominating/Governance Committee

All members meet the independence standards for compensation and nominating committee membership under the NYSE listing standards.

Table of Contents

The Compensation/Nominating/Governance Committee operates under a written charter that governs its duties and responsibilities, including the responsibility for executive compensation.

We have an Executive Compensation Subcommittee which has the responsibility to consider and approve equity based compensation for our executive officers which is intended to qualify as performance based compensation under Section 162(m) of the Internal Revenue Code.

Corporate Governance Principles

We have adopted Corporate Governance Principles, including qualification and independence standards for directors.

Stock Ownership Guidelines

We have adopted Stock Ownership Guidelines to align the interests of our executives with the interests of stockholders and promote our commitment to sound corporate governance.

The Stock Ownership Guidelines apply to the independent directors, the Chairman and Chief Executive Officer, all Executive Vice Presidents and all Senior Vice Presidents.

Communication with Directors

The Audit Committee has established a process for confidential and anonymous submission by our employees, as well as submissions by other interested parties, regarding questionable accounting or auditing matters.

Additionally, the Board of Directors has established a process for stockholders to communicate with the Board of Directors, as a whole, or any independent director.

Codes of Business Conduct and Ethics

We have adopted a Code of Ethical Conduct for Financial Managers, which applies to our Chief Executive Officer, Chief Financial Officer, Controller and other key financial managers. This code is filed as Exhibit 14 to this report.

We also operate under a Statement of Business Principles that applies to all directors, officers and employees and includes provisions ranging from restrictions on gifts to conflicts of interests. All salaried employees are required to affirm annually in writing their acceptance of, and compliance with, these principles.

Related Party Transactions Policy

We have adopted a Policy and Procedure for Transactions With Related Persons, under which our Audit Committee must generally pre-approve transactions involving more than \$120,000 with our directors, executive officers, five percent or greater stockholders and their immediate family members.

Equity Award Policy

We have adopted a written policy to be followed for all issuances by our company of compensatory awards in the form of our common stock or any derivative of the common stock.

Personal Loans to Executive Officers and Directors

We comply with and operate in a manner consistent with the legislation outlawing extensions of credit in the form of a personal loan to or for our directors or executive officers.

Our Internet address is *www.tenneco.com*. We make our proxy statements, annual report to stockholders, annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as filed with or furnished to the SEC, available free of charge on our Internet website as soon as

Table of Contents

reasonably practicable after submission to the SEC. Securities ownership reports on Forms 3, 4 and 5 are also available free of charge on our website as soon as reasonably practicable after submission to the SEC. The contents of our website are not, however, a part of this report.

Our Audit Committee, Compensation/Nominating/Governance Committee and Executive Compensation Subcommittee Charters, Corporate Governance Principles, Stock Ownership Guidelines, Audit Committee policy regarding accounting complaints, Code of Ethical Conduct for Financial Managers, Statement of Business Principles, Policy and Procedures for Transactions with Related Persons, Equity Award Policy, policy for communicating with the Board of Directors and Audit Committee policy regarding the pre-approval of audit, non-audit, tax and other services are available free of charge on our website at www.tenneco.com. In addition, we will make a copy of any of these documents available to any person, without charge, upon written request to Tenneco Inc., 500 North Field Drive, Lake Forest, Illinois 60045, Attn: General Counsel. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K and applicable NYSE rules regarding amendments to, or waivers of, our Code of Ethical Conduct for Financial Managers and Statement of Business Principles by posting this information on our website at www.tenneco.com.

Table of Contents**CONTRIBUTIONS OF MAJOR BUSINESSES**

For information concerning our operating segments, geographic areas and major products or groups of products, see Note 11 to the consolidated financial statements of Tenneco Inc. included in Item 8. The following tables summarize for each of our reporting segments for the periods indicated: (i) net sales and operating revenues; (ii) earnings before interest expense, income taxes and noncontrolling interests (EBIT); and (iii) expenditures for plant, property and equipment. You should also read Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 for information about certain costs and charges included in our results.

Net Sales and Operating Revenues:

	2009		2008		2007	
	(Dollar Amounts in Millions)					
North America	\$ 2,099	45%	\$ 2,641	45%	\$ 2,910	47%
Europe, South America and India	2,209	48	2,983	50	3,135	51
Asia Pacific	525	11	543	9	560	9
Intergroup sales	(184)	(4)	(251)	(4)	(421)	(7)
Total	\$ 4,649	100%	\$ 5,916	100%	\$ 6,184	100%

EBIT:

	2009		2008		2007	
	(Dollar Amounts in Millions)					
North America	\$ 42	45%	\$ (107)	NM	\$ 120	48%
Europe, South America and India	20	22	85	NM	99	39
Asia Pacific	30	33	19	NM	33	13
Total	\$ 92	100%	\$ (3)		\$ 252	100%

Expenditures for plant, property and equipment:

	2009		2008		2007	
	(Dollar Amounts in Millions)					
North America	\$ 45	38%	\$ 108	49%	\$ 106	54%
Europe, South America and India	58	49	89	40	74	37
Asia Pacific	15	13	24	11	18	9
Total	\$ 118	100%	\$ 221	100%	\$ 198	100%

Interest expense, income taxes, and noncontrolling interests that were not allocated to our operating segments are:

	2009	2008	2007
		(Millions)	
Interest expense (net of interest capitalized)	\$ 133	\$ 113	\$ 164
Income tax expense	13	289	83
Noncontrolling interests	19	10	10

Table of Contents

DESCRIPTION OF OUR BUSINESS

We design, manufacture and sell automotive emission control and ride control systems and products, with 2009 revenues of \$4.6 billion. We serve both original equipment manufacturers (OEMs) and replacement markets worldwide through leading brands, including Monroe®, Rancho®, Clevite® Elastomers, and Fric Rot™ ride control products and Walker®, Fonos™, and Gillet™ emission control products.

As a parts supplier, we produce individual component parts for vehicles as well as groups of components that are combined as modules or systems within vehicles. These parts, modules and systems are sold globally to most leading OEMs and throughout all aftermarket distribution channels.

Overview of Automotive Parts Industry and Adjacent Markets

The automotive parts industry is generally separated into two categories: (1) original equipment or OE in which parts are sold in large quantities directly for use by OEMs; and (2) aftermarket in which replacement parts are sold in varying quantities to a wide range of wholesalers, retailers and installers. In the OE market, parts suppliers are generally divided into tiers Tier 1 suppliers that provide their products directly to OEMs, and Tier 2 or Tier 3 suppliers that sell their products principally to other suppliers for combination into the other suppliers own product offerings.

Demand for automotive parts in the OE market is generally a function of the number of new vehicles produced, which in turn is a function of prevailing economic conditions and consumer preferences. In 2009, the number of light vehicles produced was 8.6 million in North America, 24.6 million in Europe, South America and India and 26.5 million in Asia Pacific. The term light vehicles is comprised of two groups: (1) passenger cars and (2) light trucks. When we refer to light trucks, we are including sport-utility vehicles (SUV), crossover vehicles (CUV), pick-up trucks, vans and multi-purpose passenger vehicles. Worldwide new light vehicle production is forecasted to increase to 66.4 million units in 2010 from approximately 59.7 million units in 2009. Although OE demand is tied to planned vehicle production, parts suppliers also have the opportunity to grow through increasing their product content per vehicle, by further expanding business with existing customers and by serving new customers in existing or new markets. Companies with global presence and advanced technology, engineering, manufacturing and support capabilities, such as our company, are better positioned to take advantage of these opportunities.

These same competitive advantages have enabled suppliers such as us to serve customers beyond the light vehicle market. Certain automotive parts suppliers now find themselves being asked to develop and produce components and integrated systems for the commercial market of medium- and heavy-duty trucks, buses, and non-road equipment as well as the recreational segment for two-wheelers and all-terrain vehicles. Tenneco foresees this market diversification as a source of future growth.

Demand for aftermarket products is driven by general economic conditions, the number of vehicles in operation, the age and distance driven of the vehicle fleet, and the average useful life and quality of vehicle parts. Although more vehicles are on the road than ever before, the aftermarket has experienced longer replacement cycles due to the improved quality of OE parts and increases in the average useful life of automotive parts as a result of technological innovation. In addition, the difficult global economic climate has negatively impacted aftermarket sales. Suppliers are increasingly being required to deliver innovative aftermarket products that upgrade the performance or safety of a vehicle s original components to drive aftermarket demand.

Industry Trends

Currently, we believe several significant existing and emerging trends are dramatically impacting the automotive industry and the other markets we serve. As the dynamics of the markets we serve change, so do

Table of Contents

the roles, responsibilities and relationships of the participants. Key trends that we believe are affecting parts suppliers include:

General Economic Factors and Production Levels

The recent global financial crisis materially and negatively impacted the automotive industry and our customers businesses in the U.S. and elsewhere. Automakers around the world experienced financial difficulties from a weakened economy, tightening credit markets, low consumer confidence, and reduced demand for their products. General Motors and Chrysler reorganized under bankruptcy protection in 2009, and other OE manufacturers took actions to improve profitability and remain solvent. The automotive supply base in turn also faced severe cash flow problems as a result of the significantly lower production levels of light vehicles, increased costs of certain raw material, commodity and energy costs, and restricted access to additional liquidity through the capital markets. Consumers facing a weak job market and inadequate financing options were reluctant to purchase durable goods such as automobiles.

During 2008 and 2009, the North American market in particular witnessed a shift away from higher-margin light trucks to more fuel-efficient passenger cars, negatively impacting the sales and profitability of suppliers such as us. These trends are still impacting OE manufacturers and their suppliers.

Increasing Environmental Standards

OE manufacturers and their parts suppliers are designing and developing products to respond to increasingly stringent environmental requirements, growth in the diesel markets and increased demands for better fuel economy. Government regulations adopted over the past decade require substantial reductions in vehicle tailpipe emissions, longer warranties on parts of a vehicle's pollution control equipment and additional equipment to control fuel vapor emissions. Manufacturers are responding with new technologies for gasoline- and diesel-fueled vehicles that minimize pollution and improve fuel economy.

As a leading supplier of emission control systems with strong technical capabilities, we believe we are well positioned to benefit from the more rigorous environmental standards being adopted around the world. To meet stricter air quality regulations, we have developed and sold diesel particulate filters for the Mercedes Benz Sprinter and BMW 1 and 3 series passenger cars in Europe and for the GM Duramax engine applications, the Ford Super Duty, the Dodge Ram and International Truck and Engine Corporation's medium-duty trucks in North America. These particulate filters, coupled with De-NOx converters, reduce emissions of particulate matter by up to 90 percent and of nitrogen oxide by up to 85 percent. In addition, we have development and production contracts for our selective catalytic reduction (SCR) systems with light and medium-duty truck manufacturers in North America, Europe and Asia. In China, we have development contracts for complete turnkey SCR systems, including the ELIM-NOxtm urea dosing technology which we acquired in 2007. Customers have also purchased prototypes of our hydrocarbon injector, a product acquired alongside the ELIM-NOxtm technology, which is used to inject hydrocarbon directly into the exhaust system to regenerate diesel particulate filters and Lean NOx Traps. Lastly, for various non-road customers, we are developing emission aftertreatment systems designed to meet Tier 4 environmental regulations.

Increasing Technologically Sophisticated Content

As consumers continue to demand vehicles with improved performance, safety and functionality at competitive prices, the components and systems in these vehicles become technologically more advanced and sophisticated. Mechanical functions are replaced with electronics; and mechanical and electronic devices are integrated into single systems. More stringent emission and other regulatory standards increase the complexity of the systems as well.

To remain competitive as a parts and systems supplier, we invest in engineering, research and development, spending \$97 million in 2009, \$127 million in 2008 and \$114 million in 2007, net of customer reimbursements. In addition, we build prototypes and incur other costs on behalf of our customers to further our technological capabilities. Such expenses reimbursed by our customers totaled \$104 million in 2009,

Table of Contents

\$120 million in 2008, and \$72 million in 2007. We also fund and sponsor university research to advance our emission control and ride control development.

By investing in technology, we can expand our product offerings and penetrate new markets. We developed diesel particulate filters (DPFs) which were first sold in Europe and then offered in North America. We co-developed with Öhlins Racing AB a computerized electronic suspension system (CES) now offered by Volvo, Audi, Ford, VW and Mercedes Benz on their vehicles.

Enhanced Vehicle Safety

Vehicle safety and handling continue to gain increased industry attention and play a critical role in consumer purchasing decisions. The U.S. made electronic stability control (ESC) systems mandatory by 2012 with the adoption of the Federal Motor Vehicle Safety Standard 126 (FMVSS-126). OEMs, to serve the needs of their customers and meet government mandates, are seeking parts suppliers that invest in new technologies, capabilities and products that advance vehicle safety, such as roll-over protection systems, smart airbags, braking electronics, computerized electronic suspension and safer, more durable materials. Those suppliers able to offer such innovative products and technologies have a distinct competitive advantage.

Tenneco co-developed CES and offers Kinetic[®] ride control technology to improve vehicle stability and handling. We promoted the Safety Triangle of Steering-Stopping-Stability to educate consumers about the detrimental effect of worn shock absorbers on vehicle steering and stopping distances. We introduced premium, Monroe[®] branded brakes to the aftermarket.

Outsourcing and Demand for Systems and Modules

OEMs have steadily outsourced more of the design and manufacturing of vehicle parts and systems to simplify the assembly process, lower costs and reduce development times. Furthermore, they have demanded fully integrated, functional systems made possible with the development of advanced electronics in addition to innovative, individual vehicle components and parts that may not readily interface together. As a result, successful parts suppliers offer a variety of component products individually as well as integrated modules and systems:

Modules are groups of component parts arranged in close physical proximity to each other within a vehicle. Modules are often assembled by the supplier and shipped to the OEM for installation in a vehicle as a unit. Integrated shock and spring units, seats, instrument panels, axles and door panels are examples.

Systems are groups of component parts located throughout a vehicle which operate together to provide a specific vehicle functionality. Emission control systems, anti-lock braking systems, safety restraint systems, roll control systems and powertrain systems are examples.

