

SCHNITZER STEEL INDUSTRIES INC

Form 10-K

October 25, 2016

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 August 31, 2016

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 0-22496

SCHNITZER STEEL INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

OREGON 93-0341923

(State of Incorporation) (I.R.S. Employer Identification No.)

299 SW Clay Street, Suite 350

97201

Portland, Oregon

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (503) 224-9900

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

Class A Common Stock, \$1.00 par value The NASDAQ Global Select Market

(Title of Each Class)

(Name of each Exchange on which registered)

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large Accelerated Filer  Accelerated Filer

Non-Accelerated Filer  Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

The aggregate market value of the registrant's outstanding common stock held by non-affiliates on February 29, 2016 was \$379,176,246.

The registrant had 26,593,816 shares of Class A common stock, par value of \$1.00 per share, and 200,000 shares of Class B common stock, par value of \$1.00 per share, outstanding as of October 21, 2016.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive Proxy Statement for the January 2017 Annual Meeting of Shareholders are incorporated by reference into Part III of this report.

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
FORM 10-K  
TABLE OF CONTENTS

	PAGE
<u>FORWARD LOOKING STATEMENTS</u>	<u>1</u>
<u>PART I</u>	
Item 1 <u>Business</u>	<u>2</u>
Item 1A <u>Risk Factors</u>	<u>12</u>
Item 1B <u>Unresolved Staff Comments</u>	<u>21</u>
Item 2 <u>Properties</u>	<u>22</u>
Item 3 <u>Legal Proceedings</u>	<u>22</u>
Item 4 <u>Mine Safety Disclosures</u>	<u>23</u>
<u>PART II</u>	
Item 5 <u>Market For Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>24</u>
Item 6 <u>Selected Financial Data</u>	<u>26</u>
Item 7 <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>27</u>
Item 7A <u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>50</u>
Item 8 <u>Financial Statements and Supplementary Data</u>	<u>51</u>
Item 9 <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>98</u>
Item 9A <u>Controls and Procedures</u>	<u>98</u>
Item 9B <u>Other Information</u>	<u>98</u>
<u>PART III</u>	
Item 10 <u>Directors, Executive Officers and Corporate Governance</u>	<u>99</u>
Item 11 <u>Executive Compensation</u>	<u>100</u>
Item 12 <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>100</u>
Item 13 <u>Certain Relationships and Related Transactions, and Director Independence</u>	<u>100</u>
Item 14 <u>Principal Accountant Fees and Services</u>	<u>100</u>
<u>PART IV</u>	
Item 15 <u>Exhibits and Financial Statement Schedules</u>	<u>101</u>
 <u>SIGNATURES</u>	 <u>105</u>

Table of Contents

**FORWARD-LOOKING STATEMENTS**

Statements and information included in this Annual Report on Form 10-K by Schnitzer Steel Industries, Inc. (the “Company”) that are not purely historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and are made pursuant to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. Except as noted herein or as the context may otherwise require, all references to “we,” “our,” “us” and “SSI” refer to the Company and its consolidated subsidiaries.

Forward-looking statements in this Annual Report on Form 10-K include statements regarding future events or our expectations, intentions, beliefs and strategies regarding the future, which may include statements regarding trends, cyclicity and changes in the markets we sell into; expected results, including pricing, sales volumes and profitability; strategic direction; changes to manufacturing and production processes; the cost of and the status of any agreements or actions related to our compliance with environmental and other laws; expected tax rates, deductions and credits; the realization of deferred tax assets; planned capital expenditures; liquidity positions; ability to generate cash from continuing operations; the potential impact of adopting new accounting pronouncements; obligations under our retirement plans; benefits, savings or additional costs from business realignment, cost containment and productivity improvement programs; and the adequacy of accruals.

Forward-looking statements by their nature address matters that are, to different degrees, uncertain, and often contain words such as “believes,” “expects,” “anticipates,” “intends,” “assumes,” “estimates,” “evaluates,” “may,” “will,” “could,” “opportunity,” “forecasts,” “projects,” “plans,” “future,” “forward,” “potential,” “probable,” and similar expressions. However, the absence of words or similar expressions does not mean that a statement is not forward-looking.

We may make other forward-looking statements from time to time, including in reports filed with the Securities and Exchange Commission, press releases and public conference calls. All forward-looking statements we make are based on information available to us at the time the statements are made, and we assume no obligation to update any forward-looking statements, except as may be required by law. Our business is subject to the effects of changes in domestic and global economic conditions and a number of other risks and uncertainties that could cause actual results to differ materially from those included in, or implied by, such forward-looking statements. Some of these risks and uncertainties are discussed in "Item 1A. Risk Factors" of Part I of this Form 10-K. Examples of these risks include: potential environmental cleanup costs related to the Portland Harbor Superfund site; the cyclicity and impact of general economic conditions; instability in international markets; volatile supply and demand conditions affecting prices and volumes in the markets for both our products and raw materials we purchase; imbalances in supply and demand conditions in the global steel industry; the impact of goodwill impairment charges; the impact of long-lived asset and joint venture investment impairment charges; the realization of expected benefits or cost reductions associated with productivity improvement and restructuring initiatives; difficulties associated with acquisitions and integration of acquired businesses; customer fulfillment of their contractual obligations; changes in the relative value of the U.S. dollar; the impact of foreign currency fluctuations; potential limitations on our ability to access capital resources and existing credit facilities; restrictions on our business and financial covenants under our bank credit agreement; the impact of consolidation in the steel industry; inability to realize expected benefits from investments in technology; freight rates and the availability of transportation; the impact of equipment upgrades, equipment failures and facility damage on production; product liability claims; the impact of legal proceedings and legal compliance; the adverse impact of climate change; the impact of not realizing deferred tax assets; the impact of tax increases and changes in tax rules; the impact of a cybersecurity incident; costs associated with compliance with environmental regulations; inability to obtain or renew business licenses and permits; compliance with greenhouse gas emission regulations; reliance on employees subject to collective bargaining agreements; and the impact of the underfunded status of multiemployer plans in which we participate.

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## PART I

## ITEM 1. BUSINESS

## General

Founded in 1906, Schnitzer Steel Industries, Inc. ("SSI"), an Oregon corporation, is one of North America's largest recyclers of ferrous and nonferrous scrap metal, including end-of-life vehicles, and a manufacturer of finished steel products. Worldwide demand for scrap metal is driven primarily by steel production levels. Steel mill production using electric arc furnace ("EAF") technology relies on scrap metal as its primary feedstock, and steel manufacturing using blast furnace technology also uses scrap metal for a portion of its raw materials. Steel mills around the world, including those in the North American domestic market in which our own steel mill operates, are the primary end markets for our recycled scrap metal.

Our internal organizational and reporting structure supports two operating and reportable segments: the Auto and Metals Recycling ("AMR") business and the Steel Manufacturing Business ("SMB").

AMR collects and recycles autobodies, rail cars, home appliances, industrial machinery, manufacturing scrap and construction and demolition scrap from bridges, buildings and other infrastructure. We source material through well-developed, regional supply chains that collect scrap from large and small businesses and individuals. Our largest source of autobodies is our own network of 52 self-service auto parts stores, which operate under the commercial brand-name Pick-n-Pull, a majority of which are located in close geographic proximity to our metals recycling operating facilities, six of which have large-scale shredders.

AMR processes recycled metals ranging from iron and steel to aluminum, copper, lead, stainless steel and zinc for use in the manufacture of new products. With operating facilities located in 23 States, Puerto Rico and Western Canada, we are well-positioned to efficiently collect scrap metal throughout North America and deliver products to customers around the world from our seven deep water ports. In fiscal 2016, we sold our products to customers located in 24 countries including the United States ("U.S.") and Canada, and we shipped 3.3 million tons of ferrous scrap metal and 510 million pounds of nonferrous scrap metal. AMR generated 89% of its revenues in fiscal 2016 from sales of ferrous and nonferrous scrap metal, with the remainder generated from retail and other sales. AMR's revenues by scrap product were 68% ferrous and 32% nonferrous in fiscal 2016.

SMB produces finished steel products such as rebar, wire rod, coiled rebar, merchant bar and other specialty products using nearly 100% recycled metal sourced from AMR. SMB's products are primarily used in nonresidential and infrastructure construction in North America. In fiscal 2016, SMB sold 488 thousand short tons of finished steel.

In recent years we have undertaken a number of productivity improvements and restructuring initiatives designed to reduce operating expenses and improve profitability and to achieve further integration and synergistic cost efficiencies in our operating platform. Measures initiated since the beginning of fiscal 2015 target a combined benefit to annual operating performance of \$95 million. We achieved \$78 million of benefits in fiscal 2016 related to these fiscal 2015 and 2016 measures, compared to \$28 million of benefits in fiscal 2015. We expect to achieve substantially all of the \$95 million of benefits in fiscal 2017.

We incurred restructuring charges and other exit-related activities during fiscal 2016, 2015 and 2014 in connection with productivity improvement and restructuring initiatives. See Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of this report for further discussion of restructuring initiatives, benefits and costs.

Prior to the fourth quarter of fiscal 2015, our internal organizational and reporting structure supported three operating and reportable segments: the Metals Recycling Business ("MRB"), the Auto Parts Business ("APB") and the Steel Manufacturing Business ("SMB"). In the fourth quarter of fiscal 2015, we combined and integrated our auto parts and metals recycling businesses into a single operating platform. This change in organizational structure further optimized the efficiencies in our operating platform, enabling additional synergies to be captured throughout our supply chain and global sales channels and more effectively leveraging our shared services platform. The change in our internal organizational and reporting structure resulted in the formation of a new operating and reportable segment, AMR, replacing the former MRB and APB segments. We began reporting on this new segment in the fourth quarter of fiscal

2015 as reflected in our Annual Report on Form 10-K for the year ended August 31, 2015. The segment data for the comparable periods presented prior to the segment change has been recast to conform to the current presentation for all activities of AMR. Recasting this historical information did not have an impact on the consolidated financial performance of SSI for any of the periods presented.

See Note 18 – Segment Information in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for a discussion of the primary activities of each reportable segment, total assets by reportable segment, operating results from continuing operations, revenues from external customers and concentration of sales to foreign countries.

2 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Auto and Metals Recycling

## Business

AMR sells and brokers ferrous scrap metal (containing iron) to foreign and domestic steel producers, including SMB, and nonferrous scrap metal (not containing iron) to both foreign and domestic markets. AMR buys, collects, processes and recycles autobodies, rail cars, home appliances, industrial machinery, manufacturing scrap and construction and demolition scrap through its 97 auto and metals recycling facilities. Our largest source of autobodies is our own network of auto parts stores, which operate under the commercial brand-name Pick-n-Pull. AMR procures salvaged vehicles and sells serviceable used auto parts from these vehicles through its 52 self-service auto parts stores located across the U.S. and Western Canada. Upon acquiring a salvaged vehicle, we remove catalytic converters, aluminum wheels and batteries for separate processing and sale prior to placing the vehicle in our retail lot. After retail customers have removed desired parts from a vehicle, we remove remaining major component parts containing ferrous and nonferrous materials such as engines, transmissions and alternators, which are primarily sold to wholesalers. The remaining autobodies are crushed and shipped to our metals recycling facilities to be shredded, or sold to third parties where geographically more economical.

To prepare scrap metal, we crush, sort and bale the material by product grade for easier handling and sale. AMR processes mixed and large pieces of scrap metal into smaller pieces by crushing, torching, shearing, shredding and sorting, resulting in scrap metal pieces of a size, density and metal content required by customers to meet their production needs. The manufacturing process includes physical separation of ferrous and nonferrous materials through automated and manual processes into various sub-classifications, each of which has a value and metal content of importance to different customers for their end products. One of the most efficient ways to process and sort recycled scrap metal is through the use of shredding and separation systems.

AMR operates seven deep water port locations, six of which are equipped with large-scale shredders. Our largest port facilities in Everett, Massachusetts; Portland, Oregon; Oakland, California; and Tacoma, Washington each operate a mega-shredder with 7,000 to 9,000 horsepower. Our port facilities in Salinas, Puerto Rico and Kapolei, Hawaii each operate a shredder with 1,500 to 6,000 horsepower. Our port facility in Providence, Rhode Island does not operate a shredder. In fiscal 2016, we idled a shredder in Concord, New Hampshire, and in fiscal 2015, we idled a shredder in Johnston, Rhode Island and another in Surrey, British Columbia to more closely align our business to the prevalent market conditions. Our shredders are designed to provide a denser product and, in conjunction with advanced separation equipment, a more refined form of ferrous scrap metal which is used efficiently by steel mills in the production of new steel. The shredding process reduces autobodies and other scrap metal into fist-size pieces of shredded recycled scrap metal. The shredded material is then carried by conveyor under magnetized drums that attract the ferrous scrap metal and separate it from the nonferrous scrap metal and other residue found in the shredded material, resulting in a consistent and high-quality shredded ferrous product. The nonferrous scrap metal and residue then pass through a series of additional mechanical sorting systems designed to separate the nonferrous metal from the residue. The remaining nonferrous metal is then further sorted by product and size grade before being sold. AMR invests in nonferrous metal extraction and separation technologies in order to maximize the recoverability of valuable nonferrous metal. AMR also purchases nonferrous metal directly from industrial vendors and other suppliers and prepares this metal for shipment to customers by ship, rail or truck.

## Products

AMR's primary products consist of recycled ferrous and nonferrous scrap metal. Ferrous scrap metal is a key feedstock used in the production of finished steel and is largely categorized into heavy melting steel ("HMS"), plate and structural ("bonus") and shredded scrap ("shred"), although there are various grades of each category depending on metal content and the size and consistency of individual pieces. These attributes affect the product's relative value. Our nonferrous products include aluminum, copper, stainless steel, nickel, brass, titanium, lead, high temperature alloys and joint products such as zorba (primarily mixed aluminum nonferrous material) and zurik (predominantly stainless steel).

Prior to the shredding process, AMR sells serviceable used auto parts from salvaged vehicles through its 52 self-service auto parts stores located across the U.S. and Western Canada. Each self-service store offers an extensive

selection of vehicles (including domestic and foreign cars, vans and light trucks) from which customers can remove parts. We employ proprietary information technology systems to centrally manage and operate the geographically diverse network of auto parts stores, and we regularly rotate the inventory to provide greater access to parts. In general, we believe the list prices of auto parts at our self-service stores are significantly lower than those offered at full-service auto dismantlers, retail car parts stores and car dealerships.

3 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Customers

AMR sells its ferrous and nonferrous recycled metal products globally to steel mills, foundries and smelters, and supplies the ferrous scrap raw material required by SMB to produce steel. AMR's self-service auto parts stores also serve retail customers who are typically individuals seeking to obtain serviceable used auto parts at a competitive price. Retail customers remove the parts without the assistance of store employees and pay a listed price for the part. Presented below are AMR revenues by continent and, separately, revenues from sales to SMB, for the last three fiscal years ended August 31 (dollars in thousands):

	2016	% of Revenue	2015	% of Revenue	2014	% of Revenue
North America	\$514,397	47 %	\$769,956	50 %	\$896,401	42 %
Asia	461,191	43 %	631,253	41 %	1,056,747	49 %
Europe <sup>(1)</sup>	174,302	16 %	234,536	15 %	285,540	13 %
Africa	—	— %	61,568	4 %	76,122	4 %
South America	23,142	2 %	18,983	1 %	19,579	1 %
Sales to SMB	(90,394 )	(8 )%	(175,934 )	(11 )%	(188,103 )	(9 )%
Total (net of intercompany)	\$1,082,638		\$1,540,362		\$2,146,286	

(1) Includes sales to customers in Turkey.

In fiscal 2016, the five countries from which AMR derived its largest revenues from external customers were the U.S., Turkey, China, India and South Korea, which collectively accounted for 85% of total AMR external revenue. In fiscal 2015 and 2014, the five countries from which AMR derived its largest revenues from external customers accounted for 82% and 81%, respectively, of total AMR external revenue. We attribute revenues from external customers to individual countries based on the country in which the customer takes delivery of the goods.

AMR's five largest external ferrous scrap metal customers accounted for 32% of external recycled ferrous metal revenues in fiscal 2016, compared to 34% and 30% in fiscal 2015 and 2014, respectively. AMR had no external customers that accounted for 10% or more of consolidated revenues in fiscal 2016, 2015 and 2014. Customer purchase volumes of ferrous scrap metal vary from year to year due to the level of demand, availability of supply, economic growth, infrastructure spending, relative currency values, availability of credit and other factors. Ferrous scrap metal sales are primarily denominated in U.S. dollars, and nearly all of the large shipments of ferrous scrap metal to foreign customers are supported by letters of credit.

The table below sets forth, on a revenue and volume basis, the amount of recycled ferrous scrap metal sold by AMR to foreign and domestic customers, including sales to SMB, during the last three fiscal years ended August 31:

Ferrous Recycled Metal	2016		2015		2014	
	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>
Foreign	\$457,716	2,064	\$669,868	2,236	\$1,089,088	2,801
Domestic	251,738	1,225	428,357	1,472	539,597	1,508
Total	\$709,454	3,289	\$1,098,225	3,708	\$1,628,685	4,309

(1) Revenues stated in thousands of dollars.

(2) Volume stated in thousands of long tons (one long ton = 2,240 pounds).

AMR sells processed nonferrous scrap metal to specialty steelmakers, foundries, aluminum sheet and ingot manufacturers, copper refineries and smelters, brass and bronze ingot manufacturers, wholesalers, and wire and cable producers globally. AMR invests in advanced separation technologies in order to extract higher nonferrous yields from the shredding process and to enhance the separation of nonferrous metals in order to maximize the grade and value of the individual metals.



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

The table below sets forth, on a revenue and volume basis, the amount of recycled nonferrous scrap metal sold by AMR to foreign and domestic customers during the last three fiscal years ended August 31:

Nonferrous Recycled Metal	2016		2015		2014	
	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>	Revenues <sup>(1)</sup>	Volume <sup>(2)</sup>
Foreign	\$209,557	324,047	\$289,150	361,772	\$348,715	401,127
Domestic	130,468	186,236	198,886	223,663	207,424	213,391
Total	\$340,025	510,283	\$488,036	585,435	\$556,139	614,518

(1) Revenues stated in thousands of dollars.

(2) Volume stated in thousands of pounds and volume information excludes PGM metals in catalytic converters.

AMR's retail auto parts sales account for less than 10% of our consolidated revenues in all of the periods presented.

#### Pricing

Domestic and foreign prices for ferrous and nonferrous scrap metal are generally based on prevailing market rates, which differ by region, and are subject to market cycles that are influenced by worldwide demand from steel and other metal producers as well as by the availability of materials that can be processed into saleable scrap metal, among other factors. Ferrous scrap metal export sales contracts generally provide for shipment within 30 to 60 days after the price is agreed to which, in most cases, includes freight. Nonferrous scrap metal sales contracts generally provide for shipment within 30 days after the price is agreed to, which also typically includes freight.

AMR responds to changes in selling prices by seeking to adjust scrap metal purchase prices at its recycling facilities in order to manage the impact on its operating income. The spread between selling prices and the cost of purchased material is subject to a number of factors, including differences in the market conditions between the domestic regions where unprocessed scrap metal is acquired and the areas in the world where the processed materials are sold, market volatility from the time the selling price is agreed upon with the customer until the time the unprocessed material is purchased, and changes in the estimated costs of transportation to the customer's facility. We believe AMR generally benefits from sustained periods of rising recycled scrap metal selling prices, which allow it to better maintain or expand both operating income and unprocessed scrap metal flow into its facilities. When recycled scrap metal selling prices decline, AMR's operating margins typically compress.

The sales prices for auto parts from salvaged vehicles are deeply discounted from prevailing national new and refurbished sales prices offered at full-service auto dismantlers, retail car parts stores and car dealerships. Our stores provide a list price, available at each location and online. Prices for autobodies sold to third parties and for major component parts, such as engines, transmissions, catalytic converters and alternators sold to wholesalers, are based on prevailing scrap market rates which differ by region and are subject to market cycles. By consolidating shipments of component parts and autobodies, we are able to optimize prices by focusing on larger wholesale customers that pay a premium for volume and consistency of shipments.

#### Markets

Global production of finished steel products drives demand for materials used in the steel-making process, including ferrous recycled scrap metal which is the primary feedstock used in EAFs and can also be used in blast furnaces to manufacture steel. AMR exports ferrous recycled scrap metal primarily to countries in Asia, the Mediterranean region and North, Central and South America. Ferrous exports made up 63%, 60% and 65% of AMR's total ferrous sales volume in fiscal 2016, 2015 and 2014, respectively. In fiscal 2016, global steel production declined due to slowing global growth rates and a weaker price environment for finished steel as a result of overcapacity in global steel-making. We believe long-term demand for recycled metals will continue to be driven by factors including global infrastructure spending, fixed asset investment, consumer spending, commodity prices, availability of credit, government stimulus programs, and by an increased focus on environmental policies promoting natural resource conservation and the use of recycled metals in the steel-making process compared to alternatives such as iron ore. Nonferrous exports made up 64%, 62% and 65% of AMR's total nonferrous sales volumes in fiscal 2016, 2015 and 2014, respectively. China and the U.S. have been the largest sales destinations in the nonferrous markets, unlike the ferrous market which is highly diversified with no single country other than the U.S. being the dominant destination

for our products from year to year.

5 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

**Distribution**

AMR delivers recycled ferrous and nonferrous scrap metal to foreign customers by ship and to domestic customers by barge, rail and road transportation networks. Cost efficiencies are achieved by operating deep water terminal facilities at Everett, Massachusetts; Portland, Oregon; Oakland, California; Tacoma, Washington; and Providence, Rhode Island, all of which are owned, except for the Providence, Rhode Island facility which is operated under a long-term lease. We also have access to deep water terminal facilities at Kapolei, Hawaii and Salinas, Puerto Rico through public docks. Our seven deep water terminals enable us to load ferrous material in large vessels capable of holding up to 50,000 tons for trans-oceanic shipments. Additionally, because we own most of the terminal facilities at which AMR operates, AMR is not normally subject to the same berthing delays often experienced by users of unaffiliated terminals. We believe that AMR's loading costs are lower than at terminal facilities operated by third parties. From time to time, AMR may enter into contracts of affreightment, which guarantee the availability of ocean going vessels, in order to manage the risks associated with ship availability and freight costs.