This shift towards fully integrated systems created the role of the Tier 1 systems integrator, a supplier responsible for executing a broad array of activities, including design, development, engineering, and testing of component parts, systems and modules. With more than a decade of experience as an established Tier 1 supplier, we have produced modules and systems for various vehicle platforms produced worldwide, supplying ride control modules for the GM Chevy Silverado, GM Sierra and the VW Transporter and emission control systems for the Ford Super Duty, Toyota Tundra, Chrysler Dodge Ram, Ford Focus, and the GM Acadia and Enclave. In addition, we continue to design other modules and systems for platforms yet to be introduced to the global marketplace.

Global Reach of OE Customers

Changing market dynamics are driving OE manufacturers and their parts suppliers to expand their global reach:

Growing Importance of Developing Markets: Because the North American and Western European automotive markets are relatively mature, OEMs are increasingly focusing on developing markets for

Table of Contents

growth opportunities, particularly Brazil, Russia, India and China, collectively known as the BRIC economies, as well as Thailand. As OEMs have penetrated new regions, growth opportunities for suppliers have emerged.

Governmental Tariffs and Local Parts Requirements: Many governments around the world require vehicles sold within their country to contain specified percentages of locally produced parts. Additionally, some governments place high tariffs on imported parts.

Location of Production Closer to End Markets: As OE manufacturers and parts suppliers have shifted production globally to be closer to their end markets, suppliers have expanded their reach, capturing sales in developing markets and taking advantage of relatively lower labor costs.

Because of these trends, OE manufacturers are increasingly seeking suppliers capable of supporting vehicle platforms being introduced globally. They want suppliers like Tenneco with design, production, engineering and logistics capabilities that can be accessed not just in North America and Europe but also in the developing markets.

Global Rationalization of OE Vehicle Platforms

OE manufacturers continue to standardize on global platforms, designing basic mechanical structures that are each suited for a number of similar vehicle models and able to accommodate different features for more than one region. Light vehicle platforms of over one million units are expected to grow from 36 percent to 52 percent of global OE production from 2009 to 2014.

With such global platforms, OE manufacturers realize significant economies of scale by limiting variations in items such as steering columns, brake systems, transmissions, axles, exhaust systems, support structures and power window and door lock mechanisms. The shift towards standardization can also benefit automotive parts suppliers. They can experience greater economies of scale, lower material costs, and reduced investment expenses for molds, dies and prototype development.

Extended Product Life of Automotive Parts

The average useful life of automotive parts, both OE and replacement, has been steadily increasing in recent years due to technological innovations. As a result, although there are more vehicles on the road than ever before, the global aftermarket has not kept pace with that growth. Accordingly, aftermarket suppliers have focused on reducing costs and providing product differentiation through advanced technology and recognized brand names. With our long history of technological innovation, brand awareness and operational effectiveness, we believe we are well positioned to leverage our products and technology.

Changing Aftermarket Distribution Channels

From 1999 to 2009, the number of retail outlets supplying aftermarket parts increased significantly while the number of jobber stores declined 14 percent in the U.S. Major aftermarket retailers, such as AutoZone and Advance Auto Parts, attempted to expand their commercial sales by selling directly to parts installers, which had historically purchased from their local warehouse distributors and jobbers, as they continued to market to individual retail consumers. Retailers now have the option to offer premium brands which are often preferred by their commercial customers in addition to standard products which are often selected by their individual store buyers. We believe we are well positioned to respond to this trend because we continue to produce high-quality, premium brands and products.

Contracting Supplier Base

Over the past few years, as OEMs expanded geographically, pricing pressures grew and outsourcing increased, parts suppliers fought to remain competitive through consolidation, investing or restructuring to broaden their global reach, offering integrated products and services and gaining economies of scale. The recent economic crisis only exacerbated this situation with 340 suppliers worldwide filing for insolvency in

Table of Contents

2009. We believe that a supplier's viability in this marketplace will depend, in part, on its ability to maintain and increase operating efficiencies and provide value-added services.

Analysis of Revenues

The table below provides, for each of the years 2007 through 2009, information relating to our net sales and operating revenues, by primary product lines and customer categories.

	Net Sales		
	Year Ended December 31,		
	2009	2008	2007
	(Millions)		
Emission Control Systems & Products			
Aftermarket	\$ 315	\$ 358	\$ 370
Original Equipment			
OE Value-add	1,638	2,128	2,288
OE Substrate(1)	966	1,492	1,673
	2,604	3,620	3,961
	2,919	3,978	4,331
Ride Control Systems & Products			
Aftermarket	721	761	734
Original Equipment	1,009	1,177	1,119
	1,730	1,938	1,853
Total Revenues	\$ 4,649	\$ 5,916	\$ 6,184

(1) See Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 for a discussion of substrate sales.

Brands

In each of our operating segments, we manufacture and market products with leading brand names. Monroe® ride control products and Walker® exhaust products are two of the most recognized brands in the industry. We emphasize product value differentiation with brands such as Monroe Sensa-Trac® and Reflex® (shock absorbers and struts), Quiet-Flow® (mufflers), DynoMax® (performance exhaust products), Rancho® (ride control products for the high performance light truck market), Clevite® Elastomers (elastomeric vibration control components), Marzocchi™ (forks and suspensions for the two-wheeler market) and Lukey (performance exhaust and filters). In Europe, our Gillet™ brand is recognized as a leader in highly engineered exhaust systems for OE customers.

Customers

We have developed long-standing business relationships with our customers around the world. In each of our operating segments, we work together with our customers in all stages of production, including design, development, component sourcing, quality assurance, manufacturing and delivery. With a diverse mix of OE and aftermarket products and facilities in major markets worldwide, we believe we are well positioned to meet customer needs. We believe we have a strong, established reputation with customers for providing high-quality products at competitive prices, as well as for timely delivery and customer service.

Table of Contents

Worldwide we serve more than 65 different OEMs, and our products or systems are included on six of the top 10 passenger models produced in Europe and eight of the top 10 light truck models produced in North America for 2009. During 2009, our OEM customers included:

North America	Europe	Asia
AM General	BMW	BMW
Caterpillar	Daimler AG	Brilliance Automobile
Chrysler	Fiat	Changan Automotive
Club Car	Ford Motor	Dongfeng Motor
Daimler AG	General Motors	First Auto Works
Fiat	Harley-Davidson	Ford Motor
Ford Motor	Mazda Motor	General Motors
General Motors	Nissan Motor	Great Wall Motor Co.
Harley-Davidson	Paccar	Isuzu Motors
Honda Motor	Porsche	Jiangling Motors
John Deere	PSA Peugeot Citroen	Mazda Motor
Navistar International	Renault	Nissan Motor
Nissan Motor	Suzuki	PSA Peugeot Citroen
Oshkosh Truck	Tata Motors	SAIC Motor Corp.
Paccar	Toyota Motor	Toyota Motor
Toyota Motor	Volkswagen Group	Volkswagen Group
Volkswagen Group	Volvo Global Truck	
Volvo Global Truck		
Australia	South America	India
Club Car	Daimler AG	Club Car
Fiat	Fiat	General Motors
Ford Motor	Ford Motor	Mahindra & Mahindra
General Motors	General Motors	Suzuki
Mazda Motor	Navistar International	Tata Motors
Toyota Motor	Nissan Motor	TVS Motors
	PSA Peugeot Citroen	
	Renault	
	Toyota Motor	
	Volkswagen Group	

The following customers accounted for 10 percent or more of our net sales in any of the last three years.

Customer	2009	2008	2007
General Motors	16%	20%	20%
Ford	14%	11%	13%

During 2009, our aftermarket customers were comprised of full-line and specialty warehouse distributors, retailers, jobbers, installer chains and car dealers. These customers included National Auto Parts Association (NAPA), Advance Auto Parts, Uni-Select, Pep Boys and O'Reilly Automotive in North America and Temot, Auto Distribution International, Group Auto Union, Kwik-Fit and Mekonomen Grossist in Europe. We believe our revenue mix is

balanced, with our top 10 aftermarket customers accounting for 45 percent of our net aftermarket sales and our aftermarket sales representing 22 percent of our total net sales in 2009.

Competition

We operate in highly competitive markets. Customer loyalty is a key element of competition in these markets and is developed through long-standing relationships, customer service, high quality value-added products and timely delivery. Product pricing and services provided are other important competitive factors.

In both the OE market and aftermarket, we compete with the vehicle manufacturers, some of which are also customers of ours, and numerous independent suppliers. In the OE market, we believe that we rank among the top two suppliers in the world for both emission control and ride control products and systems for

Table of Contents

light vehicles. In the aftermarket, we believe that we are the market share leader in the supply of both emission control and ride control products for light vehicles in the markets we serve throughout the world.

Seasonality

Our OE and aftermarket businesses are somewhat seasonal. OE production is historically higher in the first half of the year compared to the second half. It decreases in the third quarter due to OE plant shutdowns; and softens in the fourth quarter due to reduced consumer demand for new vehicles during the holiday season and the winter months in North America and Europe generally. Our aftermarket operations, also affected by seasonality, experience relatively higher demand during the Spring as vehicle owners prepare for the Summer driving season.

While seasonality does impact our business, actual results may vary from the above trends due to global and local economic dynamics as well as industry-specific platform launches and other production-related events. For instance, in 2008 and 2009, seasonal OE plant closures were longer and more pronounced than normal due to the global recession.

Traditionally, during recessions, OE sales decline due to reduced consumer demand for automobiles and other capital goods. Aftermarket sales do not see the same impact as consumers forego new vehicle purchases and keep their vehicles longer, choosing to spend instead on repair and maintenance services. By participating in both the OE and aftermarket segments, we generally see a smaller revenue decline than the overall change in OE production.

Emission Control Systems

Vehicle emission control products and systems play a critical role in safely conveying noxious exhaust gases away from the passenger compartment and reducing the level of pollutants and engine exhaust noise emitted to acceptable levels. Precise engineering of the exhaust system – extending from the manifold that connects an engine's exhaust ports to an exhaust pipe, to the catalytic converter that eliminates pollutants from the exhaust, and to the muffler that modulates noise and emissions – leads to a pleasant, tuned engine sound, reduced pollutants and optimized engine performance.

We design, manufacture and distribute a variety of products and systems designed to reduce pollution and optimize engine performance, acoustic tuning and weight, including the following:

Catalytic converters and diesel oxidation catalysts – Devices consisting of a substrate coated with precious metals enclosed in a steel casing used to reduce harmful gaseous emissions, such as carbon monoxide;

Diesel Particulate Filters (DPFs) – Devices to eliminate particulate matter emitted from diesel engines;

Burner systems – Devices which actively combust fuel and air inside the exhaust system to create extra heat for DPF regeneration, or for improved efficiency of SCR systems;

Hydrocarbon vaporizers and injectors – Devices to add fuel to a diesel exhaust system in order to regenerate diesel particulate filters or Lean NOx traps;

Lean NOx traps – Devices which reduce Nitrogen Oxide (NOx) emissions from diesel powertrains using capture and store technology;

Selective Catalytic Reduction (SCR) systems – Devices which reduce NOx emissions from diesel powertrains using injected reductants such as AdBlue[™] or Diesel Exhaust Fuel (DEF);

Mufflers and resonators Devices to provide noise elimination and acoustic tuning;

Exhaust manifolds Components that collect gases from individual cylinders of a vehicle's engine and direct them into a single exhaust pipe;

Table of Contents

Pipes Utilized to connect various parts of both the hot and cold ends of an exhaust system;

Hydroformed assemblies Forms in various geometric shapes, such as Y-pipes or T-pipes, which provide optimization in both design and installation as compared to conventional pipes; and

Hangers and isolators Used for system installation and elimination of noise and vibration.

For the catalytic converters we sell, we either buy completed catalytic converters systems themselves or procure substrates coated with precious metals which we incorporate into entire systems. We obtain from third parties or directly from OE manufacturers these components and systems, often at the OEM's discretion. See Item 7,

Management's Discussion and Analysis of Financial Condition and Results of Operations for more information on our sales of these products.

We entered the emission control market in 1967 with the acquisition of Walker Manufacturing Company, which was founded in 1888, and became one of Europe's leading OE emission control systems suppliers with the acquisition of Heinrich Gillet GmbH & Co. in 1994. Throughout this document, the term "Walker" refers to our subsidiaries and affiliates that produce emission control products and systems.

We supply our emission control offerings to 40 vehicle makers for use on over 200 vehicle models, including five of the top 10 passenger cars produced in Europe and six of the top 10 light truck models produced in North America for 2009. We also delivered emission control products to heavy-duty truck and specialty vehicle manufacturers including Harley-Davidson, BMW Motorcycle, Daimler Trucks, and International Truck and Engine Corporation (Navistar).

In the aftermarket, we manufacture, market and distribute replacement mufflers for virtually all North American, European, and Asian makes of light vehicles under brand names including Quiet-Flow®, TruFit® and Aluminox Pro™, in addition to offering a variety of other related products such as pipes and catalytic converters (Walker Perfection®). We also serve the specialty exhaust aftermarket with offerings that include Mega-Flow™ exhaust products for heavy-duty vehicle applications and DynoMax® high performance exhaust products. We continue to emphasize product-value differentiation with other aftermarket brands such as Thrush® and Fonos™.

The following table provides, for each of the years 2007 through 2009, information relating to our sales of emission control products and systems for certain geographic areas:

	Percentage of Net Sales		
	Year Ended December 31,		
	2009	2008	2007
United States			
Aftermarket	17%	12%	10%
OE market	83	88	90
	100%	100%	100%
Foreign Sales			
Aftermarket	8%	8%	8%
OE market	92	92	92

	100%	100%	100%
Total Sales by Geographic Area			
United States	31%	32%	34%
Foreign	69	68	66
	100%	100%	100%

Ride Control Systems

Superior ride control is governed by a vehicle's suspension system, including its shock absorbers and struts. Shock absorbers and struts serve to maintain the vertical loads placed on the vehicle's tires and thus, help keep the tires in contact with the road. A vehicle's ability to steer, brake, accelerate and operate safely

Table of Contents

depends on the contact between the vehicle's tires and the road. Worn shocks and struts can allow excess transfer of the vehicle's weight either from side to side which is called roll; from front to rear which is called pitch; or up and down, which is called bounce. Shock absorbers are designed to control the vertical loads placed on tires and thereby provide resistance to vehicle roll, pitch and bounce. They not only function as safety components but also provide a comfortable ride.

We design, manufacture and distribute a variety of ride control products and systems. Our ride control offerings include:

Shock absorbers A broad range of mechanical shock absorbers and related components for light- and heavy-duty vehicles, including twin-tube and monotube shock absorbers;

Struts A complete line of struts and strut assemblies for light vehicles;

Vibration control components (Clevite® Elastomers) Generally, rubber-to-metal bushings and mountings to reduce vibration between metal parts of a vehicle. Offerings include a broad range of suspension arms, rods and links for light- and heavy-duty vehicles;

Kinetic® Suspension Technology A suite of roll-control and nearly equal wheel-loading systems ranging from simple mechanical systems to complex hydraulic ones featuring proprietary and patented technology. The Kinetic® Suspension Technology was incorporated on the Citroën World Rally Car that was featured in the World Rally Championship 2003, 2004 and 2005. Additionally, the Kinetic® Suspension Technology was offered on the Lexus GX 470 sport utility vehicle which resulted in our winning the PACE Award;

Advanced suspension systems Shock absorbers and suspension systems that electronically adjust a vehicle's performance based on inputs such as steering and braking; and

Other We also offer other ride control products such as load assist products, springs, steering stabilizers, adjustable suspension systems, suspension kits and modular assemblies.

We supply our ride control offerings to over 65 vehicle-makers for use on over 210 vehicle models, including three of the top 10 passenger cars produced in Europe and 7 of the top 10 light truck models produced in North America for 2009. We also supply OE ride control products and systems to a range of heavy-duty and specialty vehicle manufacturers including Volvo Truck, Scania, International Truck and Engine Corporation (Navistar), and PACCAR.

In the ride control aftermarket, we manufacture, market and distribute replacement shock absorbers for virtually all North American, European and Asian makes of light vehicles under several brand names including Gas Matic®, Sensa-Trac®, Monroe Reflex® and Monroe Adventure®, as well as Clevite® Elastomers for elastomeric vibration control components. We also sell ride control offerings for the heavy-duty, off-road and specialty aftermarket, such as our Gas-Magnum® shock absorbers for the North American heavy-duty category and Marzocchi front forks for two wheelers.

We entered the ride control product line in 1977 with the acquisition of Monroe Auto Equipment Company, which was founded in 1916, and introduced the world's first modern tubular shock absorber in 1930. When the term Monroe is used in this document it refers to our subsidiaries and affiliates that produce ride control products and systems.

Table of Contents

The following table provides, for each of the years 2007 through 2009, information relating to our sales of ride control equipment for certain geographic areas:

	Percentage of Net Sales Year Ended December 31,		
	2009	2008	2007
United States			
Aftermarket	60%	53%	58%
OE market	40	47	42
	100%	100%	100%
Foreign Sales			
Aftermarket	32%	32%	31%
OE market	68	68	69
	100%	100%	100%
Total Sales by Geographic Area			
United States	36%	34%	32%
Foreign	64	66	68
	100%	100%	100%

Financial Information About Geographic Areas

Refer to Note 11 of the consolidated financial statements of Tenneco Inc. included in Item 8 of this report for financial information about geographic areas.

Sales, Marketing and Distribution

We have separate and distinct sales and marketing efforts for our OE and aftermarket businesses.

For OE sales, our sales and marketing team is an integrated group of professionals, including skilled engineers and program managers, who are organized by customer and product type (e.g., ride control and emission control). Our sales and marketing team provides the appropriate mix of operational and technical expertise needed to interface successfully with the OEMs. Our new business capture process involves working closely with the OEM platform engineering and purchasing teams. Bidding on OE automotive platforms typically encompasses many months of engineering and business development activity. Throughout the process, our sales team, program managers and product engineers assist the OE customer in defining the project's technical and business requirements. A normal part of the process includes our engineering and sales personnel working on customers' integrated product teams, and assisting with the development of component/system specifications and test procedures. Given that the OE business involves long-term production contracts awarded on a platform-by-platform basis, our strategy is to leverage our engineering expertise and strong customer relationships to obtain platform awards and increase operating margins.

For aftermarket sales and marketing, our sales force is generally organized by customer and region and covers multiple product lines. We sell aftermarket products through four primary channels of distribution: (1) the traditional three-step distribution system of full-line warehouse distributors, jobbers and installers; (2) the specialty two-step distribution system of specialty warehouse distributors that carry only specified automotive product groups and installers; (3) direct sales to retailers; and (4) direct sales to installer chains. Our aftermarket sales and marketing representatives cover all levels of the distribution channel, stimulating interest in our products and helping our products move through the distribution system. Also, to generate demand for our products from end-users, we run print and television advertisements and offer pricing promotions. We were one of the first parts manufacturers to offer business-to-business services to customers

Table of Contents

with TA-Direct, an on-line order entry and customer service tool. In addition, we maintain detailed web sites for each of Walker[®], Monroe[®], Rancho[®], DynoMax[®], Monroe brake brands and our heavy-duty products.

Manufacturing and Engineering

We focus on achieving superior product quality at the lowest operating costs possible and generally use state-of-the-art manufacturing processes to achieve that goal. Our manufacturing strategy centers on a lean production system designed to reduce overall costs, while maintaining quality standards and reducing manufacturing cycle time. In addition, we have implemented Six Sigma in our processes to minimize product defects and improve operational efficiencies. We deploy new technology to differentiate our products from our competitors and to achieve higher quality and productivity. We continue to adapt our capacity to customer demand, both expanding capabilities in growth areas as well as reallocating capacity away from demand segments in decline.

Emission Control

Our consolidated businesses operate 11 emission control manufacturing facilities in the U.S. and 43 emission control manufacturing facilities outside of the U.S. We operate 14 of these international manufacturing facilities through joint ventures in which we hold a controlling interest. We operate five emission control engineering and technical facilities worldwide and share two other such facilities with our ride control operations. In addition, three joint ventures in which we hold a noncontrolling interest operate a total of three manufacturing facilities outside the U.S.

Within each of our emission control manufacturing facilities, operations are organized by component (e.g., muffler, catalytic converter, pipe, resonator and manifold). Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility. We continue to invest in plant and equipment to stay competitive in the industry. For instance, in our Smithville, Tennessee, OE manufacturing facility, we have developed a muffler assembly cell that utilizes laser welding. This allows for quicker change-over times in the process as well as less material used and less weight for the product. There is also a reduced cycle time compared to traditional joining and increased manufacturing precision for superior durability and performance. In 2007, we introduced the Measured and Matched Converter technique in North America. This allows us to maintain the optimum GBD (Gap Bulk Density) in our converter manufacturing operations with Tenneco proprietary processing. This process, coupled with cold spinning of the converter body, versus traditional cone to can welding, allows for more effective use of material through reduced welding, lower cost, and better performance of the product.

To strengthen our position as a Tier-1 OE systems supplier, we have developed some of our emission control manufacturing operations into just-in-time or JIT systems. In this system, a JIT facility located close to our OE customer's manufacturing plant receives product components from both our manufacturing operations and independent suppliers, and then assembles and ships products to the OEMs on an as-needed basis. To manage the JIT functions and material flow, we have advanced computerized material requirements planning systems linked with our customers' and supplier partners' resource management systems. We have three emission control JIT assembly facilities in the United States and 23 throughout the rest of the world.

Our engineering capabilities include advanced predictive design tools, advanced prototyping processes and state-of-the-art testing equipment. These technological capabilities make us a full system integrator to the OEMs, supplying complete emission control systems from the manifold to the tailpipe, to provide full emission and noise control. We have expanded our engineering capabilities with the acquisition of Combustion Component Associates' s ELIM-NOx[™] mobile emission technology that includes urea and hydrocarbon injection, and electronic controls and software for selective catalytic reduction. We have also developed advanced predictive engineering tools, including KBM&E (Knowledge Based Manufacturing & Engineering). The innovation of our KBM&E (which we call TEN-KBM&E) is a modular toolbox set of CAD embedded applications for manufacturing and engineering compliant

design. The encapsulated TEN-KBM&E content is driven by an analytical method which continuously captures and updates the knowledge of our main manufacturing and engineering processes.

Table of Contents

Ride Control

Our consolidated businesses operate seven ride control manufacturing facilities in the U.S. and 23 ride control manufacturing facilities outside the U.S. We operate two of these international facilities through joint ventures in which we hold a controlling interest. We operate seven engineering and technical facilities worldwide and share two other such facilities with our emission control operations.

Within each of our ride control manufacturing facilities, operations are organized by product (e.g., shocks, struts and vibration control products) and include computer numerically controlled and conventional machine centers; tube milling and drawn-over-mandrel manufacturing equipment; metal inert gas and resistance welding; powdered metal pressing and sintering; chrome plating; stamping; and assembly/test capabilities. Our manufacturing systems incorporate cell-based designs, allowing work-in-process to move through the operation with greater speed and flexibility.

To strengthen our position as a Tier 1 OE module supplier, we have developed some of our manufacturing operations into JIT systems. We have three JIT ride control facilities outside the U.S.

In designing our shock absorbers and struts, we use advanced engineering and test capabilities to provide product reliability, endurance and performance. Our engineering capabilities feature advanced computer-aided design equipment and testing facilities. Our dedication to innovative solutions has led to such technological advances as:

Adaptive damping systems adapt to the vehicle's motion to better control undesirable vehicle motions;

Electronically adjustable suspensions change suspension performance based on a variety of inputs such as steering, braking, vehicle height, and velocity; and

Air leveling systems manually or automatically adjust the height of the vehicle.

Conventional shock absorbers and struts generally compromise either ride comfort or vehicle control. Our innovative grooved-tube, gas-charged shock absorbers and struts provide both ride comfort and vehicle control, resulting in improved handling, reduced vibration and a wider range of vehicle control. This technology can be found in our premium quality Sensa-Trac® shock absorbers. We further enhanced this technology by adding the SafeTech™ fluon banded piston, which improves shock absorber performance and durability. We introduced the Monroe Reflex® shock absorber, which incorporates our Impact Sensor™ device. This technology permits the shock absorber to automatically switch in milliseconds between firm and soft compression damping when the vehicle encounters rough road conditions, thus maintaining better tire-to-road contact and improving handling and safety. We have also developed an innovative computerized electronic suspension system, which features dampers developed by Tenneco and electronic valves designed by öhlins Racing AB. The continuously controlled electronic suspension (CES) ride control system is featured on Audi, Volvo, Ford, VW and Mercedes Benz vehicles.

Quality Control

Quality control is an important part of our production process. Our quality engineers establish performance and reliability standards in the product's design stage, and use prototypes to confirm that the component/system can be manufactured to specifications. Quality control is also integrated into the manufacturing process, with shop operators being responsible for quality control of their specific work product. In addition, our inspectors test work-in-progress at various stages to ensure components are being fabricated to meet customers' requirements.

We believe our commitment to quality control and sound management practices and policies is demonstrated by our successful participation in the International Standards Organization/Technical Specifications certification process (ISO/TS). ISO/TS certifications are semi-annual or annual audits that certify that a company s facilities meet stringent quality and business systems requirements. Without ISO or TS certification, we would not be able to supply our products for the aftermarket or the OE market, respectively, either locally or globally. All of our manufacturing facilities where we have determined that TS certification is required to

Table of Contents

serve our customers or would provide us with an advantage in securing additional business, have achieved ISO/TS 16949 certification.

Business Strategy

We strive to strengthen our global market position by designing, manufacturing, delivering and marketing technologically innovative emission control and ride control products and systems for OEMs and the aftermarket. We work toward achieving a balanced mix of products, markets and customers by capitalizing on emerging trends, specific regional preferences and changing customer requirements. We target both mature and developing markets for not just light vehicles, but also for commercial and specialty vehicles. We further enhance our operations by focusing on operational excellence in all functional areas.

The key components of our business strategy are described below:

Develop and Commercialize Advanced Technologies

We develop and commercialize technologies that allow us to expand into new, fast-growing markets and serve our existing customers. By anticipating customer needs and preferences, we design advanced technologies that meet global market needs. For example, to meet the increasingly stringent emissions regulations being introduced around the world, we offer an integrated Selective Catalytic Reduction (SCR) system that incorporates our ELIM-NO_x[™] technology.

We expect available content per vehicle to continue to rise over the next several years. Advanced aftertreatment exhaust systems will be required to comply with emissions regulations that affect light and commercial vehicles as well as locomotive and stationary engines. In addition, vehicle manufacturers, we believe, will offer greater comfort, handling and safety features by offering products such as electronic suspension and adjustable dampers. Our Continuously Controlled Electronic Suspension (CES) shock absorbers are now sold to Volvo, Audi, Mercedes, VW, and Ford, among others, and our engineered elastomers to manufacturers with unique requirements.

We continue to focus on developing highly engineered systems and complex assemblies and modules designed to provide value-added solutions to customers and increase vehicle content generally. Having many of our engineering and manufacturing facilities integrated electronically, we believe, has helped our products continue to be selected for inclusion in top-selling vehicles. In addition, our just-in-time and in-line sequencing manufacturing processes and distribution capabilities have enabled us to be more responsive to our customers' needs.

Penetrate Adjacent Markets

We seek to penetrate a variety of adjacent markets and achieve growth in higher-margin businesses by applying our existing design, engineering and manufacturing capabilities. For example, we are aggressively leveraging our technology and engineering leadership in emission and ride control into adjacent markets such as the heavy-duty market for trucks, buses, agricultural equipment, construction machinery and other commercial vehicles. We have expanded our presence into the global market for off-road equipment by our newly formed relationship with Caterpillar as their global diesel emission control system integration supplier. We have added the ride control products and technologies of Gruppo Marzocchi to our existing exhaust systems for two-wheelers obtained from the Gabilan Manufacturing acquisition. In addition, we are evaluating and selectively pursuing retrofit opportunities which will allow us to penetrate new markets or expand our products in existing markets.