Our nonferrous products are shipped in containers, which hold 20 to 30 tons, from container ports and rail ramps located in close proximity to our recycling facilities. Containerized shipments are exported by marine vessels to customers globally and domestic shipments are typically shipped by rail or by truck.

AMR sells used auto parts from its self-service retail stores. Once customers have pulled desirable parts from the vehicle, we remove other valuable ferrous and nonferrous parts which are consolidated and shipped primarily to wholesale customers by truck. The salvaged autobodies are crushed and shipped by truck to our metals recycling facilities where geographically feasible, or to third-party recyclers, for shredding.

**Sources of Unprocessed Metal**

The most common forms of purchased unprocessed metal are obsolete machinery and equipment, such as automobiles, railroad cars, railroad tracks, home appliances and other consumer goods, waste metal from manufacturing operations and demolition metal from buildings and other infrastructure. Unprocessed metal is acquired from a diverse base of suppliers who unload at our facilities, from drop boxes at suppliers' industrial sites and through negotiated purchases from other large suppliers, including railroads, manufacturers, automobile salvage facilities, metal dealers, various government entities and individuals. We typically seek to locate our retail auto parts stores in major population centers with convenient road access. Our auto parts store network spans 15 states in the U.S. and two provinces in Western Canada, with a majority of the stores concentrated in regions where our large shredders are located. Through our network of auto parts stores, we seek to obtain salvaged vehicles from five primary sources: private parties, tow companies, charities, auto auctions and municipal and other contracts. AMR has a program to purchase vehicles from private parties called "Cash for Junk Cars" which is advertised in local markets. Private parties either call a toll-free number and receive a quote for their vehicle or obtain an instant online quote. The private party can either deliver the vehicle to one of our retail locations or arrange for the vehicle to be picked up. AMR also employs car buyers who travel to vendors and bid on vehicles.

The majority of AMR's scrap metal collection and processing facilities receive unprocessed metal via major railroad routes, waterways or highways. Metals recycling facilities situated near metal sellers and major transportation routes have the competitive advantage of reduced freight costs because of the significant cost of freight relative to the cost of metal. The locations of AMR's West Coast facilities provide access to sources of unprocessed metal in the Northern California region, northward to Western Canada and Alaska, and to the East, including Idaho, Montana, Utah, Colorado and Nevada. The locations of the East Coast facilities provide access to sources of unprocessed metal in New York, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Eastern Canada and, from time to time, the Midwest. In the Southeastern U.S., approximately half of AMR's ferrous and nonferrous unprocessed metal volume is purchased from industrial companies, including auto manufacturers, with the remaining volume being purchased from smaller dealers and individuals. These industrial companies provide AMR with metals that are by-products of their manufacturing processes.

The supply of scrap metal from these various sources can fluctuate with the level of economic activity in the U.S. and can be sensitive to variability in scrap metal prices, particularly in the short term. The supply of scrap metal can also fluctuate, to a lesser degree, due to seasonal factors, such as severe weather conditions during winter months, which

can inhibit scrap metal collections at our facilities. Severe winter and summer weather conditions can also adversely impact retail admissions at our self-service auto parts stores.

**Backlog**

As of September 30, 2016, AMR had a backlog of orders to sell \$55 million of export ferrous metal compared to \$48 million at the same time in the prior year primarily due to the timing of sales. Additionally, as of September 30, 2016, AMR had a backlog of orders to sell \$31 million of export nonferrous metal compared to \$33 million in the prior year primarily due to the decrease in selling prices and the timing of sales. We expect to fill the entirety of the backlog of orders for export ferrous and nonferrous metal during fiscal 2017.

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Competition

AMR competes in the U.S. and in Western Canada for the purchase of scrap metal with large, well-financed recyclers of scrap metal, steel mills that own scrap yards and, increasingly in recent years, with smaller metal facilities and dealers. AMR's auto stores compete for the purchase of end-of-life vehicles with other auto dismantlers, used car dealers, auto auctions and metal recyclers. In general, the competitive factors impacting the purchase of scrap metal are the price offered by the purchaser and the proximity of the purchaser to the source of scrap metal and end-of-life vehicles. AMR also competes with brokers that buy scrap metal on behalf of domestic and foreign steel mills. In recent years, an environment of lower economic growth rates and lower scrap prices constrained scrap generation in the U.S., which led to reduced supply flows of scrap metal, including end-of-life vehicles, and margin compression. During the last three fiscal years, the continued challenging market conditions led to an industry trend of reductions in capacity through idling of equipment and curtailment of operations, including by large and well-capitalized companies, while a number of smaller competitors consolidated or exited the scrap market due to the protracted cyclical downturn.

AMR competes globally for the sale of processed recycled metal to finished steel and other metal product producers. The predominant competitive factors that impact recycled metal sales are price (including shipping cost), reliability of service, product quality, the relative value of the U.S. dollar and the availability and price of scrap metal and scrap metal substitutes including steel billets. During the last three fiscal years, the increased production and availability of iron ore, a raw material used in steel-making in blast furnaces which compete with EAF steel-making production that uses primarily ferrous scrap, led to prices for iron ore that have been at low levels relative to historical levels. This has been and may continue to be, among other reasons, a contributing factor to weaker demand and lower prices for ferrous scrap in our export markets. While the impact of the availability of low-priced iron ore may continue in the near-term, we believe the significant production efficiencies and environmental benefits associated with EAF steel-making compared to blast furnace steel-making will contribute to worldwide long-term demand for ferrous recycled scrap metal. AMR also competes for the sale of used auto parts to retail customers with other self-service and full-service auto dismantlers. The auto parts industry is characterized by diverse and fragmented competition and comprises a large number of aftermarket and used auto parts suppliers of all sizes, ranging from large, multinational corporations which serve both original equipment manufacturers and the aftermarket on a worldwide basis to small, local entities which have more limited supply. The main competitive factors impacting the retail sale of auto parts are price, availability of product, quality and convenience of the retail stores to customers.

We believe AMR's ability to process substantial volumes of scrap metal products, state-of-the-art equipment, number of locations, access to a variety of different modes of transportation, geographic dispersion and operational synergies of its integrated platform provide its business with the ability to compete successfully in varying market conditions.

## Steel Manufacturing Business

## Business

SMB operates a steel mini-mill in McMinnville, Oregon that produces a wide range of finished steel products using recycled metal and other raw materials. AMR is the sole supplier for SMB's scrap metal requirements, which SMB purchases at rates that approximate market prices for shipments from the West Coast of the U.S.

## Manufacturing

SMB's melt shop includes an EAF, a ladle refining furnace with enhanced steel chemistry refining capabilities, and a five-strand continuous billet caster, permitting the mill to produce special alloy grades of steel not currently produced by other mills on the West Coast of the U.S. The melt shop produced 499 thousand, 600 thousand and 580 thousand short tons of steel in the form of billets during fiscal 2016, 2015 and 2014, respectively. SMB reinvests in its melt shop to improve efficiencies in the melting process.

Through the end of fiscal 2016, SMB also operated two computerized rolling mills that allowed for synchronized operations of the rolling mills and related equipment, providing an effective annual finished goods production capacity of approximately 800 thousand tons. Billets produced in SMB's melt shop are reheated in two natural gas-fueled furnaces and are then hot-rolled through one of the two rolling mills to produce finished products. SMB continues to monitor the market for new products and, through discussions with customers, to identify additional

opportunities to expand its product lines and sales.

In August 2016, the Company committed to a plan, to be implemented during the first quarter of fiscal 2017, to shut down and decommission the older and less technologically advanced rolling mill, which was entered into service over 40 years ago, and which in recent years has been producing a smaller proportion of SMB's finished steel products. This plan is being implemented in conjunction with an improvement initiative to enhance the operating efficiency of the newer and more technologically advanced rolling mill, improve product quality, and expand its overall effective annual production capacity. Under current conditions, the continuing rolling mill has an effective annual production capacity of 580 thousand tons of finished steel products.

7 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

**Products**

SMB produces semi-finished goods (billets) and finished goods, consisting of rebar, coiled rebar, wire rod, merchant bar and other specialty products. Semi-finished goods are predominantly used for SMB's finished products, but also have been produced for sale to other steel mills. Rebar is produced in either straight length steel bars or coils and used to increase the strength of poured concrete. Coiled rebar is preferred by some manufacturers because it reduces the waste generated by cutting individual lengths to meet customer specifications and, therefore, improves yield. Wire rod is steel rod, delivered in coiled form, used by manufacturers to produce a variety of products such as chain link fencing, nails, wire, stucco netting, and pre-stressed concrete strand. Merchant bar consists of round, flat and square steel bars used by manufacturers to produce a wide variety of products, including gratings, steel floor and roof joists, safety walkways, ornamental furniture, stair railings, and farm equipment. SMB is also certified to produce high-quality rebar to support nuclear power plant construction and has a license to produce certain patented high-strength specialty steels.

The table below sets forth, on a revenue and volume basis, the sales of finished steel products during the last three fiscal years ended August 31:

	2016	2015	2014
	Revenues <sup>(1)</sup> Volume <sup>(2)</sup>	Revenues <sup>(1)</sup> Volume <sup>(2)</sup>	Revenues <sup>(1)</sup> Volume <sup>(2)</sup>
Finished steel products	\$269,355 488,212	\$363,795 539,984	\$377,678 533,147

(1) Revenues stated in thousands of dollars.

(2) Volume stated in short tons (one short ton = 2,000 pounds).

**Customers**

SMB's customers are principally steel service centers, construction industry subcontractors, steel fabricators, wire drawers and major farm and wood products suppliers. During fiscal 2016, SMB sold its finished steel products to customers located primarily in the Western U.S. and Western Canada. Customers in California accounted for 48%, 46% and 43% of SMB's revenues in fiscal 2016, 2015 and 2014. SMB's ten largest customers accounted for 45%, 42% and 40% of its revenues during fiscal 2016, 2015 and 2014, respectively. No SMB customer accounted for 10% or more of consolidated revenues in fiscal 2016, 2015 and 2014.

The table below sets forth SMB revenues from sales to domestic and foreign customers for the last three fiscal years ended August 31 (in thousands):

	2016	2015	2014
Domestic	\$253,609	\$349,145	\$354,420
Foreign <sup>(1)</sup>	16,296	25,892	34,220
Total	\$269,905	\$375,037	\$388,640

(1) Consists entirely of sales to Canada.