Expand in Developing Economies

We continue to adjust our global footprint to follow our customers into growth regions around the world and capture our fair share of new business. Recently, we opened a wholly-owned elastomer manufacturing facility in Suzhou, China; built and expanded several facilities in India; opened a second emissions control facility in St. Petersburg, Russia; and opened a new manufacturing plant in Korea. As OEMs have entered the fast-growing economies of Brazil, Russia, India, China, and Thailand, we have followed, building our capabilities to engineer and produce locally cost-competitive and cutting-edge products and capturing new business.

Table of Contents

Maintain Our Aftermarket Leadership

We manufacture and market leading, brand-name products to a diversified and global aftermarket customer base. Two of the most recognized brand-name products in the automotive parts industry are our Monroe® ride control products and Walker® emission control products, which have been offered to consumers since the 1930s. We believe our brand equity in the aftermarket is a key asset especially as customers consolidate and channels of distribution converge.

We provide value differentiation by creating product extensions bearing our various brands. For example, we offer Monroe Reflex® and Monroe Sensa-Trac® shock absorbers, Walker Quiet-Flow® mufflers, Rancho® ride control products, DynoMax® exhaust products and Walker Ultra® catalytic converters, and in European markets, Walker and Aluminox Pro™ mufflers. Further, we introduced Monroe Springs™ and Monroe Magnum™ (bus and truck shock line) in Europe and in 2006 Monroe Dynamics® and Monroe Ceramics® brake pads in the United States. We continue to explore other opportunities for developing new product lines that bear our existing, well-known brands.

We strive to gain market share in the aftermarket business by adding new product offerings and increasing our market coverage of existing brands and products. To this end, we now offer an innovative, ride control product, the Quick-Strut®, that combines the spring and the upper mount into a single, complete module and simplifies and shortens the installation process, eliminating the need for the special tools and skills required previously. We plan on adapting our products further for use in Japanese and Korean vehicles. We benefited from the consolidation of, and regional expansion by, our customers and gained business lost by competitors that encountered financial difficulties.

Our success in the aftermarket business strengthens our competitive position with OEMs. We gain timely market and product knowledge that can be used to modify and enhance our original equipment offerings for greater customer acceptance.

Execute Focused Transactions

In the past, we have successfully identified and capitalized on strategic acquisitions and alliances to achieve growth. Through these acquisitions and alliances, we have (1) expanded our product portfolio with complementary technologies; (2) realized incremental business from existing customers; (3) gained access to new customers; and (4) achieved leadership positions in geographic markets outside North America.

We developed a strategic alliance with Futaba, a leading exhaust manufacturer in Japan. We also created an alliance with Hitachi (as successor to Tokico Ltd. following its acquisition of Tokico), a leading Japanese ride control manufacturer. These alliances help us grow our business with Japan-based OEMs by leveraging the geographical reach of each partner to serve global vehicle platforms of these OEMs.

We positioned ourselves as a leading exhaust supplier in the rapidly growing Chinese market through majority-owned joint venture operations in Dalian and Shanghai. In June of 2009, we formed a joint venture with Beijing Hainachuan Automotive Parts Company Limited in Beijing that will produce emission-control exhaust systems for Hyundai. In addition, we continue to serve North American and European OEMs located in China; we supply luxury cars produced by BMW and Audi through our joint venture with Eberspächer International GmbH, and we supply various Ford platforms through our joint venture with Chengdu Lingchuan Mechanical Plant. We established a local engineering center in Shanghai to develop automotive exhaust products when our joint venture with Shanghai Tractor and Engine Company, a subsidiary of Shanghai Automotive Industry Corp., was expanded. Also, we increased our stake from 60 percent to 80 percent in Tenneco Tongtai Exhaust Company Limited located in Dalian in January 2010.

In September 2007, we bought the mobile emissions business of Combustion Components Associates, Inc., a manufacturer of air pollution control technologies. The acquisition augmented Tenneco's system integration

capabilities and offerings related to Selective Catalyst Reduction (SCR) technologies designed to meet future, more stringent diesel emissions regulations for passenger cars, trucks, and other vehicles.

Table of Contents

In May 2008, we acquired from Delphi Automotive System LLC certain ride control assets at Delphi's Kettering, Ohio facility to allow us to grow our OE ride control business globally. This acquisition allowed us to diversify our ride control business in North America and elsewhere.

In September 2008, we purchased the suspension business of Gruppo Marzocchi, an Italy-based worldwide supplier of suspension technology for the two-wheeler market. This acquisition helped to expand our business beyond light vehicles and brings us strong brands, leading products and advanced technology capabilities.

In February 2009, we signed a joint development agreement with GE Transportation, a unit of General Electric Company, to develop a proprietary SCR and aftertreatment technology designed to reduce and control diesel engine emissions for various transportation and other applications. We are collaborating with GE Transportation on the development and production of GE's Hydrocarbon-Selective Catalytic Reduction catalyst technology (HC-SCR), a diesel aftertreatment innovation aimed at reducing harmful nitrogen oxide (NO_x) emissions as effectively as urea-based SCR systems. We are working with others on alternative urea SCR technologies, such as solid SCR.

We signed exclusive licensing agreements for T.R.U.E. Clean[™], an exhaust aftertreatment technology used for automatic and active regeneration of Diesel Particulate Filters (DPFs), with Woodward Governor Company and for vaporizer technologies with another company. These technologies, which complement our array of existing emissions control products, allow us to provide integrated exhaust aftertreatment systems to commercial vehicle manufacturers and others.

We intend to continue to pursue strategic alliances, joint ventures, acquisitions and other transactions that complement or enhance our existing products, technology, systems development efforts, customer base and/or global presence. We will align with companies that have proven products, proprietary technology, advanced research capabilities, broad geographic reach, and/or strong market positions to further strengthen our product leadership, technological edge, international reach and customer relationships.

Adapt Cost Structure to Economic Realities

We aggressively respond to difficult economic environments, aligning our operations to any resulting reductions in production levels and replacement demand and executing comprehensive restructuring and cost-reduction initiatives. In the fourth quarter of 2008, we launched a global restructuring program that is generating annual savings of about \$58 million since fully implemented at the end of 2009. The restructuring program included actions to permanently reduce our fixed cost base and flex our costs, such as:

Permanently eliminating 1,100 jobs worldwide, which is in addition to 1,150 jobs previously eliminated in 2008;

Closing three North American manufacturing plants and an engineering facility in Australia;

Suspending matching contributions to employee 401(k) programs (which we reinstated in 2010); and

Cutting spending on information technology, sales and marketing programs.

During 2009, we further flexed our operations to address the market conditions, implementing temporary layoffs of hourly workers at our plants worldwide that are impacted by customers' plant shutdowns. We announced the closing of another manufacturing facility. In North America, where customer production cuts were the greatest, we also initiated salaried employee furloughs. In Europe, we eliminated all temporary positions and negotiated with various works councils to pursue similar cost reduction efforts including reduced work hours. We instituted cuts in salaries of at least

10 percent for salaried employees effective April 1, 2009, and implemented other actions to control employee costs. As economic and industry-wide conditions improved, we restored salaries to their prior levels effective October 1, 2009, and reinstated the employer matching contributions to the employee 401(k) plans for the year 2010.

In addition, we strategically reduced capital expenditures and engineering investments where possible without compromising our long-term growth prospects. We eliminated or postponed regional expansion projects, deferred spending tied to delayed customer launches, redeployed assets where feasible, and eliminated all discretionary capital spending. We focused on developing technologies and capabilities tied to business launching within the

Table of Contents

next two to three years, making exceptions in instances where the customer agreed to pay upfront for engineering and advance technology developments for programs launching in 2012 and beyond. In this way, we were able to continue all programs critical to our growth while limiting any near-term cash impact.

We are also focusing on generating cash flow through working capital improvements, particularly by reducing inventories and strengthening our management of payables and receivables.

Strengthen Operational Excellence

We will continue to focus on operational excellence by optimizing our manufacturing footprint, enhancing our Six Sigma processes and Lean productivity tools, developing further our engineering capabilities, managing the complexities of our global supply chain to realize purchasing economies of scale while satisfying diverse and global requirements, and supporting our businesses with robust information technology systems. We will make investments in our operations and infrastructure as required to achieve our strategic goals. We will be mindful of the changing market conditions that might necessitate adjustments to our resources and manufacturing capacity around the world. We will remain committed to protecting the environment as well as the health and safety of our employees.

Environmental Matters

We estimate that we and our subsidiaries will make expenditures for plant, property and equipment for environmental matters of approximately \$3 million in 2010 and \$2 million in 2011.

For additional information regarding environmental matters, see Item 3, Legal Proceedings, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations Environmental and Other Matters, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations Liquidity and Capital Resources and Note 12 to the consolidated financial statements of Tenneco Inc. included in Item 8.

Employees

As of December 31, 2009, we had approximately 21,000 employees of which approximately 49 percent were covered by collective bargaining agreements. European works councils cover 21 percent of our total employees, a majority of whom are also included under collective bargaining agreements. Several of our existing labor agreements in the United States and Mexico are scheduled for renegotiation in 2010. In addition, agreements are expiring in 2010 in Europe and South America covering plants in Spain, Germany, Portugal and Argentina. We regard our employee relations as satisfactory.

Other

The principal raw material that we use is steel. We obtain steel from a number of sources pursuant to various contractual and other arrangements. We believe that an adequate supply of steel can presently be obtained from a number of different domestic and foreign suppliers. From 2004 through 2008, we experienced higher steel prices which we have addressed by evaluating alternative materials and processes, reviewing material substitution opportunities, increasing component and assembly outsourcing to low cost countries and aggressively negotiating with our customers to allow us to recover these higher costs from them. While the recent global economic crisis has reduced the pressure on raw material prices, market prices remain volatile and we may face increased prices in the future.

We hold a number of domestic and foreign patents and trademarks relating to our products and businesses. We manufacture and distribute our products primarily under the Walker® and Monroe® brand names, which are

well-recognized in the marketplace and are registered trademarks. The patents, trademarks and other intellectual property owned by or licensed to us are important in the manufacturing, marketing and distribution of our products.

Table of Contents

ITEM 1A. RISK FACTORS.

The recent global economic crisis severely and negatively affected the automotive industry and our business, financial position and liquidity and future deterioration or prolonged difficulty in economic conditions could have a material adverse impact on our business, financial position and liquidity.

The economic crisis in 2008 and 2009 arising out of the subprime mortgage market collapse and the resulting worldwide financial industry turmoil resulted in a severe and global tightening of credit and a liquidity crisis. As a result, nearly every major economy in the world faced a widespread reduction of business activity, seized-up credit markets and rising unemployment. These conditions led to a low consumer confidence, which resulted in delayed and reduced purchases of durable consumer goods such as automobiles. As a result, our OEM customers significantly reduced their production schedules. Light vehicle production during 2009 decreased by 32 percent in North America and 20 percent in Europe as compared to 2008. These unprecedented conditions had a severe and negative impact on our business and financial position and vehicle production remains at its lowest level in decades. Although we believe that 2010 production in North America and Europe will increase over 2009, we cannot assure you of this. Accordingly, we remain cautious.

We face several risks relating to difficult economic conditions, including the following:

Disruptions in the financial markets may adversely impact the availability and cost of credit which could materially and negatively affect our company. The recent global financial crisis materially and negatively impacted our business and our customers' businesses in the U.S. and globally. Longer term disruptions in the capital and credit markets could further adversely affect our customers' and our ability to access the liquidity that is necessary to fund operations on terms that are acceptable to us or at all. The recent global economic crisis also negatively impacted consumer spending patterns in the automotive industry. During periods of economic difficulty, purchases of our customers' products may be limited by their customers' inability to obtain adequate financing for such purchases. In addition, as our customers and suppliers respond to rapidly changing consumer preferences, they may require access to additional capital. If that capital is not available or its cost is prohibitively high, their businesses would be negatively impacted which could result in further restructuring or even reorganization under bankruptcy laws. Any such negative impact, in turn, could materially and negatively affect our company either through loss of sales to any of our customers so affected or through inability to meet our commitments (or inability to meet them without excess expense) because of loss of supplies from any of our suppliers so affected.

Financial or other difficulties facing other automotive companies may have a material and adverse impact on us. Over the last several years, a number of companies in the automotive industry have been facing severe financial difficulties. GM, Ford and Chrysler undertook significant restructuring actions in an effort to improve profitability and remain solvent. The North American automotive manufacturers were burdened with substantial structural and embedded costs, such as facility overhead as well as pension and healthcare costs, that led GM and Chrysler to reorganize under bankruptcy protection in 2009. Automakers in other markets in the world also have been experiencing difficulties from a weakened economy, tightening credit markets and reduced demand for their products. The automotive supply base in turn has also been faced with severe cash flow problems as a result of the significantly lower production levels of light vehicles, increases in certain costs and restricted access to additional liquidity through the credit markets. Several suppliers have filed for bankruptcy protection or ceased operations.

Severe financial or other difficulties, including bankruptcy, of any automotive manufacturer or significant automotive supplier could have a significant disruptive effect on the entire automotive industry, leading to supply chain disruptions and labor unrest, among other things. For example, if a parts supplier were to cease operations, it could force the automotive manufacturers to whom the supplier provides parts to shut down their operations. This, in turn, could force other suppliers, including us, to shut down production at plants that are producing products for these

automotive manufacturers. Severe financial or other difficulties at any of our major suppliers could have a material adverse effect on us if we are unable to obtain on a timely basis on similar economic terms the quantity and quality of components we require to produce our products. While the difficulties facing our customers and suppliers over the last two years have been primarily financial in nature,

Table of Contents

other difficulties, such as an inability to meet increased demand as the economy recovers, could also result in supply chain and other disruptions.

Financial or other difficulties at any of our major customers could have a material adverse impact on us if such customer were unable to pay for the products we provide or we experience a loss of, or material reduction in, business from such customer. In connection with the 2009 bankruptcies of GM and Chrysler, we collected substantially all of our pre-petition receivables and the reorganized GM and Chrysler assumed substantially all of the pre-petition contracts we had with them. However, further financial difficulties at any of our major customers (including Chrysler or GM, as reorganized) could have a material adverse impact on us, including as a result of lost revenues, significant write offs of accounts receivable, significant impairment charges or additional restructurings beyond our current global plans. In addition, a bankruptcy filing by one of our other large customers could result in a default under our U.S. securitization agreement. Our inability to collect receivables in a timely manner or to sell receivables under our U.S. securitization program may have a material adverse effect on our liquidity.

Our failure to comply with the covenants contained in our senior credit facility or the indentures for our other debt instruments, including as a result of events beyond our control, could result in an event of default, which could materially and adversely affect our operating results and our financial condition. Our senior credit facility and receivables securitization program in the U.S. require us to maintain certain financial ratios. Our senior credit facility and our other debt instruments require us to comply with various operational and other covenants. If there were an event of default under any of our debt instruments that was not cured or waived, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. We cannot assure you that our assets or cash flow would be sufficient to fully repay borrowings under our outstanding debt instruments, either upon maturity or if accelerated, upon an event of default, or that we would be able to refinance or restructure the payments on those debt instruments.

For example, in February 2009, we sought an amendment to our senior credit facility to revise the financial ratios we are required to maintain thereunder. The revised financial ratios were based on a set of projections that we shared with our lenders. If, in the future, we are required to obtain similar amendments as a result of our inability to meet the financial ratios in those projections, there can be no assurance that those amendments will be available on commercially reasonable terms or at all. If, as or when required, we are unable to repay, refinance or restructure our indebtedness under our senior credit facility, or amend the covenants contained therein, the lenders under our senior credit facility could elect to terminate their commitments thereunder, cease making further loans and institute foreclosure proceedings against our assets. Under such circumstances, we could be forced into bankruptcy or liquidation. In addition, any event of default or declaration of acceleration under one of our debt instruments could also result in an event of default under one or more of our other financing agreements, including our other debt instruments and/or the agreements under which we sell certain of our accounts receivable. This would have a material adverse impact on our liquidity, financial position and results of operations.

Our working capital requirements may negatively affect our liquidity and capital resources. Our working capital requirements can vary significantly, depending in part on the level, variability and timing of our customers' worldwide vehicle production and the payment terms with our customers and suppliers. Our liquidity could also be adversely impacted if our suppliers were to suspend normal trade credit terms and require payment in advance or payment on delivery of purchases. If our working capital needs exceed our cash flows from operations, we would look to our cash balances and availability for borrowings under our borrowing arrangements to satisfy those needs, as well as potential sources of additional capital, which may not be available on satisfactory terms and in adequate amounts, if at all.

Any further continuation of the global economic downturn or other factors that reduce consumer demand for our products or reduce prices could materially and adversely impact our financial condition and results of operations. Demand for and pricing of our products are subject to economic conditions and other factors present in

the various domestic and international markets where the products are sold. Demand for our OE products is subject to the level of consumer demand for new vehicles that are equipped with our parts. The level of new light vehicle purchases is cyclical, affected by such factors as general economic conditions,

Table of Contents

interest rates, consumer confidence, patterns of consumer spending, fuel cost and the automobile replacement cycle. Consumer preferences also impact the level of new light vehicle purchases. For example, if increasing consumer awareness of climate change issues causes consumers to increasingly prefer electric vehicles, demand for the vehicles equipped with our products would decrease.

As described above, the recent unprecedented deterioration in the global economy, global credit markets and the financial services industry has negatively impacted our operations, including by leading to a rapid decline in light vehicle purchases. In 2009, North American light vehicle production decreased 32 percent from 2008. During 2009, European production declined 20 percent as compared to 2008. In addition, significant increases in gasoline prices in the United States, starting in the first half of 2008, accelerated the shift in the North American market away from light trucks, which tend to be higher margin products for OEMs and suppliers, to more fuel-efficient passenger cars. During 2009, SUV and pick-up truck business accounted for 55 percent of our North American OE revenues, relatively unchanged from 54 percent in 2008. A further decline in automotive sales and production would likely cause a decline in our sales to vehicle manufacturers, and would likely result in a decline in our results of operations and financial condition.

Demand for our aftermarket, or replacement, products varies based upon such factors as general economic conditions, the level of new vehicle purchases, which initially displaces demand for aftermarket products, the severity of winter weather, which increases the demand for certain aftermarket products, and other factors, including the average useful life of parts and number of miles driven.

The highly cyclical nature of the automotive industry presents a risk that is outside our control and that cannot be accurately predicted. For example, we cannot assure you that difficult economic conditions will not continue into 2010 or that we would be able to maintain or improve our results of operations in a stagnant or extended recessionary economic environment. Further decreases in demand for automobiles and automotive products generally, or in the demand for our products in particular, could materially and adversely impact our financial condition and results of operations.

Our level of debt makes us more sensitive to the effects of economic downturns; our level of debt and provisions in our debt agreements could limit our ability to react to changes in the economy or our industry. Our level of debt makes us more vulnerable to changes in our results of operations because a substantial portion of our cash flow from operations is dedicated to servicing our debt and is not available for other purposes. Our level of debt could have other negative consequences to us, including the following:

limiting our ability to borrow money or sell stock for our working capital, capital expenditures, debt service requirements or other general corporate purposes;

limiting our flexibility in planning for, or reacting to, changes in our operations, our business or the industry in which we compete;

our leverage may place us at a competitive disadvantage by limiting our ability to invest in the business or in further research and development;

making us more vulnerable to downturns in our business or the economy; and

there would be a material adverse effect on our business and financial condition if we were unable to service our indebtedness or obtain additional financing, as needed.

Our ability to make payments on our indebtedness depends on our ability to generate cash in the future. If we do not generate sufficient cash flow to meet our debt service and working capital requirements, we may need to seek additional financing or sell assets. This may make it more difficult for us to obtain financing on terms that are acceptable to us, or at all. Without any such financing, we could be forced to sell assets to make up for any shortfall in our payment obligations under unfavorable circumstances. During periods of economic difficulty, conditions for asset sales may be very difficult due to tight credit conditions and other factors. In addition, our debt agreements contain covenants which limit our ability to sell assets and also restrict the use of proceeds from any asset sale. Moreover, our senior credit facility is secured on a first priority basis by, among other things, substantially all of our and our subsidiary guarantors' tangible and

Table of Contents

intangible domestic assets. If necessary, we may not be able to sell assets quickly enough or for sufficient amounts to enable us to meet our obligations.

In addition, our senior credit facility and our other debt agreements contain other restrictive covenants that limit our flexibility in planning for or reacting to changes in our business and our industry, including limitations on incurring additional indebtedness, making investments, granting liens and merging or consolidating with other companies. Our senior credit facility also requires us to maintain certain financial ratios. Complying with these restrictive covenants and financial ratios may impair our ability to finance our future operations or capital needs or to engage in other favorable business activities.

We are dependent on large customers for future revenue. The loss of any of these customers or the loss of market share by these customers could have a material adverse impact on us.

We depend on major vehicle manufacturers for a substantial portion of our net sales. For example, during fiscal year ended December 31, 2009, GM and Ford accounted for 16 percent and 14 percent of our net sales, respectively. The loss of all or a substantial portion of our sales to any of our large-volume customers could have a material adverse effect on our financial condition and results of operations by reducing cash flows and our ability to spread costs over a larger revenue base. We may make fewer sales to these customers for a variety of reasons, including but not limited to: (1) loss of awarded business; (2) reduced or delayed customer requirements; (3) strikes or other work stoppages affecting production by the customers; or (4) reduced demand for our customers' products. See the risk factor "Financial difficulties facing other automotive companies may have a material and adverse impact on us."

During the past several years, GM and Ford have lost market share particularly in the United States, primarily to Asian competitors. While we are actively targeting Japanese, Chinese and Korean automakers, any further market share loss by these North American-based and European-based automakers could, if we are unable to achieve increased sales to the Asian OE manufacturers, have a material adverse effect on our business.

We may be unable to realize sales represented by our awarded business, which could materially and adversely impact our financial condition and results of operations.

The realization of future sales from awarded business is inherently subject to a number of important risks and uncertainties, including the number of vehicles that our OE customers will actually produce, the timing of that production and the mix of options that our OE customers and consumers may choose. Prior to 2008, substantially all of our North American vehicle manufacturing customers had slowed or maintained at relatively flat levels new vehicle production for several years. More recently, new vehicle production has decreased dramatically as a result of the recent global economic crisis. In addition, our customers generally have the right to replace us with another supplier at any time for a variety of reasons and have demanded price decreases over the life of awarded business. Accordingly, we cannot assure you that we will in fact realize any or all of the future sales represented by our awarded business. Any failure to realize these sales could have a material adverse effect on our financial condition, results of operations, and liquidity.

In many cases, we must commit substantial resources in preparation for production under awarded OE business well in advance of the customer's production start date. In certain instances, the terms of our OE customer arrangements permit us to recover these pre-production costs if the customer cancels the business through no fault of our company. Although we have been successful in recovering these costs under appropriate circumstances in the past, we can give no assurance that our results of operations will not be materially impacted in the future if we are unable to recover these types of pre-production costs related to OE cancellation of awarded business.

The hourly workforce in the automotive industry is highly unionized and our business could be adversely affected by labor disruptions.

Although we consider our current relations with our employees to be satisfactory, if major work disruptions were to occur, our business could be adversely affected by, for instance, a loss of revenues,

Table of Contents

increased costs or reduced profitability. We have not experienced a material labor disruption in our workforce in the last ten years, but there can be no assurance that we will not experience a material labor disruption at one of our facilities in the future in the course of renegotiation of our labor arrangements or otherwise. In addition, substantially all of the hourly employees of North American vehicle manufacturers and many of their other suppliers are represented by the United Automobile, Aerospace and Agricultural Implement Workers of America under collective bargaining agreements. Vehicle manufacturers and such suppliers and their employees in other countries are also subject to labor agreements. A work stoppage or strike at our production facilities, at those of a significant customer, or at a significant supplier of ours or any of our customers, such as the 2008 strike at American Axle which resulted in 30 GM facilities in North America being idled for several months, could have an adverse impact on us by disrupting demand for our products and/or our ability to manufacture our products.

In the past, we have experienced significant increases in raw materials pricing; and future changes in the prices of raw materials or utilities could have a material adverse impact on us.

Significant increases in the cost of certain raw materials used in our products or the cost of utilities required to produce our products, to the extent they are not timely reflected in the price we charge our customers or are otherwise mitigated, could materially and adversely impact our results. For example, from 2004 through 2008, we experienced significant increases in processed metal and steel prices. We addressed these increases by evaluating alternative materials and processes, reviewing material substitution opportunities, increasing component and assembly outsourcing to low cost countries and aggressively negotiating with our customers to allow us to recover these higher costs from them. In addition to these actions, we continue to pursue productivity initiatives and review opportunities to reduce costs through restructuring activities. We cannot assure you that we will not face increased prices in the future or, if we do, whether these actions will be effective in containing margin pressures from any further raw material or utility price increases.

We may be unable to realize our business strategy of improving operating performance, growing our business and generating savings and improvements.

We regularly implement strategic and other initiatives designed to improve our operating performance and grow our business. The failure to achieve the goals of these initiatives could have a material adverse effect on our business, particularly since we rely on these initiatives to offset pricing pressures from our suppliers and our customers, as described above, as well as to manage the impacts of production cuts such as the significant production decreases we are experiencing as a result of the recent global economic crisis. Furthermore, the terms of our senior credit facility may restrict the types of initiatives we undertake, as these agreements restrict our uses of cash, certain of these agreements require us to maintain financial ratios and otherwise prohibit us from undertaking certain activities. In the past we have been successful in obtaining the consent of our senior lenders where appropriate in connection with our initiatives. We cannot assure you, however, that we will be able to pursue, successfully implement or realize the expected benefits of any initiative or that we will be able to sustain improvements made to date.

In addition, we believe that increasingly stringent environmental standards for emissions have presented and will continue to present an important opportunity for us to grow our emissions control business. We cannot assure you, however, that environmental standards for emissions will continue to become more stringent or that the adoption of any new standards will not be delayed beyond our expectations.

We may incur material costs related to product warranties, environmental and regulatory matters and other claims, which could have a material adverse impact on our financial condition and results of operations.

From time to time, we receive product warranty claims from our customers, pursuant to which we may be required to bear costs of repair or replacement of certain of our products. Vehicle manufacturers are increasingly requiring their

outside suppliers to guarantee or warrant their products and to be responsible for the operation of these component products in new vehicles sold to consumers. Warranty claims may range from individual customer claims to full recalls of all products in the field. We cannot assure you that costs associated with providing product warranties will not be material, or that those costs will not exceed any

Table of Contents

amounts reserved in our consolidated financial statements. For a description of our accounting policies regarding warranty reserves, see Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies included in Item 7.

We are subject to extensive government regulations worldwide. Foreign, Federal, state and local laws and regulations may change from time to time and our compliance with new or amended laws and regulations in the future may require a material increase in our costs and could adversely affect our results of operations and competitive position. For example, we are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. Soil and groundwater remediation activities are being conducted at certain of our current and former real properties. We record liabilities for these activities when environmental assessments indicate that the remedial efforts are probable and the costs can be reasonably estimated. On this basis, we have established reserves that we believe are adequate for the remediation activities at our current and former real properties for which we could be held responsible. Although we believe our estimates of remediation costs are reasonable and are based on the latest available information, the cleanup costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. In future periods, we could be subject to cash or non-cash charges to earnings if we are required to undertake material additional remediation efforts based on the results of our ongoing analyses of the environmental status of our properties, as more information becomes available to us.