**Distribution**

SMB sells directly from its mini-mill in McMinnville, Oregon and its owned distribution center in City of Industry, California (Los Angeles area). Products are shipped from the mini-mill to the distribution center primarily by rail. The distribution center facilitates sales by maintaining an inventory of products close to major customers for just-in-time delivery. SMB communicates regularly with major customers to determine their anticipated needs and plans its rolling mill production schedule accordingly. Shipments to customers are made by common carrier, primarily truck or rail.

**Supply of Scrap Metal**

We believe SMB operates the only mini-mill in the Western U.S. that obtains its scrap metal requirements from an affiliated metal recycler. AMR provides a mix of recycled metal grades to SMB, which allows SMB to achieve optimum efficiency in its melting operations.



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

**Energy Supply**

SMB needs a significant amount of electricity to run its operations, primarily its EAF. SMB purchases electricity under a long-term contract with McMinnville Water & Light (“MW&L”), which in turn relies on the Bonneville Power Administration (“BPA”). We entered into our current contract with MW&L in October 2011 that will expire in September 2028.

SMB also needs a significant amount of natural gas to run its reheat furnaces, which are used to reheat billets prior to running them through the rolling mills. SMB meets this demand through a natural gas agreement with a utility provider that obligates SMB at each month-end to purchase a volume of gas based on its projected needs for the immediately subsequent month on a take-or-pay basis priced using published natural gas indices.

Energy costs represented 7% of SMB’s cost of goods sold in fiscal 2016, and 5% in each of fiscal 2015 and 2014.

**Backlog**

SMB generally ships products within days after the receipt of a purchase order. As of September 30, 2016 and 2015, SMB had a backlog of orders of \$5 million and \$13 million, respectively.

**Competition**

SMB’s primary domestic competitors for the sale of finished steel products include Nucor Corporation’s manufacturing facilities in Arizona, Utah and Washington; Gerdau Long Steel North America’s facility in California; and Commercial Metals Company’s manufacturing facility in Arizona. In addition to domestic competition, SMB competes with foreign steel producers, principally located in Asia, Canada, Mexico and Central and South America, primarily in shorter length rebar and certain wire rod grades. In recent years, a trend of increasing volumes of imported steel products has been observed in SMB’s primary domestic markets, driven by the global overcapacity in steel-making production and by the relative strength of the U.S. dollar which increases the competitiveness of imports. The principal competitive factors in SMB’s market are price, quality, service, product availability and the relative value of the U.S. dollar. Large volumes of low-priced imports have negatively impacted, and have the potential to continue to negatively impact, the ability of SMB to compete. For more than a decade, SMB, as part of a U.S. industry coalition, has petitioned the U.S. Government under our international trade laws for relief in the form of antidumping and countervailing duties against wire rod and rebar products from a number of foreign countries. Many of those cases have been successful and as of the start of fiscal 2016, antidumping duty orders were in effect related to imports of rebar from Belarus, China, Indonesia, Latvia, Mexico, Moldova, Poland and Ukraine; a countervailing duty order was in effect related to imports of rebar from Turkey; antidumping duty orders were in effect related to imports of wire rod from Brazil, China, Indonesia, Mexico, Moldova and Trinidad and Tobago; and a countervailing duty order was in effect related to imports of wire rod from Brazil. The duties imposed as part of these orders are periodically reassessed through the administrative review process. In addition, every five years the U.S. government conducts sunset reviews to determine whether revocation of the orders would likely lead to resumption of dumping and subsidization and negatively impact the U.S. domestic industry. Affirmative decisions allow the orders to continue for an additional five years. The next sunset reviews for rebar from Belarus, China, Indonesia, Latvia, Moldova, Poland and Ukraine will be in 2017, and for Mexico and Turkey will be in 2019. The next sunset reviews for wire rod from all countries other than China will be in 2017, with the Chinese sunset review scheduled for 2020.

During fiscal 2016, the domestic industry prevailed in an anti-circumvention case related to the Mexican wire rod antidumping duty order. The result of the determination is that the scope of that order will encompass a broader range of wire rod products, potentially reducing wire rod imports. At the same time, antidumping margins on several large Mexican wire rod manufacturers were reduced significantly in the administrative review process.

In August 2016, following a petition from the Canadian domestic industry, the Canada Border Services Agency initiated an antidumping duty investigation of rebar from Belarus, Chinese Taipei, Hong Kong, Japan, Portugal and Spain. That case is pending, but if successful, will result in antidumping duty orders against rebar from those countries which, with the current orders against rebar from China, Korea and Turkey, are expected to generally lead to a reduction in the volume of imports into Canada from these countries.

In September 2016, the domestic industry filed a new petition targeting rebar from Japan, Taiwan and Turkey. The petition alleges dumping of Japanese and Taiwanese rebar, and dumping and unfair subsidization of Turkish rebar

imports, which would apply to any producers not subject to the current order discussed above. The U.S. International Trade Commission will make its preliminary injury determination in November and, if that is affirmative, the case will proceed.

The long-term effectiveness of existing antidumping and countervailing duty orders related to imports of wire rod and rebar products is largely uncertain and is impacted by the U.S. Government's ability to efficiently identify and respond to violations of U.S. international trade laws affecting SMB's business.

9 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Strategic Focus

Use of our Operating Platform to Meet Both Domestic and Global Demand

Our AMR operating platform includes a wide-ranging network of locations that allows us to directly access customers domestically and around the world to meet demand for recycled metal wherever it is greatest. Our seven deep water terminal facilities enable us to bulk load large vessels capable of trans-oceanic shipments, thereby allowing us to efficiently ship products globally. We achieve cost efficiencies because we own the majority of these terminal facilities, which reduces the likelihood of berthing delays often experienced by users of unaffiliated terminals, and because we are able to ship bulk cargoes of up to 50,000 tons, which generally have lower freight costs on a per-ton basis than containerized shipments that hold 20 to 30 tons. We also use an internal and third-party logistics network to transport both ferrous and nonferrous metals by truck, rail and barge to efficiently meet regional domestic demand in our North American market.

Continuous Improvement Initiatives

We are a competitive producer of both recycled metal and finished steel products. In order to maximize the operating income for both operations, we have historically focused on, and will continue to emphasize, continuous improvement programs, including productivity initiatives and technology investments which seek to maximize ferrous and nonferrous scrap metal recovery and to improve productivity in our steel manufacturing operations. The objective of these programs is to identify areas in existing processes that could be made more efficient or where current performance could be improved and to recommend and implement solutions that could increase revenues or reduce costs by increasing output, recovery and productivity.

In recent years, we undertook a number of productivity improvements and restructuring initiatives designed to reduce operating expenses and improve profitability, including further integration among our operating platforms. In fiscal 2014, we implemented productivity improvement and restructuring initiatives which achieved a reduction in annual pre-tax operating costs of \$40 million and were completed by the end of fiscal 2015. The benefits associated with these initiatives occurred primarily as a result of a combination of headcount reductions, implementation of operational efficiencies, reduced lease costs and other productivity improvements.

In fiscal 2015, we initiated and implemented restructuring initiatives including idling underutilized metals recycling assets and closing seven auto parts stores to more closely align our business to the prevalent market conditions. We also implemented measures focused on further reducing our annual operating expenses at Corporate and AMR through headcount reductions, reducing organizational layers, consolidating shared services functions and other non-headcount measures. Additional cost savings and productivity improvement initiatives, including additional reductions in personnel, savings from procurement activities, streamlining of administrative and supporting services functions, and adjustments to our operating capacity through additional facility closures, were identified and initiated in fiscal 2016 as an expansion of the fiscal 2015 restructuring initiatives. Together, these fiscal 2015 and 2016 initiatives target an improvement in annual pre-tax operating results of \$95 million, of which we achieved approximately \$78 million of benefits in our fiscal 2016 results, with the full annual benefits expected to be substantially achieved in fiscal 2017. See Note 8 - Discontinued Operations and Note 10 - Restructuring Charges and Other Exit-Related Activities in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for further details.

During fiscal 2016, 2015 and 2014, we spent \$35 million, \$32 million and \$39 million, respectively, on capital improvements. These capital expenditures primarily reflect our significant investments in modern equipment to improve the efficiency and capabilities of our businesses in order to further maximize our economies of scale and to comply with environmental regulations. Our capital expenditures in fiscal 2016 included costs to upgrade our equipment and infrastructure and expand on our investments in environmental and safety-related assets. We currently plan to invest in the range of \$45 million in capital expenditures on similar projects in fiscal 2017, exclusive of any acquisitions.

Integrated Operations Maximize Opportunities for Synergies, Cost Efficiencies and Volumes

In the fourth quarter of fiscal 2015, we combined our auto parts and metals recycling businesses into a single operating platform to further optimize the efficiencies within the platform, enable additional synergies to be captured

throughout our supply chain and global sales channel, and more effectively leverage our shared services functions. Through our integrated operating platform, we also seek to generate operational efficiencies through the use of regionally-based supply networks and national commercial market activities. Operations at 97 facilities support relationships within our existing and potential supply channels to maximize available volumes, and our commercial flexibility and management operating systems benefit the entire value chain, which enhances our ability to adjust to market changes. In addition, we have implemented operational efficiencies and cost savings through the reduction of management layers and consolidated shared services functions including in finance, information technology, non-scrap procurement, environmental, safety and human resources functions.

10 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Environmental Matters

## Impact of Legislation and Regulation

Compliance with environmental laws and regulations is a significant factor in our operations. Our businesses are subject to extensive local, state and federal environmental protection, health, safety and transportation laws and regulations relating to, among others:

- The U.S. Environmental Protection Agency (“EPA”);
- Remediation under the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”);
- The discharge of materials and emissions into the air;
- The prevention and remediation of soil and groundwater contamination;
- The management and treatment of wastewater and storm water;
- Global climate change;
- The treatment, handling and/or disposal of solid waste and hazardous waste; and
- The protection of our employees’ health and safety.

These environmental laws regulate, among other things, the release and discharge of hazardous materials into the air, water and ground; exposure to hazardous materials; and the identification, storage, treatment, handling and disposal of hazardous materials. Environmental legislation and regulations have changed rapidly in recent years, and it is likely that we will be subject to even more stringent environmental standards in the future.

Concern over climate change, including the impact of global warming, has led to significant U.S. and international regulatory and legislative initiatives to limit greenhouse gas (“GHG”) emissions. In 2007, the U.S. Supreme Court ruled that the EPA was authorized to regulate carbon dioxide under the U.S. Clean Air Act. As a consequence, the EPA initiated a series of regulatory efforts aimed at addressing greenhouse gases as pollutants, including finding that GHG emissions endanger public health, implementing mandatory GHG emission reporting requirements, setting carbon emission standards for light-duty vehicles and taking other steps to address GHG emissions. Legislation has also been proposed in the U.S. Congress to address GHG emissions and global climate change, including “cap and trade” programs, and some form of federal climate change legislation or additional federal regulation is possible. In addition, we are required to annually report GHG emissions from our steel mill to the State of Oregon Department of Environmental Quality and the EPA. A number of other states, including states in which we have operations and facilities, have considered, are considering or have already enacted legislation to develop information or address climate change and GHG emissions, as well.