We also from time to time are involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities, intellectual property matters, personal injury claims, taxes, employment matters or commercial or contractual disputes. For example, we are subject to a number of lawsuits initiated by a significant number of claimants alleging health problems as a result of exposure to asbestos. Many of these cases involve significant numbers of individual claimants. Many of these cases also involve numerous defendants, with the number of defendants in some cases exceeding 100 defendants from a variety of industries. As major asbestos manufacturers or other companies that used asbestos in their manufacturing processes continue to go out of business, we may experience an increased number of these claims.

We vigorously defend ourselves in connection with all of the matters described above. We cannot, however, assure you that the costs, charges and liabilities associated with these matters will not be material, or that those costs, charges and liabilities will not exceed any amounts reserved for them in our consolidated financial statements. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved unfavorably to us. See Management's Discussion and Analysis of Financial Condition and Results of Operations Environmental and Other Matters included in Item 7.

We may have difficulty competing favorably in the highly competitive automotive parts industry.

The automotive parts industry is highly competitive. Although the overall number of competitors has decreased due to ongoing industry consolidation, we face significant competition within each of our major product areas, including from new competitors entering the markets which we serve. The principal competitive factors include price, quality, service, product performance, design and engineering capabilities, new product innovation, global presence and timely delivery. As a result, many suppliers have established or are establishing themselves in emerging, low-cost markets to reduce their costs of production and be more conveniently located for customers. Although we are also pursuing a low-cost country production strategy and otherwise continue to seek process improvements to reduce costs, we cannot assure you that we will be able to continue to compete favorably in this competitive market or that increased competition will not have a material adverse effect on our business by reducing our ability to increase or maintain sales or profit margins.

The decreasing number of automotive parts customers and suppliers could make it more difficult for us to compete favorably.

Our financial condition and results of operations could be adversely affected because the customer base for automotive parts is decreasing in both the original equipment market and aftermarket. As a result, we are competing for business from fewer customers. Due to the cost focus of these major customers, we have been,

Table of Contents

and expect to continue to be, requested to reduce prices as part of our initial business quotations and over the life of vehicle platforms we have been awarded. We cannot be certain that we will be able to generate cost savings and operational improvements in the future that are sufficient to offset price reductions requested by existing customers and necessary to win additional business.

Furthermore, the trend toward consolidation and bankruptcies among automotive parts suppliers is resulting in fewer, larger suppliers who benefit from purchasing and distribution economies of scale. If we cannot achieve cost savings and operational improvements sufficient to allow us to compete favorably in the future with these larger companies, our financial condition and results of operations could be adversely affected due to a reduction of, or inability to increase, sales.

We may not be able to successfully respond to the changing distribution channels for aftermarket products.

Major automotive aftermarket retailers, such as AutoZone and Advance Auto Parts, are attempting to increase their commercial sales by selling directly to automotive parts installers in addition to individual consumers. These installers have historically purchased from their local warehouse distributors and jobbers, who are our more traditional customers. We cannot assure you that we will be able to maintain or increase aftermarket sales through increasing our sales to retailers. Furthermore, because of the cost focus of major retailers, we have occasionally been requested to offer price concessions to them. Our failure to maintain or increase aftermarket sales, or to offset the impact of any reduced sales or pricing through cost improvements, could have an adverse impact on our business and operating results.

Longer product lives of automotive parts are adversely affecting aftermarket demand for some of our products.

The average useful life of automotive parts has steadily increased in recent years due to innovations in products and technologies. The longer product lives allow vehicle owners to replace parts of their vehicles less often. As a result, a portion of sales in the aftermarket has been displaced. This has adversely impacted, and could continue to adversely impact, our aftermarket sales. Also, any additional increases in the average useful lives of automotive parts would further adversely affect the demand for our aftermarket products. Recently, we have experienced relative stabilization in our aftermarket business due to our ability to win new customers and recover steel price increases through selling price increases. However, there can be no assurance that we will be able to maintain this stabilization. Aftermarket sales represented approximately 22 percent and 19 percent of our net sales in the fiscal years ended December 31, 2009 and 2008, respectively.

Assertions against us or our customers relating to intellectual property rights could materially impact our business.

We and others in our industry hold a number of patents and other intellectual property rights that are critical to our respective businesses. On occasion, third parties may assert claims against us and our customers and distributors alleging our products or technology infringe upon third-party intellectual property rights. Similarly, we may assert claims against third-parties who are taking actions that we believe are infringing on our intellectual property rights. These claims, regardless of their merit or resolution, are frequently costly to prosecute, defend or settle and divert the efforts and attention of our management and employees. Claims of this sort also could harm our relationships with our customers and might deter future customers from doing business with us. If any such claim were to result in an adverse outcome, we could be required to take actions which may include: cease the manufacture, use or sale of the infringing products; pay substantial damages to third parties, including to customers to compensate them for their discontinued use or replace infringing technology with non-infringing technology; or expend significant resources to develop or license non-infringing products. Any of the foregoing results could have a material adverse effect on our business, financial condition and results of operations.

Table of Contents

Any acquisitions we make could disrupt our business and seriously harm our financial condition.

We may, from time to time, consider acquisitions of complementary companies, products or technologies. Acquisitions involve numerous risks, including difficulties in the assimilation of the acquired businesses, the diversion of our management's attention from other business concerns and potential adverse effects on existing business relationships with current customers and suppliers. In addition, any acquisitions could involve the incurrence of substantial additional indebtedness. We cannot assure you that we will be able to successfully integrate any acquisitions that we pursue or that such acquisitions will perform as planned or prove to be beneficial to our operations and cash flow. Any such failure could seriously harm our business, financial condition and results of operations.

We are subject to risks related to our international operations.

We have manufacturing and distribution facilities in many regions and countries, including Australia, China, India, North America, Europe and South America, and sell our products worldwide. For the fiscal year ended December 31, 2009, approximately 55 percent of our net sales were derived from operations outside North America. International operations are subject to various risks which could have a material adverse effect on those operations or our business as a whole, including:

- exposure to local economic conditions;
- exposure to local political conditions, including the risk of seizure of assets by a foreign government;
- exposure to local social unrest, including any resultant acts of war, terrorism or similar events;
- exposure to local public health issues and the resultant impact on economic and political conditions;
- currency exchange rate fluctuations;
- hyperinflation in certain foreign countries;
- controls on the repatriation of cash, including imposition or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries; and
- export and import restrictions.

Exchange rate fluctuations could cause a decline in our financial condition and results of operations.

As a result of our international operations, we are subject to increased risk because we generate a significant portion of our net sales and incur a significant portion of our expenses in currencies other than the U.S. dollar. For example, where we have significantly more costs than revenues generated in a foreign currency, we are subject to risk if the foreign currency in which our costs are paid appreciates against the currency in which we generate revenue because the appreciation effectively increases our cost in that country.

The financial condition and results of operations of some of our operating entities are reported in foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. As a result, appreciation of the U.S. dollar against these foreign currencies generally will have a negative impact on our reported revenues and operating profit while depreciation of the U.S. dollar against these foreign currencies will generally have a positive effect on reported revenues and operating profit. For example, our European

operations were positively impacted in 2007 due to the strengthening of the Euro against the U.S. dollar. However, in 2008, the dollar strengthened against the Euro which had a negative effect on our results of operations. Our South American operations were negatively impacted by the devaluation in 2000 of the Brazilian currency as well as by the devaluation of the Argentine currency in 2002. We do not generally seek to mitigate this translation effect through the use of derivative financial instruments. To the extent we are unable to match revenues received in foreign currencies with costs paid in the same currency, exchange rate fluctuations in that currency could have a material adverse effect on our business.

Table of Contents

Entering new markets poses new competitive threats and commercial risks.

As we have expanded into markets beyond light vehicles, we expect to diversify our product sales by leveraging technologies being developed for the light vehicle segment. Such diversification requires investments and resources which may not be available as needed. We cannot guarantee that we will be successful in leveraging our capabilities into new markets and thus, in meeting the needs of these new customers and competing favorably in these new markets. If those customers experience reduced demand for their products or financial difficulties, our future prospects will be negatively affected as well.

Impairment in the carrying value of long-lived assets and goodwill could negatively affect our operating results.

We have a significant amount of long-lived assets and goodwill on our consolidated balance sheet. Under generally accepted accounting principles, long-lived assets, excluding goodwill, are required to be reviewed for impairment whenever adverse events or changes in circumstances indicate a possible impairment. If business conditions or other factors cause profitability and cash flows to decline, we may be required to record non-cash impairment charges. Goodwill must be evaluated for impairment annually or more frequently if events indicate it is warranted. If the carrying value of our reporting units exceeds their current fair value as determined based on the discounted future cash flows of the related business, the goodwill is considered impaired and is reduced to fair value by a non-cash charge to earnings. Events and conditions that could result in impairment in the value of our long-lived assets and goodwill include changes in the industries in which we operate, particularly the impact of the current downturn in the global economy, as well as competition and advances in technology, adverse changes in the regulatory environment, or other factors leading to reduction in expected long-term sales or profitability. For example, during the fiscal year ended December 31, 2008, we were required to record a \$114 million asset impairment charge to write-off the remaining goodwill related to our 1996 acquisition of Clevite Industries.

The value of our deferred tax assets could become impaired, which could materially and adversely affect our operating results.

As of December 31, 2009, we had approximately \$63 million in net deferred tax assets. These deferred tax assets include net operating loss carryovers that can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. We periodically determine the probability of the realization of deferred tax assets, using significant judgments and estimates with respect to, among other things, historical operating results, expectations of future earnings and tax planning strategies. For example, we were required to record charges during the fiscal year ended December 31, 2008 for a valuation allowance against our U.S. deferred tax assets. These charges were attributable to the significant decline in production which resulted from the recent global economic crisis and the accounting requirement to project that the current negative operating environment will continue through the expiration of the net operating loss carry-forward periods. If we determine in the future that there is not sufficient positive evidence to support the valuation of these assets, due to the risk factors described herein or other factors, we may be required to further adjust the valuation allowance to reduce our deferred tax assets. Such a reduction could result in material non-cash expenses in the period in which the valuation allowance is adjusted and could have a material adverse effect on our results of operations.

Our expected annual effective tax rate could be volatile and materially change as a result of changes in mix of earnings and other factors.

Our overall effective tax rate is equal to our total tax expense as a percentage of our total profit or loss before tax. However, tax expenses and benefits are determined separately for each tax paying entity or group of entities that is consolidated for tax purposes in each jurisdiction. Losses in certain jurisdictions may provide no current financial statement tax benefit. As a result, changes in the mix of projected profits and losses between jurisdictions, among

other factors, could have a significant impact on our overall effective tax rate.

Table of Contents

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We lease our principal executive offices, which are located at 500 North Field Drive, Lake Forest, Illinois, 60045.

Walker's consolidated businesses operate 11 manufacturing facilities in the U.S. and 43 manufacturing facilities outside of the U.S., operate five engineering and technical facilities worldwide and share two other such facilities with Monroe. Twenty-six of these manufacturing plants are JIT facilities. In addition, three joint ventures in which we hold a noncontrolling interest operate a total of three manufacturing facilities outside the U.S., two of which are JIT facilities.

Monroe's consolidated businesses operate seven manufacturing facilities in the U.S. and 23 manufacturing facilities outside the U.S., operate seven engineering and technical facilities worldwide and share two other such facilities with Walker. Three of these manufacturing plants are JIT facilities.

The above-described manufacturing locations outside of the U.S. are located in Argentina, Australia, Belgium, Brazil, Canada, China, the Czech Republic, France, Germany, India, Italy, Korea, Mexico, New Zealand, Poland, Portugal, Russia, Spain, South Africa, Sweden, Thailand and the United Kingdom. We also have sales offices located in Algeria, Croatia, Greece, Hungary, Japan, Lithuania, Singapore, Taiwan, Turkey and the Ukraine.

We own approximately one-half of the properties described above and lease the other half. We hold 16 of the above-described international manufacturing facilities through seven joint ventures in which we own a controlling interest. In addition, three joint ventures in which we hold a noncontrolling interest operate a total of three manufacturing facilities outside the U.S. We also have distribution facilities at our manufacturing sites and at a few offsite locations, substantially all of which we lease.

We believe that substantially all of our plants and equipment are, in general, well maintained and in good operating condition. They are considered adequate for present needs and, as supplemented by planned construction, are expected to remain adequate for the near future.

We also believe that we have generally satisfactory title to the properties owned and used in our respective businesses.

ITEM 3. LEGAL PROCEEDINGS.

We are subject to a variety of environmental and pollution control laws and regulations in all jurisdictions in which we operate. We expense or capitalize, as appropriate, expenditures for ongoing compliance with environmental regulations that relate to current operations. We expense costs related to an existing condition caused by past operations that do not contribute to current or future revenue generation. We record liabilities when environmental assessments indicate that remedial efforts are probable and the costs can be reasonably estimated. Estimates of the liability are based upon currently available facts, existing technology, and presently enacted laws and regulations taking into consideration the likely effects of inflation and other societal and economic factors. We consider all available evidence including prior experience in remediation of contaminated sites, other companies' cleanup experiences and data released by the United States Environmental Protection Agency or other organizations. These estimated liabilities are subject to revision in future periods based on actual costs or new information. Where future cash flows are fixed or reliably determinable, we have discounted the liabilities. All other environmental liabilities are recorded at their undiscounted amounts. We evaluate recoveries separately from the liability and, when they are

assured, recoveries are recorded and reported separately from the associated liability in our consolidated financial statements.

As of December 31, 2009, we have the obligation to remediate or contribute towards the remediation of certain sites, including two existing Superfund sites. At December 31, 2009, our estimated share of environmental remediation costs at these sites was approximately \$16 million, on a discounted basis. The undiscounted value

Table of Contents

of the estimated remediation costs was \$23 million. For those locations in which the liability was discounted, the weighted average discount rate used was 3.6 percent. Based on information known to us, we have established reserves that we believe are adequate for these costs. Although we believe these estimates of remediation costs are reasonable and are based on the latest available information, the costs are estimates and are subject to revision as more information becomes available about the extent of remediation required. At some sites, we expect that other parties will contribute towards the remediation costs. In addition, certain environmental statutes provide that our liability could be joint and several, meaning that we could be required to pay in excess of our share of remediation costs. Our understanding of the financial strength of other potentially responsible parties at these sites has been considered, where appropriate, in our determination of our estimated liability.

The \$16 million noted above includes \$5 million of estimated environmental remediation costs that resulted from the bankruptcy of Mark IV Industries in 2009. Prior to our 1996 acquisition of The Pullman Company, Pullman had sold certain assets to Mark IV. As partial consideration for the purchase of these assets, Mark IV agreed to assume Pullman's and its subsidiaries' historical obligations to contribute to the environmental remediation of certain sites. Mark IV has filed a petition for insolvency under Chapter 11 of the United States Bankruptcy Code and notified Pullman that it no longer intends to continue to contribute toward the remediation of those sites. We are conducting a thorough analysis and review of these matters and it is possible that our estimate may change as additional information becomes available to us.

We do not believe that any potential costs associated with our current status as a potentially responsible party in the Superfund sites, or as a liable party at the other locations referenced herein, will be material to our consolidated results of operations, financial position or cash flows.

We also from time to time are involved in legal proceedings, claims or investigations that are incidental to the conduct of our business. Some of these proceedings allege damages against us relating to environmental liabilities (including toxic tort, property damage and remediation), intellectual property matters (including patent, trademark and copyright infringement, and licensing disputes), personal injury claims (including injuries due to product failure, design or warning issues, and other product liability related matters), taxes, employment matters, and commercial or contractual disputes, sometimes related to acquisitions or divestitures. For example, one of our Argentine subsidiaries is currently defending against a criminal complaint alleging the failure to comply with laws requiring the proceeds of export transactions to be collected, reported and/or converted to local currency within specified time periods. As another example, we have recently become subject to an audit in 11 states of our practices with respect to the payment of unclaimed property to those states. We have practices in place designed to ensure that we pay unclaimed property as required. We are in the early stages of this audit, which could cover over 20 years. We vigorously defend ourselves against all of these claims. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved on unfavorable terms. However, although the ultimate outcome of any legal matter cannot be predicted with certainty, based on current information, including our assessment of the merits of the particular claim, we do not expect that these legal proceedings or claims will have any material adverse impact on our future consolidated financial position, results of operations or cash flows.

In addition, we are subject to a number of lawsuits initiated by claimants alleging health problems as a result of exposure to asbestos. In the early 2000's we were named in nearly 20,000 complaints, most of which were filed in Mississippi state court and the vast majority of which made no allegations of exposure to asbestos from our product categories. Most of these claims have been dismissed and our current docket of active and inactive cases is less than 500 cases nationwide. A small number of claims have been asserted by railroad workers alleging exposure to asbestos products in railroad cars manufactured by The Pullman Company, one of our subsidiaries. The balance of the claims is related to alleged exposure to asbestos in our automotive emission control products. Only a small percentage of the claimants allege that they were automobile mechanics and a significant number appear to involve workers in other industries or otherwise do not include sufficient information to determine whether there is any basis for a claim

against us. We believe, based on scientific and other evidence, it is unlikely that mechanics were exposed to asbestos by our former muffler products and that, in any event, they would not be at increased risk of asbestos-related disease based on their work with these products. Further, many of these cases involve numerous defendants, with the number of each in some cases exceeding 100 defendants from a variety of industries. Additionally, the plaintiffs either

Table of Contents

do not specify any, or specify the jurisdictional minimum, dollar amount for damages. As major asbestos manufacturers continue to go out of business or file for bankruptcy, we may experience an increased number of these claims. We vigorously defend ourselves against these claims as part of our ordinary course of business. In future periods, we could be subject to cash costs or non-cash charges to earnings if any of these matters is resolved unfavorably to us. To date, with respect to claims that have proceeded sufficiently through the judicial process, we have regularly achieved favorable resolution. Accordingly, we presently believe that these asbestos-related claims will not have a material adverse impact on our future consolidated financial condition, results of operations or cash flows.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

No matters were submitted to the vote of security holders during the fourth quarter of 2009.

ITEM 4.1. EXECUTIVE OFFICERS OF THE REGISTRANT.

The following provides information concerning the persons who serve as our executive officers as of February 26, 2010.

Name (and Age at December 31, 2009)	Offices Held
Gregg M. Sherrill (56)	Chairman and Chief Executive Officer
Hari N. Nair (49)	Executive Vice President and President International
Kenneth R. Trammell (49)	Executive Vice President and Chief Financial Officer
Neal A. Yanos (47)	Executive Vice President, North America
Brent J. Bauer (54)	Senior Vice President and General Manager North American Original Equipment Emission Control
Michael J. Charlton (51)	Senior Vice President, Global Supply Chain Management and Manufacturing
James D. Harrington (48)	Senior Vice President, General Counsel and Corporate Secretary
Timothy E. Jackson (52)	Senior Vice President and Chief Technology Officer
Richard P. Schneider (62)	Senior Vice President Global Administration
Paul D. Novas (51)	Vice President and Controller

Gregg M. Sherrill Mr. Sherrill was named the Chairman and Chief Executive Officer of Tenneco in January 2007. Mr. Sherrill joined us from Johnson Controls Inc., where he served since 1998, most recently as President, Power Solutions. From 2002 to 2003, Mr. Sherrill served as the Vice President and Managing Director of Europe, South Africa and South America for Johnson Controls Automotive Systems Group. Prior to joining Johnson Controls, Mr. Sherrill held various engineering and manufacturing assignments over a 22-year span at Ford Motor Company, including Plant Manager of Ford's Dearborn, Michigan engine plant, Chief Engineer, Steering Systems and Director of Supplier Technical Assistance. Mr. Sherrill became a director of our company in January 2007.

Hari N. Nair Mr. Nair was named our Executive Vice President and President International effective March 2007. Previously, Mr. Nair served as Executive Vice President and Managing Director of our business in Europe, South America and India. Before that, he was Senior Vice President and Managing Director International. Prior to December 2000, Mr. Nair was the Vice President and Managing Director Emerging Markets. Previously, Mr. Nair was the Managing Director for Tenneco Automotive Asia, based in Singapore and responsible for all operations and development projects in Asia. He began his career with the former Tenneco Inc. in 1987, holding various positions in strategic planning, marketing, business development, quality control and finance. Prior to joining Tenneco, Mr. Nair

was a senior financial analyst at General Motors Corporation focusing on European operations. Mr. Nair became a director of our company in March 2009.

Kenneth R. Trammell Mr. Trammell has served as our Executive Vice President and Chief Financial Officer since January 2006. Mr. Trammell was named our Senior Vice President and Chief Financial Officer in September 2003, having served as our Vice President and Controller since September 1999. From April 1997

Table of Contents

to November 1999, he served as Corporate Controller of Tenneco Inc. He joined Tenneco Inc. in May 1996 as Assistant Controller. Before joining Tenneco Inc., Mr. Trammell spent 12 years with the international public accounting firm of Arthur Andersen LLP, last serving as a senior manager.

Neal A. Yanos Mr. Yanos was named Executive Vice President, North America in July 2008. Prior to that, he served as our Senior Vice President and General Manager North American Original Equipment Ride Control and North American Aftermarket since May 2003. He joined our Monroe ride control division as a process engineer in 1988 and since that time has served in a broad range of assignments including product engineering, strategic planning, business development, finance, program management and marketing, including Director of our North American original equipment GM/VW business unit and most recently as our Vice President and General Manager North American Original Equipment Ride Control from December 2000. Before joining our company, Mr. Yanos was employed in various engineering positions by Sheller Globe Inc. from 1985 to 1988.

Brent J. Bauer Mr. Bauer joined Tenneco Automotive in August 1996 as a Plant Manager and was named Vice President and General Manager European Original Equipment Emission Control in September 1999. Mr. Bauer was named Vice President and General Manager European and North American Original Equipment Emission Control in July 2001. Currently, Mr. Bauer serves as the Senior Vice President and General Manager North American Original Equipment Emission Control. Prior to joining Tenneco, he was employed at AeroquipVickers Corporation for 20 years in positions of increasing responsibility serving most recently as Director of Operations.

Michael J. Charlton Mr. Charlton has served as our Senior Vice President, Global Supply Chain Management and Manufacturing since January 2010. Mr. Charlton served as our Vice President, Global Supply Chain Management and Manufacturing from November 2008 through December 2009. Mr. Charlton served as Tenneco's Managing Director for India from January 2008 until November 2008. Prior to that, he served as the operations director for the Company's emission control business in Europe since 2005. Prior to joining Tenneco in 2005, Mr. Charlton held a variety of positions of increasing responsibility at TRW Automotive, the most recent being Lead Director, European Purchasing and Operations for the United Kingdom.

James D. Harrington Mr. Harrington has served as our Senior Vice President, General Counsel and Corporate Secretary since June 2009 and is responsible for managing our worldwide legal affairs including corporate governance and compliance. Mr. Harrington joined us in January 2005 as Corporate Counsel and was named Vice President Law in July 2007. Prior to joining Tenneco, he worked at Mayer Brown LLP in the firm's corporate and securities practice.

Timothy E. Jackson Mr. Jackson joined us as Senior Vice President and General Manager North American Original Equipment and Worldwide Program Management in June 1999. He served in this position until August 2000, at which time he was named Senior Vice President Global Technology. From 2002 to 2005, Mr. Jackson served as Senior Vice President Manufacturing, Engineering and Global Technology. In July 2005, Mr. Jackson was named Senior Vice President Global Technology and General Manager, Asia Pacific. In March 2007, he was named our Chief Technology Officer. Mr. Jackson joined us from ITT Industries where he was President of that company's Fluid Handling Systems Division. With over 20 years of management experience, 14 within the automotive industry, he was also Chief Executive Officer for HiSAN, a joint venture between ITT Industries and Sanoh Industrial Company. Mr. Jackson has also served in senior management positions at BF Goodrich Aerospace and General Motors Corporation.

Richard P. Schneider Mr. Schneider was named our Senior Vice President Global Administration in 1999 and is responsible for the development and implementation of human resources programs and policies and employee communications activities for our worldwide operations. Prior to 1999, Mr. Schneider served as our Vice President Human Resources. He joined us in 1994 from International Paper Company where, during his 20 year tenure, he held key positions in labor relations, management development, personnel administration and equal employment

opportunity.

Paul D. Novas Mr. Novas was named our Vice President and Controller in July 2006. Mr. Novas served as Vice President, Finance and Administration for Tenneco Europe from January 2004 until July 2006 and as Vice President and Treasurer of Tenneco from November 1999 until January 2004. Mr. Novas joined Tenneco in

Table of Contents

1996 as assistant treasurer responsible for corporate finance and North American treasury operations. Prior to joining Tenneco, Mr. Novas worked in the treasurer's office of General Motors Corporation for ten years.

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

Our outstanding shares of common stock, par value \$.01 per share, are listed on the New York and Chicago Stock Exchanges. The following table sets forth, for the periods indicated, the high and low sales prices of our common stock on the New York Stock Exchange Composite Transactions Tape.

Quarter	Sales Prices	
	High	Low
2009		
1st	\$ 4.14	\$ 0.67
2nd	11.19	1.56
3rd	18.11	8.14
4th	19.78	11.35
2008		
1st	\$ 29.41	\$ 20.18
2nd	30.41	13.52
3rd	16.92	9.58
4th	10.63	1.31

As of February 22, 2010, there were approximately 21,015 holders of record of our common stock, including brokers and other nominees.

The declaration of dividends on our common stock is at the discretion of our Board of Directors. The Board has not adopted a dividend policy as such; subject to legal and contractual restrictions, its decisions regarding dividends are based on all considerations that in its business judgment are relevant at the time. These considerations may include past and projected earnings, cash flows, economic, business and securities market conditions and anticipated developments concerning our business and operations.

We are highly leveraged and restricted with respect to the payment of dividends under the terms of our financing arrangements. On January 10, 2001, we announced that our Board of Directors eliminated the regular quarterly dividend on the Company's common stock. The Board took this action in response to then-current industry conditions, primarily greater than anticipated production volume reductions by OEMs in North America and continued softness in the global aftermarket. We have not paid dividends on our common stock since the fourth quarter of 2000. There are no current plans to reinstate a dividend on our common stock, as the Board of Directors intends to retain any earnings for use in our business for the foreseeable future. For additional information concerning our payment of dividends, see Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7.

See Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters included in Item 12 for information regarding securities authorized for issuance under our equity compensation plans.

Purchase of equity securities by the issuer and affiliated purchasers

We have not purchased any shares of our common stock in the fourth quarter of 2009. We presently have no publicly announced repurchase plan or program, but intend to continue to satisfy statutory minimum tax withholding obligations in connection with the vesting of outstanding restricted stock through the withholding of shares.

Recent Sales of Unregistered Securities

None.

Table of Contents***Share Performance***

The following graph shows a five year comparison of the cumulative total stockholder return on Tenneco's common stock as compared to the cumulative total return of two other indexes: a custom composite index (Peer Group) and the Standard & Poor's 500 Composite Stock Price Index. The companies included in the Peer Group are: ArvinMeritor Inc., American Axle & Manufacturing Co., Borg Warner Inc., Cummins Inc., Johnson Controls Inc., Lear Corp., Magna International Inc. and TRW Automotive Holdings Corp. (beginning in the second quarter of 2004). These comparisons assume an initial investment of \$100 and the reinvestment of dividends.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Tenneco, Inc., The S&P 500 Index
And A Peer Group

* \$100 invested on 12/31/04 in stock or index, including reinvestment of dividends.

Fiscal year ending December 31.

Copyright© 2010 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
Tenneco Inc	100.00	113.75	143.39	151.22	17.11	102.84
S&P 500	100.00	104.91	121.48	128.16	80.74	102.11
Peer Group	100.00	104.24	121.18	161.42	70.79	122.39

The graph and other information furnished in the section titled *Share Performance* under this Part II, Item 5 of this Form 10-K shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended.