Although our objective is to maintain compliance with applicable environmental regulations, we have, in the past, been found to be not in compliance with certain environmental laws and regulations and have incurred liabilities, expenditures, fines and penalties associated with such violations. In December 2000, we were notified by the EPA that we are one of the potentially responsible parties that owns or operates, or formerly owned or operated, sites which are part of or adjacent to the Portland Harbor Superfund site (see discussion in Risk Factors in Part I, Item 1A and Note 9 – Commitments and Contingencies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report). In fiscal 2016, capital expenditures related to ongoing environmental compliance were \$14 million, and we expect to spend in the range of \$19 million on capital expenditures for ongoing environmental compliance in fiscal 2017.

## Indirect Consequences of Future Legislation and Regulation

Increased regulation regarding climate change and GHG emissions could impose significant costs on our business and our customers and suppliers, including increased energy, capital equipment, environmental monitoring and reporting and other costs in order to comply with regulations concerning climate change and GHG emissions. The potential costs of allowances, offsets or credits that may be part of “cap and trade” programs or similar future regulatory measures are still uncertain. Any adopted future climate change and GHG regulations could negatively impact our ability (and that of our customers and suppliers) to compete with companies situated in areas not subject to such limitations. Furthermore, even without such regulation, increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the metals recycling and steel manufacturing industries could harm our reputation and reduce customer demand for our products.

GHG legislation and regulation is also expected to have an effect on the price of electricity, especially when generated using carbon-based fuels. Since the electricity supply for SMB includes a significant element of hydro-generated production, SMB's energy costs are less likely to be impacted than those of competitors using electricity generated by carbon-based fuels. In addition, demand for scrap metal may increase as a result of mills with blast furnaces seeking to maximize the scrap metal component of raw material infeed, as melting scrap metal involves less energy than is required for melting iron ore.

11 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Since the use of recycled iron and steel instead of iron ore to make new steel results in savings in the consumption of energy, virgin materials and water and reduces mining wastes, we believe our recycled metal products position us to be more competitive in the future for business from companies wishing to reduce their carbon footprint and impact on the environment. In addition, our EAF generates significantly less GHG emissions than traditional blast furnaces.

**Physical Impacts of Climate Change on Our Costs and Operations**

There has been public discussion that climate change may be associated with rising sea levels as well as extreme weather conditions such as more intense hurricanes, thunderstorms, tornadoes and snow or ice storms. Extreme weather conditions may increase our costs or cause damage to our facilities, and any damage resulting from extreme weather may not be fully insured. As many of our recycling facilities are located near deep water ports, significantly rising sea levels may disrupt our ability to receive scrap metal, process the scrap metal through our mega-shredders and ship product to our customers. Periods of extended adverse weather conditions may inhibit the supply of scrap metal to AMR and SMB. In addition, sustained periods of increased temperature levels in the summer in areas where our retail auto parts operations are located could result in less customer traffic, thus resulting in reduced admissions and parts sales.

**Employees**

As of September 30, 2016, we had 2,818 full-time employees, consisting of 2,245 employees at AMR, 406 employees at SMB and 167 corporate administrative employees. Of these employees, 639 were covered by collective bargaining agreements. The SMB contract with the United Steelworkers of America, which covers 293 of these employees, was renewed and ratified in April 2016 and will expire on March 31, 2019. We believe that in general our labor relations are good.

**Available Information**

Our internet address is [www.schnitzersteel.com](http://www.schnitzersteel.com). The content of our website is not incorporated by reference into this Annual Report on Form 10-K. We make available on our website, free of charge, under the caption “Investors – SEC Filings” our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after electronically filing with or furnishing such materials to the Securities and Exchange Commission (“SEC”) pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934.

We may use our website as a channel of distribution of material Company information. Financial and other material information regarding our Company is routinely posted on and accessible at <http://www.schnitzersteel.com/investors.aspx>. In addition, you may automatically receive e-mail alerts and other information about our Company by visiting the “E-mail Alerts” section at <http://www.schnitzersteel.com/investors.aspx> and registering your email address.

**ITEM 1A. RISK FACTORS**

Described below are risks, which are categorized as “Risk Factors Relating to Our Business,” “Risk Factors Relating to the Regulatory Environment” and “Risk Factors Relating to Our Employees,” that could have a material adverse effect on our results of operations, financial condition and cash flows or could cause actual results to differ materially from the results contemplated by the forward-looking statements contained in this Annual Report. See “Forward-Looking Statements” that precedes Part I of this report. Additional risks and uncertainties that we are unaware of or that we currently deem immaterial may in the future have a material adverse effect on our results of operations, financial condition and cash flows.

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Risk Factors Relating to Our Business

Potential costs related to the environmental cleanup of Portland Harbor may be material to our financial position and liquidity

In December 2000, we were notified by the EPA under CERCLA that we are one of the potentially responsible parties (“PRP”) that owns or operates or formerly owned or operated sites which are part of or adjacent to the Portland Harbor Superfund site (the “Site”). The precise nature and extent of any cleanup of the Site, the parties to be involved, the process to be followed for any cleanup and the allocation of the costs for any cleanup among responsible parties have not yet been determined, but the process of identifying additional PRPs and beginning allocation of costs is underway. A group of PRPs referred to as the “Lower Willamette Group” (“LWG”) is conducting a remedial investigation and feasibility study (“RI/FS”) to identify and characterize the contamination at the Site and develop alternative approaches to remediation of the contamination. On March 30, 2012, the LWG submitted to the EPA and made available on its website a draft feasibility study (“FS”) for the Site based on approximately ten years of work and \$100 million in costs classified by the LWG as investigation related. The draft FS submitted by the LWG identified ten possible remedial alternatives which ranged in estimated cost from approximately \$170 million to \$250 million (net present value) for the least costly alternative to approximately \$1.08 billion to \$1.76 billion (net present value) for the most costly and estimated a range of two to 28 years to implement the remedial work, depending on the selected alternative. However, the EPA largely rejected this draft FS, and took over the drafting process. The EPA provided their revised draft FS to the LWG and other key stakeholders in sections, with the final section being made available in August 2015. The revised draft FS identified five possible remedial alternatives which ranged in estimated cost from approximately \$550 million to \$1.19 billion (net present value) for the least costly alternative to approximately \$1.71 billion to \$3.67 billion (net present value) for the most costly and estimated a range of four to 18 years to implement the remedial work, depending on the selected alternative.

In November 2015, EPA Region 10 presented its preferred alternative remedy to the National Remedy Review Board (“NRRB”), a peer review group that has been established to review proposed Superfund cleanup decisions for consistency with the Superfund statute, regulations, and guidance. EPA Region 10’s preferred alternative presented to the NRRB was a modified version of one of the alternatives (Alternative E) in the revised draft FS, and EPA Region 10 estimated that its preferred alternative would take seven years to implement, with an estimated cost of \$1.4 billion (net present value).

In June 2016, the EPA issued its Proposed Plan for the cleanup of the in-river portion of the Site. In the Proposed Plan, the EPA identified its preferred alternative, which includes a combination of dredging, capping, and enhanced natural recovery and which the EPA estimates will take approximately seven years to construct with additional time for monitored natural recovery to occur and cost an estimated \$746 million (net present value). This is approximately half of the estimated \$1.4 billion (net present value) cost of the very similar preferred alternative that EPA Region 10 presented in November 2015. The Proposed Plan also describes other alternatives that were considered and the criteria the EPA used to compare the alternatives, including estimated costs and construction timelines. In conjunction with the Proposed Plan, the EPA issued its final FS in June 2016. The final FS identifies eight possible remedial alternatives (some of which contain two disposal alternatives, for a total of 13 possible alternative remedial scenarios) which ranged in estimated cost from approximately \$316 million to \$677 million (net present value) for the least costly alternative to approximately \$1.21 billion to \$2.67 billion (net present value) for the most costly alternative that the EPA did not screen out and estimates a range of four to 19 years to implement the remedial work, depending on the selected alternative. The final FS includes one alternative (Alternative H) which would involve capping/dredging the entire Site with an estimated cost range from approximately \$6.61 billion to \$14.29 billion and 62 years to implement. The EPA screened out this Alternative H due to implementability and cost considerations. Each of the draft and final FS also contains a No Action alternative considered as a baseline for comparison with the other alternatives. The FS and the Proposed Plan do not determine or allocate the responsibility for remediation costs.

Issuance of the Proposed Plan is part of the continuing process for evaluation and remediation of the Site. There was a 90-day public comment period on the Proposed Plan that closed on September 6, 2016. Approximately 5,300 commenters submitted comments. Following its review and consideration of these comments, the EPA will prepare a

summary responding to the submitted comments and select a remedy for the Site in a Record of Decision (“ROD”). The EPA has indicated that it plans to issue the ROD by the end of 2016 or in early January 2017. In the ROD, the EPA may modify the preferred alternative or select a different alternative than that presented in the Proposed Plan based on new information or public comments. It is uncertain whether the preferred alternative identified by the EPA in the Proposed Plan will be the selected remedy in the ROD or whether the EPA will be able to maintain its proposed schedule for issuing the ROD. Even when the ROD is issued, it is likely that there will continue to be significant uncertainty regarding the costs of the selected remedy.

13 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

The Company and other stakeholders have identified a number of serious concerns regarding the EPA's risk and remedial alternatives assessments and the EPA's cost estimates, scheduling assumptions and conclusions regarding the feasibility, effectiveness, community impact and assignment of remediation technologies. The EPA's FS and Proposed Plan are based on data that are more than a decade old and may not accurately represent site or background conditions. In its Proposed Plan, the EPA acknowledged that the assumptions used to estimate costs for the remedial alternatives were developed based on the existing data and will be finalized during the remedial design, after design level data to refine the baseline conditions are obtained. In addition, the FS and Proposed Plan provide only site-wide cost estimates and do not provide sufficient detail regarding costs for specific sediment management areas. Accordingly, it is anticipated that additional pre-remedial design investigative work will need to occur after the ROD is issued in order to provide a re-baseline for costs and determine particular remedial actions for specific areas within the Site. The next phase in the process following the ROD is the remedial design. The remedial design phase is an engineering phase during which additional technical information and data will be collected, identified and incorporated into technical drawings and specifications developed for the subsequent remedial action. The EPA will be seeking a new coalition of PRPs to perform the remedial design activities. Remediation activities are not expected to commence for a number of years and responsibility for implementing and funding the EPA's selected remedy will be determined in a separate allocation process. While an allocation process is currently underway, the EPA's FS and its approach to the proposed alternative remedies have raised questions and uncertainty as to how that allocation process will proceed. Because there has not been a determination of the total cost of the investigations, the remediation that will be required, the amount of natural resource damages or how the costs of the ongoing investigations and any remedy and natural resource damages will be allocated among the PRPs, the Company believes it is not possible to reasonably estimate the amount or range of costs which it is likely to or which it is reasonably possible that it will incur in connection with the Site, although such costs could be material to the Company's financial position, results of operations, cash flows and liquidity.

Significant cash outflows in the future related to the Site could reduce the amount of our borrowing capacity that could otherwise be used for investment in capital expenditures, acquisitions, dividends and share repurchases. Any material liabilities incurred in the future related to the Site could result in our failure to maintain compliance with certain covenants in our debt agreements. See "Contingencies – Environmental" in Note 9 – Commitments and Contingencies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

We operate in industries that are cyclical and sensitive to general economic conditions, which could have a material adverse effect on our operating results, financial condition and cash flows

Demand for most of our products is cyclical in nature and sensitive to general economic conditions. The timing and magnitude of the cycles in the industries in which our products are used, including global steel manufacturing and residential construction in the U.S., are difficult to predict. The cyclical nature of our operations tends to reflect and be amplified by changes in economic conditions, both domestically and internationally, and foreign currency exchange fluctuations. Economic downturns or a prolonged period of slow growth in the U.S. and foreign markets or any of the industries in which we operate could have a material adverse effect on our results of operations, financial condition and cash flows. While we believe that drivers such as infrastructure growth in developing economies and demand for environmentally sustainable raw materials will continue to drive long-term global demand for recycled metal, we are unable to predict the duration of the current challenging economic and industry conditions that are contributing to a weaker demand environment for our products and constrained supply of raw materials.

Instability in international markets may adversely affect our business, financial position and results of operations. We generate a substantial portion of our revenues from sales to customers located outside the U.S. including countries in Asia, the Mediterranean region and North, Central and South America. Our ability to sell our products profitably to international markets is subject to a number of risks including the adverse impacts of political, military, terrorist or major pandemic events; local labor and social issues; legal and regulatory requirements or limitations imposed by foreign governments including quotas, tariffs or other protectionist trade barriers, adverse tax law changes, nationalization or currency restrictions; and disruptions or delays in shipments caused by customs compliance or government agencies. The occurrence of such events and conditions may adversely affect our business, financial

position and results of operations.

14 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

Changes in the availability or price of raw materials and end-of-life vehicles could reduce our sales. Our businesses require certain materials that are sourced from third-party suppliers. Although the synergies from our integrated operations allow us to be our own source for some raw materials, particularly with respect to scrap metal for SMB, we rely on other suppliers for most of our raw material needs. Industry supply conditions generally involve risks, including the possibility of shortages of raw materials, increases in raw material costs and reduced control over delivery schedules. We procure our scrap inventory from numerous sources. These suppliers generally are not bound by long-term contracts and have no obligation to sell scrap metal to us. In periods of declining or lower scrap metal prices, such as the declining price environment we experienced in fiscal 2015 and the first half of fiscal 2016, suppliers may elect to hold scrap metal to wait for higher prices or intentionally slow their metal collection activities tightening supply. If a substantial number of suppliers cease selling scrap metal to us, we will be unable to recycle metal at desired levels, and our results of operations and financial condition could be materially adversely affected. A slowdown of industrial production in the U.S. may also reduce the supply of industrial grades of metal to the metals recycling industry, resulting in less recyclable metal available to process and market. Increased competition for domestic scrap metal, including as a result of overcapacity in the scrap recycling industry in the U.S. and Canada, may also reduce the supply of scrap metal available to us. Failure to obtain a steady supply of scrap material could both adversely impact our ability to meet sales commitments and reduce our operating margins. Failure to obtain an adequate supply of end-of-life vehicles could adversely impact our ability to attract customers and charge admission fees and reduce our parts sales. Failure to obtain raw materials, such as alloys used in the steel-making process, could adversely impact our ability to make steel to the specifications of our customers.

Significant decreases in scrap metal prices may adversely impact our operating results

The timing and magnitude of the cycles in the industries in which we operate are difficult to predict and are influenced by different economic conditions in the domestic market, where we typically acquire our raw materials, and foreign markets, where we typically sell the majority of our products. Purchase prices for scrap metal including end-of-life vehicles and selling prices for recycled scrap metal are volatile and beyond our control. In recent years, particularly fiscal 2015 and the first half of fiscal 2016, scrap metal prices experienced a significant downward trend caused primarily by the weak macroeconomic conditions and global steel-making overcapacity, which was further exacerbated by the impact of lower iron ore prices, a raw material used in steel-making in blast furnaces which compete with EAF steel-making production that uses ferrous scrap as its primary feedstock. While we attempt to respond to changing recycled scrap metal selling prices through adjustments to our metal purchase prices, our ability to do so is limited by competitive and other market factors. As a result, we may not be able to reduce our metal purchase prices to fully offset a sharp reduction in recycled scrap metal sales prices, which may adversely impact our operating income and cash flows. For example, in fiscal 2015 and the first half of fiscal 2016, lower demand for recycled scrap metal relative to demand and competition for supply of unprocessed scrap metal in the domestic market compressed operating margins due to selling prices decreasing at a faster rate than purchase prices for unprocessed scrap metal. In addition, a rapid decrease in selling prices may compress our operating margins due to the impact of average inventory cost accounting, which causes cost of goods sold recognized in the Consolidated Statements of Operations to decrease at a slower rate than metal purchase prices and net selling prices.

Imbalances in supply and demand conditions in the global steel industry may reduce demand for our products. Economic expansions and contractions in global economies can result in supply and demand imbalances in the global steel industry that can significantly affect the price of commodities used and sold by our business, as well as the price of and demand for finished steel products. In a number of foreign countries, such as China, steel producers are generally government-owned and may therefore make production decisions based on political or other factors that do not reflect free market conditions. In recent years, overcapacity and excess steel production in these foreign countries resulted in the export of aggressively priced semi-finished and finished steel products. This led to disruptions in steel-making operations within other countries, negatively impacting demand for our recycled scrap metal products used by EAF mills globally as their primary feedstock. Further, the import of foreign steel products into the U.S. at similarly aggressive prices adversely impacted sales prices and sales volumes at SMB. Existing trade laws and regulations may be inadequate to prevent disadvantageous trade practices, which could have a material adverse effect

on our financial condition and results of operations. Although trade regulations restrict or impose duties on the importation of certain products, if foreign steel production significantly exceeds consumption in those countries, global demand for our recycled scrap metal products could decline and imports of steel products into the U.S. could increase, resulting in lower volumes and selling prices for AMR's recycled metal products and SMB's finished steel products.

15 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

**Goodwill impairment charges may adversely affect our operating results**

Goodwill represents the excess purchase price over the net amount of identifiable assets acquired and liabilities assumed in a business combination measured at fair value. We have a substantial amount of goodwill on our balance sheet generated in connection with our acquisitions and business growth strategy. We test the goodwill balances allocated to our reporting units for impairment on an annual basis and when events occur or circumstances change that indicate that the fair value of one or more of our reporting units may be below its carrying amount. A decline in the quoted market price of our stock could denote a triggering event indicating that goodwill may be impaired. When testing goodwill for impairment, we determine fair value using an income approach based on the present value of expected future cash flows utilizing a market-based weighted average cost of capital (“WACC”). Given that market prices of our reporting units are not readily available, we make various estimates and assumptions in determining the fair value of the reporting units, including estimating revenue growth rates, operating margins, capital expenditures, working capital requirements, tax rates, terminal growth rates, discount rate, benefits associated with a taxable transaction and synergistic benefits available to market participants. We corroborate the reporting units’ valuation using a market approach based on earnings multiple data and a reconciliation between our market capitalization and our estimate of the aggregate fair value of the reporting units, including consideration of a control premium. Fair value determinations require considerable judgment and are sensitive to inherent uncertainties and changes in the estimates and assumptions described above.

In the second quarter of fiscal 2015, management identified the combination of a significant further weakening in market conditions, continued constrained supply of raw materials due to the lower price environment which negatively impacted volumes, the planned idling or closure of certain production facilities and retail stores, our recent financial performance and a decline in our market capitalization during the first half of fiscal 2015 as a triggering event requiring an interim impairment test of goodwill allocated to our reporting units. The impairment test resulted in a non-cash goodwill impairment charge of \$141 million representing the entire carrying amount of the former MRB reporting unit's goodwill as of the measurement date of February 1, 2015.

In the second quarter of fiscal 2016, we identified the combination of sustained weak market conditions, including the adverse effects of lower commodity selling prices and the constraining impact of the lower price environment on the supply of raw materials which negatively impacted volumes, our recent financial performance and a decline in our market capitalization as a triggering event requiring an interim impairment test of goodwill allocated to our reporting units. The impairment test resulted in a non-cash goodwill impairment charge of \$9 million at a reporting unit within the AMR operating segment. For the other reporting unit with \$166 million of goodwill as of February 1, 2016, the estimated fair value of the reporting unit exceeded its carrying value by approximately 27% and, therefore, no goodwill impairment was identified.

In the fourth quarter of fiscal 2016, we performed the annual goodwill impairment test as of July 1, 2016. As of the testing date, the balance of our goodwill of \$167 million was carried by a single reporting unit within the AMR operating segment. We elected to first assess qualitative factors to determine whether the existence of events or circumstances led to a determination that it is more likely than not that the estimated fair value of the reporting unit is less than its carrying amount. As a result of the qualitative assessment, we concluded that it is not more likely than not that the fair value of the reporting unit is less than its carrying value as of the testing date and, therefore, no further impairment testing was required.

Declines in market conditions from current levels, a trend of weaker than anticipated financial performance for the reporting unit with allocated goodwill, a decline in our share price from current levels for a sustained period of time, or an increase in the market-based WACC, among other factors, could significantly impact our impairment analysis and may result in further goodwill impairment charges that, if incurred, could have a material adverse effect on our financial condition and results of operations. See Critical Accounting Policies and Estimates in Part II, Item 7 of this report.

**Impairment of long-lived assets and joint venture investments may adversely affect our operating results**

Long-lived assets are subject to an impairment assessment when certain triggering events or circumstances indicate that their carrying value may be impaired. If the carrying value exceeds our estimate of future undiscounted cash



flows of the operations related to the asset, an impairment is recorded for the difference between the carrying amount and the fair value of the asset. The results of these tests for potential impairment may be adversely affected by unfavorable market conditions, the Company's financial performance trends, or an increase in interest rates, among other factors. If as a result of the impairment test we determine that the fair value of any of our long-lived assets is less than its carrying amount, we may incur an impairment charge that could have a material adverse effect on our financial condition and results of operations. We recorded impairment charges on long-lived tangible and intangible assets associated with certain regional metals recycling operations and used auto parts store locations in the amount of \$8 million and \$44 million during fiscal 2016 and 2015, respectively. With respect to our investments in joint ventures accounted for under the equity method, a loss in value of an investment that is other than a temporary decline is recognized. Once we determine that an other-than-temporary impairment exists, we may incur an impairment charge that could have a material adverse effect on our results of operations. We recorded an impairment charge of \$2 million during fiscal 2016 related to an investment in a joint venture. See Note 2 - Summary of Significant Accounting Policies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for further detail on long-lived asset and joint venture investment impairment charges.