Table of Contents**ITEM 6. SELECTED FINANCIAL DATA.****TENNECO INC. AND CONSOLIDATED SUBSIDIARIES
SELECTED CONSOLIDATED FINANCIAL DATA**

	Year Ended December 31,					
	2009	2008	2007	2006	2005(a)	
	(Millions Except Share and Per Share Amounts)					
Statements of Income (Loss)						
Data:						
Net sales and operating revenues						
North America	\$ 2,099	\$ 2,641	\$ 2,910	\$ 1,963	\$ 2,033	
Europe, South America and India	2,209	2,983	3,135	2,387	2,110	
Asia Pacific	525	543	560	436	371	
Intergroup sales	(184)	(251)	(421)	(104)	(74)	
	\$ 4,649	\$ 5,916	\$ 6,184	\$ 4,682	\$ 4,440	
Income (loss) before interest expense, income taxes, and noncontrolling interests						
North America	\$ 42	\$ (107)	\$ 120	\$ 103	\$ 148	
Europe, South America and India	20	85	99	81	53	
Asia Pacific	30	19	33	12	16	
Total	92	(3)	252	196	217	
Interest expense (net of interest capitalized)	133	113	164	136	133	
Income tax expense	13	289	83	5	26	
Net income (loss)	(54)	(405)	5	55	58	
Less: Net income attributable to noncontrolling interests	19	10	10	6	2	
Net income (loss) attributable to Tenneco, Inc.	\$ (73)	\$ (415)	\$ (5)	\$ 49	\$ 56	
Weighted average shares of common stock outstanding						
Basic	48,572,463	46,406,095	45,809,730	44,625,220	43,088,558	
Diluted	48,572,463	46,406,095	45,809,730	46,755,573	45,321,225	
Basic earnings (loss) per share of common stock	\$ (1.50)	\$ (8.95)	\$ (0.11)	\$ 1.11	\$ 1.30	

Edgar Filing: TENNECO INC - Form 10-K

Diluted earnings (loss) per share of common stock	\$	(1.50)	\$	(8.95)	\$	(0.11)	\$	1.05	\$	1.24
---	----	--------	----	--------	----	--------	----	------	----	------

Table of Contents

	Years Ended December 31,				
	2009	2008	2007	2006	2005
	(Millions Except Ratio and Percent Amounts)				
Balance Sheet Data (at year end):					
Total assets	\$ 2,841	\$ 2,828	\$ 3,590	\$ 3,274	\$ 2,945
Short-term debt	75	49	46	28	22
Long-term debt	1,145	1,402	1,328	1,357	1,361
Redeemable noncontrolling interests	7	7	6	4	3
Total Tenneco Inc. shareholders equity	(21)	(251)	400	226	137
Noncontrolling interests	32	24	25	24	21
Total equity	11	(227)	425	250	158
Statement of Cash Flows Data:					
Net cash provided by operating activities	\$ 241	\$ 160	\$ 158	\$ 203	\$ 123
Net cash used by investing activities	(119)	(261)	(202)	(172)	(164)
Net cash provided (used) by financing activities	87	58	(10)	12	(28)
Cash payments for plant, property and equipment	(120)	(233)	(177)	(177)	(140)
Other Data:					
EBITDA including noncontrolling interests(a)	\$ 313	\$ 219	\$ 457	\$ 380	\$ 394
Ratio of EBITDA including noncontrolling interests to interest expense	2.35	1.94	2.79	2.79	2.96
Ratio of total debt to EBITDA including noncontrolling interests	3.90	6.63	3.01	3.64	3.51
Ratio of earnings to fixed charges(b)			1.46	1.35	1.55

NOTE: Our consolidated financial statements for the three years ended December 31, 2009, which are discussed in the following notes, are included in this Form 10-K under Item 8.

- (a) EBITDA including noncontrolling interests is a non-GAAP measure defined as net income before extraordinary items, cumulative effect of changes in accounting principle, interest expense, income taxes, depreciation and amortization and noncontrolling interests. We use EBITDA including noncontrolling interests, together with GAAP measures, to evaluate and compare our operating performance on a consistent basis between time periods and with other companies that compete in our markets but which may have different capital structures and tax positions, which can have an impact on the comparability of interest expense, noncontrolling interests and tax expense. We also believe that using this measure allows us to understand and compare operating performance both with and without depreciation expense, which can vary based on several factors. We believe EBITDA including noncontrolling interests is useful to our investors and other parties for these same reasons.

EBITDA including noncontrolling interests should not be used as a substitute for net income or for net cash provided by operating activities prepared in accordance with GAAP. It should also be noted that EBITDA including noncontrolling interests may not be comparable to similarly titled measures used by other companies and, furthermore, that it excludes expenditures for debt financing, taxes and future capital requirements that are essential to our ongoing business operations. For these reasons, EBITDA including noncontrolling interests is of value to management and investors only as a supplement to, and not in lieu of, GAAP results. EBITDA including noncontrolling interests are derived from the statements of income (loss) as follows:

		Year Ended December 31,				
	2009	2008	2007	2006	2005	
	(Millions)					
Net income (loss)	\$ (73)	\$ (415)	\$ (5)	\$ 49	\$ 56	
Noncontrolling interests	19	10	10	6	2	
Income tax expense	13	289	83	5	26	
Interest expense, net of interest capitalized	133	113	164	136	133	
Depreciation and amortization of other intangibles	221	222	205	184	177	
Total EBITDA including noncontrolling interests	\$ 313	\$ 219	\$ 457	\$ 380	\$ 394	

(b) For purposes of computing this ratio, earnings generally consist of income before income taxes and fixed charges excluding capitalized interest. Fixed charges consist of interest expense, the portion of rental expense considered representative of the interest factor and capitalized interest. Earnings were insufficient to cover fixed charges by \$39 million and \$121 million for the years ended December 31, 2009 and 2008, respectively. See Exhibit 12 to this Form 10-K for the calculation of this ratio.

Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

As you read the following review of our financial condition and results of operations, you should also read our consolidated financial statements and related notes beginning on page 67.

Executive Summary

We are one of the world's leading manufacturers of automotive emission control and ride control products and systems. We serve both original equipment (OE) vehicle designers and manufacturers and the repair and replacement markets, or aftermarket, globally through leading brands, including Monroe®, Rancho®, Clevite® Elastomers and Fric Rot™ ride control products and Walker®, Fonos™, and Gillet™ emission control products. Worldwide we serve more than 65 different original equipment manufacturers, and our products or systems are included on six of the top 10 passenger models produced in Europe and eight of the top 10 light truck models produced in North America for 2009. Our aftermarket customers are comprised of full-line and specialty warehouse distributors, retailers, jobbers, installer chains and car dealers. As of December 31, 2009, we operated 84 manufacturing facilities worldwide and employed approximately 21,000 people to service our customers' demands.

Factors that continue to be critical to our success include winning new business awards, managing our overall global manufacturing footprint to ensure proper placement and workforce levels in line with business needs, maintaining competitive wages and benefits, maximizing efficiencies in manufacturing processes and reducing overall costs. In addition, our ability to adapt to key industry trends, such as a shift in consumer preferences to other vehicles in response to higher fuel costs and other economic and social factors, increasing technologically sophisticated content, changing aftermarket distribution channels, increasing environmental standards and extended product life of automotive parts, also play a critical role in our success. Other factors that are critical to our success include adjusting to economic challenges such as increases in the cost of raw materials and our ability to successfully reduce the impact of any such cost increases through material substitutions, cost reduction initiatives and other methods.

The deterioration in the global economy and global credit markets beginning in 2008 has negatively impacted global business activity in general, and specifically the automotive industry in which we operate. The market turmoil and tightening of credit, as well as the dramatic decline in the housing market in the United States and Western Europe, have led to a lack of consumer confidence evidenced by a rapid decline in light vehicle purchases in 2008 and the first six months of 2009. Light vehicle production during the first six months of 2009 decreased by 50 percent in North America and 35 percent in Europe as compared to the first six months of 2008. OE production has stabilized and overall the production environment strengthened in the third and fourth quarters compared to the first half of the year as production began to track more closely to vehicle sales after inventory corrections in the first half of the year. In North America, light vehicle production in the fourth quarter 2009 was up one percent year-over-year. In Europe, light vehicle production in the fourth quarter 2009 was up 14 percent year-over-year.

In response to current economic conditions, some of our customers have eliminated or are expected to eliminate certain light vehicle models or brands. While we do not believe that models eliminated to date will have a significant impact on us, changes in the models produced by our customers or sales of their brands may have an adverse effect on our market share. Additional declines in consumer demand would have a further adverse effect on the financial condition of our OE customers, and on our future results of operations. Continued or further financial difficulties at any of our major customers could have an adverse impact on the level of our future revenues and collection of our receivables from such customers.

Other than the impact from production shutdowns during the second quarter, we incurred no other economic loss from the bankruptcy filings of Chrysler or General Motors. We collected substantially all of our pre-petition receivables

from Chrysler Group LLC and Chrysler Group LLC has assumed substantially all of the contracts which we had with Chrysler LLC. We collected substantially all of our pre-petition receivables from General Motors Company and General Motors Company has assumed substantially all of the contracts which we had with General Motors Corporation.

Table of Contents

We have a substantial amount of indebtedness. As such, our ability to generate cash both to fund operations and service our debt is also a significant area of focus for our company. As part of our strategic imperative to improve financial flexibility, we completed a common stock offering of 12 million shares in November 2009. We used the net proceeds of \$188 million from the offering to pay down debt. See *Liquidity and Capital Resources* below for further discussion of cash flows and *Risk Factors* included in Item 1A.

Total revenues for 2009 were \$4.6 billion, a 21 percent decrease from \$5.9 billion in 2008. Excluding the impact of currency and substrate sales, revenue was down \$456 million, or 10 percent, driven primarily by lower OE production in North America, Europe and Australia and lower European aftermarket sales. Partially offsetting these declines were increased North American aftermarket sales and higher sales in South America and Asia.

Gross margin for 2009 was 16.6 percent, up 2.2 percentage points from 14.4 percent in 2008. The gross margin improvement was driven by the benefits from our restructuring activities in 2008, material cost management, improved manufacturing efficiencies, lower year-over-year restructuring and related expenses and currency gains. Lower OE production volumes and the related fixed cost absorption partially offset these improvements.

Selling, general and administrative expense was down \$48 million in 2009, to \$344 million, including \$1 million in restructuring and related expense, compared to \$392 million in 2008 which included \$22 million in restructuring and related expense and \$7 million in aftermarket changeover costs. Cost reduction efforts, which included restructuring savings, 401(k) match suspension, temporary salary reductions and employee furloughs, drove the improvement. Engineering expense was \$97 million and \$127 million in 2009 and 2008, respectively. 2008 engineering expense included \$1 million of restructuring and related expenses. The reduction in engineering expense was driven by engineering cost recoveries, employee furloughs and temporary salary reductions. In total, we reported selling, general, administrative and engineering expenses in 2009 at 9.5 percent of revenues, as compared to 8.8 percent of revenues in 2008 due to a decline in year-over-year revenues which out paced the decrease in selling, general, administrative and engineering costs.

Earnings before interest expense, taxes and noncontrolling interests (EBIT) was \$92 million for 2009, an improvement of \$95 million, when compared to a loss of \$3 million in 2008. This increase was driven by the savings from prior restructuring activities, manufacturing efficiency improvements, lower selling, general and administrative spending, customer recovery of engineering costs, material cost management actions, lower restructuring and related expenses, reduced aftermarket changeover costs and lower goodwill impairment charges. The negative impact of currency and lower OE production and the related fixed cost absorption partially offset the EBIT improvement.

Results from Operations***Net Sales and Operating Revenues for Years 2009 and 2008***

The following tables reflect our revenues for 2009 and 2008. We present these reconciliations of revenues in order to reflect the trend in our sales in various product lines and geographic regions separately from the effects of doing business in currencies other than the U.S. dollar. We have not reflected any currency impact in the 2008 table since this is the base period for measuring the effects of currency during 2009 on our operations. We believe investors find this information useful in understanding period-to-period comparisons in our revenues.

Additionally, we show the component of our revenue represented by substrate sales in the following tables. While we generally have primary design, engineering and manufacturing responsibility for OE emission control systems, we do not manufacture substrates. Substrates are porous ceramic filters coated with a catalyst precious metals such as platinum, palladium and rhodium. These are supplied to us by Tier 2 suppliers and directed by our OE customers. We generally earn a small margin on these components of the system. As the need for more sophisticated emission control

solutions increases to meet more stringent environmental regulations, and as we capture more diesel aftertreatment business, these substrate components have been increasing as a percentage of our revenue. Changes in commodity prices as well as changes in the

Table of Contents

mix of vehicles produced by our customers as a result of the economic crisis have recently reduced the percentage of our revenue related to substrates. While these substrates dilute our gross margin percentage, they are a necessary component of an emission control system. We view the growth of substrates as a key indicator that our value-add content in an emission control system is moving toward the higher technology hot-end gas and diesel business.

Our value-add content in an emission control system includes designing the system to meet environmental regulations through integration of the substrates into the system, maximizing use of thermal energy to heat up the catalyst quickly, efficiently managing airflow to reduce back pressure as the exhaust stream moves past the catalyst, managing the expansion and contraction of the emission control system components due to temperature extremes experienced by an emission control system, using advanced acoustic engineering tools to design the desired exhaust sound, minimizing the opportunity for the fragile components of the substrate to be damaged when we integrate it into the emission control system and reducing unwanted noise, vibration and harshness transmitted through the emission control system.

We present these substrate sales separately in the following table because we believe investors utilize this information to understand the impact of this portion of our revenues on our overall business and because it removes the impact of potentially volatile precious metals pricing from our revenues. While our original equipment customers generally assume the risk of precious metals pricing volatility, it impacts our reported revenues. Excluding substrate catalytic converter and