16 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

Our productivity improvement and restructuring initiatives may not achieve the expected benefits or cost reductions. We have undertaken a number of productivity improvements and restructuring initiatives designed to reduce operating expenses and improve profitability and to achieve further integration and synergistic cost efficiencies in our operating platform. In fiscal 2015 and 2016, restructuring initiatives included idling underutilized assets and closing facilities to more closely align our business to market conditions, implementing productivity initiatives to increase production efficiency and material recovery, and further reducing our annual operating expenses through headcount reductions, reducing organizational layers, consolidating shared service functions, savings from procurement activities, streamlining of administrative and supporting services functions, and other non-headcount measures. Our ability to achieve the anticipated cost savings and other benefits from these initiatives within the expected time frame is subject to many estimates and assumptions. These estimates and assumptions are subject to significant economic, competitive and other uncertainties, some of which are beyond our control. We have incurred restructuring charges and other exit-related activities in fiscal 2014, 2015 and 2016 as a result of these initiatives and expect to incur restructuring charges and other-exit-related activities associated with these initiatives through fiscal 2017. Failure to achieve or sustain the expected cost reductions and benefits related to these restructuring initiatives could have a material adverse effect on our results of operations and cash flows.

Acquisitions and integration of acquired businesses may result in operating difficulties and other unintended consequences.

We may make acquisitions of complementary businesses to enable us to enhance our customer base and grow our revenues. Execution of any past or potential future acquisition involves a number of risks, including:

- Difficulty integrating the acquired businesses' personnel and operations;
- Potential loss of key employees or customers of the acquired business;
- Difficulties in realizing anticipated cost savings, efficiencies and synergies;
- Unexpected costs;
- Inaccurate assessment of or undisclosed liabilities;
- Inability to maintain uniform standards, controls and procedures; and
- Difficulty in managing growth.

If we do not successfully execute on acquisitions and the acquired businesses do not perform as projected, our financial condition and results of operations could be materially adversely affected.

Changing economic conditions may result in customers not fulfilling their contractual obligations.

We enter into export ferrous sales contracts preceded by negotiations that include fixing price, quantity, shipping terms and other contractual terms. Upon finalization of these terms and satisfactory completion of other contractual contingencies, the customer typically opens a letter of credit to satisfy its payment obligation under the contract prior to our shipment of the cargo. Although not considered normal course of business, in times of changing economic conditions, including during periods of sharply falling scrap metal prices such as those experienced in fiscal 2015, there is an increased risk that customers may not be willing or able to fulfill their contractual obligations or open letters of credit. For example, in fiscal 2015, the resale or modification of the terms, each at significantly lower prices, of certain previously contracted bulk shipments had a \$7 million negative impact on our operating results. As of August 31, 2016 and 2015, 34% and 28%, respectively, of our trade accounts receivable balance were covered by letters of credit.

Further increases in the value of the U.S. dollar relative to other currencies may reduce the demand for our products. A significant portion of AMR's revenues is generated from sales to foreign customers, which are denominated in U.S. dollars, including customers located in Asia, Africa and Europe. A strengthening U.S. dollar, as experienced in fiscal 2015 and continuing into fiscal 2016, makes our products more expensive for non-U.S. customers, which may negatively impact export sales. A strengthening U.S. dollar also makes imported metal products less expensive, which may result in an increase in imports of steel products into the U.S. As a result, our finished steel products, which are made in the U.S., may become more expensive for our U.S. customers relative to imported steel products thereby reducing demand for our products.

We are exposed to translation and transaction risks associated with fluctuations in foreign currency exchange rates. Hedging instruments may not be effective in mitigating such risks and may expose us to losses or limit our potential gains.

Our operations in Canada expose us to translation and transaction risks associated with fluctuations in foreign currency exchange rates as compared to the U.S. dollar, our reporting currency. As a result, we are subject to foreign currency exchange risks due to exchange rate movements in connection with the translation of the operating costs and the assets and liabilities of our foreign operations into our functional currency for inclusion in our Consolidated Financial Statements.

17 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

We are also exposed to foreign currency exchange transaction risk. As part of our risk management program, we may use financial instruments, including foreign currency exchange forward contracts. While intended to reduce the effects of fluctuations in foreign currency exchange rates, these instruments may not be effective in reducing all risks related to such fluctuations and may limit our potential gains or expose us to losses. Although we do not enter into these instruments for trading purposes or speculation, and our management believes all such instruments are entered into as hedges of underlying physical transactions, these instruments are dependent on timely performance by our counterparties. Should our counterparties to such instruments or the sponsors of the exchanges through which these transactions are offered fail to honor their obligations due to financial distress or otherwise, we would be exposed to potential losses or the inability to recover anticipated gains from the transactions covered by these instruments.

Potential limitations on our ability to access capital resources may restrict our ability to operate

Our operations are capital intensive. Our business also requires substantial expenditures for routine maintenance. While we expect that our cash requirements, including the funding of capital expenditures, debt service, dividends, and share repurchases, will be financed by internally generated funds or from borrowings under our secured committed bank credit facility, there can be no assurance that this will be the case. Additional acquisitions could require financing from external sources.

Although we believe we have adequate access to contractually committed borrowings, we could be adversely affected if our banks were unable to honor their contractual commitments or ceased lending. Failure to access our credit facilities could restrict our ability to fund operations, make capital expenditures or execute acquisitions.

The agreement governing our bank credit facility imposes certain restrictions on our business and contains financial covenants

Our secured bank credit facilities contain certain restrictions on our business which limit (subject to certain exceptions) our ability to, among other things, incur or suffer to exist certain liens, make investments, incur or guaranty additional indebtedness, enter into consolidations, mergers, acquisitions, and sales of assets, make distributions and other restricted payments, change the nature of our business, engage in transactions with affiliates and enter into restrictive agreements, including agreements that restrict the ability of our subsidiaries to make distributions. These restrictions may affect our ability to operate our business or execute our strategy and may limit our ability to take advantage of potential business opportunities as they arise. Our bank credit agreement also requires that we maintain certain financial and other covenants, including a consolidated fixed charge coverage ratio, a consolidated leverage ratio, and a consolidated asset coverage ratio. Our ability to comply with these covenants may be affected by events beyond our control, including prevailing economic, financial and industry conditions. Our failure to comply with any of these restrictions or financial covenants could result in an event of default under the bank credit agreement, and permit our lenders to cease lending to us and declare all amounts borrowed from them to be due and payable, together with accrued and unpaid interest. This could require us to refinance our bank facilities, which we may not be able to do at terms acceptable to us, or at all.

Consolidation in the steel industry may reduce demand for our products

There has been a significant amount of consolidation in the steel industry in recent years that has included steel mills acquiring steel fabricators to ensure demand for their products. If any of SMB's significant remaining customers were to be acquired by competing steel mills, this could reduce the demand for our products and force us to lower our prices, reducing our revenues, or to reduce production, which could increase our unit costs and have a material adverse effect on our financial condition and results of operations.

Failure to realize expected benefits from investments in processing and manufacturing technology may impact our operating results and cash flows

We make significant investments in processing and manufacturing technology improvements aimed at increasing the efficiency and capabilities of our businesses and to maximize our economies of scale. Failure to realize the anticipated benefits and generate adequate returns on such capital improvement projects may have a material adverse effect on our results of operations and cash flows.

Reliance on third party shipping companies may restrict our ability to ship our products

AMR and SMB generally rely on third parties to handle and transport raw materials to their production facilities and products to customers. Despite our practice of utilizing a diversified group of suppliers of transportation, factors beyond our control, including changes in fuel prices, political events, governmental regulation of transportation, changes in market rates, carrier availability, carrier bankruptcy, shipping industry consolidation and disruptions in transportation infrastructure, may adversely impact our ability to ship our products. These impacts could include delays or other disruptions in shipments in transit or third party shipping companies increasing their charges for transportation services or otherwise reducing or eliminating the availability of their vehicles or ships. As a result, we may not be able to transport our products in a timely and cost-effective manner, which could have a material adverse effect on our financial condition and results of operations and may harm our reputation.

18 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Equipment upgrades, equipment failures and facility damage may lead to production curtailments or shutdowns. Our recycling and manufacturing processes depend on critical pieces of equipment, including shredders, nonferrous sorting technology, furnaces and a rolling mill, which may be out of service occasionally for scheduled upgrades or maintenance or as a result of unanticipated failures. Our facilities are subject to equipment failures and the risk of catastrophic loss due to unanticipated events such as fires, earthquakes, accidents or violent weather conditions. We have insurance to cover certain of the risks associated with equipment damage and resulting business interruption, but there are certain events that would not be covered by insurance and there can be no assurance that insurance will continue to be available on acceptable terms. Interruptions in our processing and production capabilities and shutdowns resulting from unanticipated events could have a material adverse effect on our financial condition, results of operations and cash flows.

Product liability claims may adversely impact our operating results

We could inadvertently acquire radioactive scrap metal that could potentially be included in mixed scrap metal shipped to consumers worldwide. Although we have invested in radiation detection equipment in the majority of our locations, including the facilities from which we ship directly to customers, failure to detect radioactive scrap metal remains a possibility. Even though we maintain insurance to address the risk of this failure in detection, there can be no assurance that the insurance coverage would be adequate or will continue to be available on acceptable terms. In addition, if we fail to meet contractual requirements for a product, we may be subject to product warranty costs and claims. These costs and claims could both have a material adverse effect on our financial condition and results of operations and harm our reputation.

We are subject to legal proceedings and legal compliance risks that may adversely impact our financial condition, results of operations and liquidity

We spend substantial resources ensuring that we comply with domestic and foreign regulations, contractual obligations and other legal standards. Notwithstanding this, we are subject to a variety of legal proceedings and compliance risks in respect of various matters, including regulatory, safety, environmental, employment, transportation, intellectual property, contractual, import/export, international trade and governmental matters that arise in the course of our business and in our industry. For information regarding our current significant legal proceedings, see “Legal Proceedings” in Part I, Item 3 of this report. A negative outcome in an unusual or significant legal proceeding or compliance investigation in excess of insurance recoveries could adversely affect our financial condition and results of operations.

Climate change may adversely impact our facilities and our ongoing operations

The potential physical impacts of climate change on our operations are highly uncertain and depend upon the unique geographic and environmental factors present, for example rising sea levels at our deep water port facilities, changing storm patterns and intensities, and changing temperature levels. As many of our recycling facilities are located near deep water ports, rising sea levels may disrupt our ability to receive scrap metal, process the scrap metal through our mega-shredders and ship products to our customers. Periods of extended adverse weather conditions may inhibit the supply of scrap metal to AMR and SMB, which could have an adverse effect on our sales or cause us to fail to meet our sales commitments. In addition, sustained periods of increased temperature levels in the summer in areas where our auto store operations are located could result in reduced customer traffic, thus resulting in lower admissions and parts sales.

We may not realize our deferred tax assets in the future

The assessment of recoverability of our deferred tax assets is based on an evaluation of existing positive and negative evidence as to whether it is more likely than not that they will be realized. If negative evidence outweighs positive evidence, a valuation allowance is required. Impairment of deferred tax assets may result from significant negative industry or economic trends, a decrease in earnings performance and projections of future taxable income, adverse changes in laws or regulations and a variety of other factors. Impairment of deferred tax assets could have a material adverse impact on our results of operations and financial condition and could result in not realizing the deferred tax assets. In recent years, we have recorded significant valuation allowances against our deferred tax assets, and our low annual effective tax rate in fiscal 2016 is primarily the result of our full valuation allowance position. Deferred tax

assets generated in future periods may require further valuation allowances if it is not more likely than not that the deferred tax assets will be realized.

Tax increases and changes in tax rules may adversely affect our financial results

As a company conducting business on a global basis with physical operations throughout North America, we are exposed, both directly and indirectly, to the effects of changes in U.S., state, local and foreign tax rules. Taxes for financial reporting purposes and cash tax liabilities in the future may be adversely affected by changes in such tax rules. In many cases, such changes put us at a competitive disadvantage compared to some of our major competitors, to the extent we are unable to pass the tax costs through to our customers.

19 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

A cybersecurity incident may adversely impact our financial condition, results of operations and reputation. We face global cybersecurity risks and threats on a continual and ongoing basis. These risks and threats range from inadvertent release of sensitive information to sophisticated and targeted measures directed at us. Our operations involve use of multiple systems that process, store and transmit sensitive information about our customers, suppliers, employees, financial position, operating results and strategies. While we are not aware of any material cyber-attacks or breaches of our systems to date, we have and continue to implement measures to safeguard our systems and mitigate potential risks, but there is no assurance that such actions will be sufficient to prevent cyber-attacks or security breaches that manipulate or improperly use our systems, compromise sensitive information, destroy or corrupt data, or otherwise disrupt our operations. The occurrence of such events could negatively impact our reputation and our competitive position and could result in litigation with third parties, regulatory action, loss of business, potential liability and increased remediation costs, any of which could have a material adverse effect on our financial condition and results of operations.

**Risk Factors Relating to the Regulatory Environment**

Environmental regulations may cause us to incur significant compliance costs

Compliance with environmental laws and regulations is a significant factor in our business. We are subject to local, state and federal environmental laws and regulations in the U.S. and other countries relating to, among other matters:

- ♣Waste disposal;
- ♣Air emissions;
- ♣Waste water and storm water management and treatment;
- ♣Soil and groundwater contamination remediation;
- ♣Global climate change;
- ♣Discharge, storage, handling and disposal of hazardous materials; and
- ♣Employee health and safety.

We are also required to obtain environmental permits from governmental authorities for certain operations. Violation of or failure to obtain permits or comply with these laws or regulations could result in our business being fined or otherwise sanctioned by regulators or becoming subject to litigation by private parties. Our operations use, handle and generate hazardous substances. In addition, previous operations by others at facilities that we currently or formerly owned, operated or otherwise used may have caused contamination from hazardous substances. As a result, we are exposed to possible claims under environmental laws and regulations, especially for the remediation of waterways and soil or groundwater contamination. These laws can impose liability for the cleanup of hazardous substances even if the owner or operator was neither aware of nor responsible for the release of the hazardous substances. We have, in the past, been found not to be in compliance with certain of these laws and regulations, and have incurred liabilities, expenditures, fines and penalties associated with such violations. Future environmental compliance costs may increase because of new laws and regulations, changing interpretations and stricter enforcement of current regulations by regulatory authorities, uncertainty regarding adequate pollution control levels, the future costs of pollution control technology and issues related to global climate change. Further, the level of activity by regulatory authorities and non-governmental organizations has increased in recent years. Environmental compliance costs and potential environmental liabilities could have a material adverse effect on our financial condition and results of operations. See the risk factor “Potential costs related to the environmental cleanup of Portland Harbor may be material to our financial position and liquidity” in this Item 1A.

Governmental agencies may refuse to grant or renew our licenses and permits, thus restricting our ability to operate. We conduct certain of our operations subject to licenses, permits and approvals from state and local governments. Governmental agencies often resist the establishment of certain types of facilities in their communities, including auto parts facilities. In addition, from time to time, both the U.S. and foreign governments impose regulations and restrictions on trade in the markets in which we operate. In some countries, governments can require us to apply for certificates or registration before allowing shipment of recycled metal to customers in those countries. There can be no assurance that future approvals, licenses and permits will be granted or that we will be able to maintain and renew the approvals, licenses and permits we currently hold. Failure to obtain these approvals could cause us to limit or



discontinue operations in these locations or prevent us from developing or acquiring new facilities, which could have a material adverse effect on our financial condition and results of operations.

20 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Compliance with existing and new greenhouse gas emission regulations may adversely impact our operating results. Increased regulation regarding climate change and GHG emissions could impose significant costs on our business and our customers and suppliers, including increased energy, capital equipment, environmental monitoring and reporting and other costs in order to comply with regulations concerning and limitations imposed on climate change and GHG emissions. The potential costs of allowances, offsets or credits that may be part of “cap and trade” programs or similar future regulatory measures are still uncertain. Any adopted future climate change and GHG regulations could negatively impact our ability (and that of our customers and suppliers) to compete with companies situated in areas not subject to such limitations. Until the timing, scope and extent of any future regulation becomes known, we cannot predict the effect on our financial condition, operating performance or ability to compete. Furthermore, even without such regulation, increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the metals recycling and steel manufacturing industries could harm our reputation and reduce customer demand for our products. See “Business - Environmental Matters” in Part I, Item 1 of this report for further detail.

**Risk Factors Relating to Our Employees**

Reliance on employees subject to collective bargaining may restrict our ability to operate

Approximately 23% of our full-time employees are represented by unions under collective bargaining agreements, including substantially all of the manufacturing employees at our SMB steel manufacturing facility. As these agreements expire, we may not be able to negotiate extensions or replacements of such agreements on acceptable terms. Any failure to reach an agreement with one or more of our unions may result in strikes, lockouts or other labor actions, including work slowdowns or stoppages, which could have a material adverse effect on our results of operations.

The underfunded status of our multiemployer pension plans may cause us to increase our contributions to the plans. As discussed in Note 13 – Employee Benefits in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report, we contribute to the Steelworkers Western Independent Shops Pension Plan (“WISPP”), a multiemployer plan benefiting union employees of SMB. Because we have no current intention of withdrawing from the WISPP, we have not recognized a withdrawal liability in our consolidated financial statements. However, if such a liability were triggered, it could have a material adverse effect on our results of operations, financial position, liquidity and cash flows. Our contributions to the WISPP could also increase as a result of a diminished contribution base due to the insolvency or withdrawal of other employers who currently contribute to it, the inability or failure of withdrawing employers to pay their withdrawal liability or other funding deficiencies, as we would need to fund the retirement obligations of these employers.

In 2004, the Internal Revenue Service (“IRS”) approved a seven-year extension of the period over which the WISPP may amortize unfunded liabilities, conditioned upon maintenance of certain minimum funding levels. In 2014, the WISPP obtained relief from the specified funding requirements from the IRS, which requires that the WISPP meet a minimum funded percentage on each valuation date and achieve a funded percentage of 100% as of October 1, 2029. Based on the actuarial valuation for the WISPP as of October 1, 2015, the funded percentage (based on the ratio of the market value of assets to the accumulated benefits liability (present value of accrued benefits) using the valuation method prescribed by the IRS) was 74.3%, which satisfies the minimum funded percentage requirements of the IRS.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

## ITEM 2. PROPERTIES

Our facilities and administrative offices by type, including their total acreage, were as follows as of August 31, 2016:

Division	No. of Facilities	Acreage		Total
		Leased	Owned	
Corporate offices – Domestic	1	—	—	—
Auto and Metals Recycling: Domestic: <sup>(1)</sup>				
Administrative offices	3	—	1	1
Collection and processing	33	48	521	569
Collection	6	5	22	27
Auto Stores	48	589	152	741
Non-operating sites <sup>(4)</sup>	19	52	181	233
Foreign: <sup>(2)</sup>				
Collection and processing	4	33	4	37
Collection	2	6	3	9
Auto Stores	4	51	—	51
Non-operating sites <sup>(4)</sup>	6	33	—	33
Steel Manufacturing Business: Domestic:				
Steel mill and administrative offices	2	—	85	85
Non-operating sites <sup>(4)</sup>	1	—	51	51
Total company:				
Domestic	113	694	1,013	1,707
Foreign <sup>(2)</sup>	16	123	7	130
Total <sup>(3)</sup>	129	817	1,020	1,837

(1) We jointly own 36 acres in California at three of our sites with minority interest partners.

(2) All foreign facilities are located in Canada.

(3) For long-lived assets by geography, see Note 18 – Segment Information in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

(4) Non-operating sites are comprised of owned and leased real properties, some of which are sublet to external parties.

We consider all properties, both owned and leased, to be well-maintained, in good operating condition and suitable and adequate to carry on our business.

## ITEM 3. LEGAL PROCEEDINGS

From time to time, we are involved in various litigation matters that arise in the ordinary course of business involving normal and routine claims, including environmental compliance matters. Except in connection with our status as a potentially responsible party with respect to the Portland Harbor Superfund Site, which is described in Note 9 – Commitments and Contingencies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report, we currently believe that the ultimate outcome of these proceedings, individually or in the aggregate, will not have a material adverse effect on our consolidated financial position, results of operations, cash flows or business. In fiscal 2013, the Commonwealth of Massachusetts advised us of alleged violations of environmental requirements, including but not limited to those related to air emissions and hazardous waste management, at our operations in the Commonwealth. We actively engaged in discussions with the Commonwealth's representatives, which resulted in a settlement agreement to resolve the alleged violations. A consent judgment was jointly filed with and entered by the Superior Court for the County of Suffolk, Commonwealth of Massachusetts on September 24, 2015. The settlement

involves a \$450,000 cash payment, an additional \$450,000 in suspended payments to be waived upon completion of a shredder emission control system and certain other specified milestones, and \$350,000 in supplemental environmental projects that we have agreed to undertake.

22 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

The Alameda County District Attorney and the California Office of the Attorney General, the latter on behalf of certain state agencies, are jointly investigating alleged violations of environmental requirements, including but not limited to those related to hazardous waste management and water quality, at one of our operations in the State. We are currently engaged in extensive discussions with the governmental representatives concerning the nature, extent and schedule for implementation of various facility upgrades and remedial activities that have been completed or that are underway and are included in our capital expenditure budget and that we believe will resolve the underlying environmental concerns identified by the agencies. We have also continued to dispute certain of the allegations that have been raised and maintain that the operational practices giving rise to those allegations were in compliance with applicable laws. To date, no complaint has been filed by the District Attorney or the State although we anticipate that the settlement of this matter will ultimately involve the simultaneous filing of a complaint and a stipulation (settlement) that involves a commitment to complete agreed-upon actions, payment of a civil penalty, and reimbursement of the agencies' enforcement costs. Completion of a Supplemental Environmental Project may offset some portion of the penalty. The government has not yet presented a penalty demand or disclosed its enforcement costs, but based on similar enforcement proceedings that have recently been concluded in the State and the government's positive response to the facility improvements that have been completed or are underway, we do not believe that the potential penalty or enforcement costs associated with resolution of this enforcement proceeding will be material to our financial position, results of operations, cash flows or liquidity.

The California Office of the Attorney General has also received a formal enforcement referral relating to another facility that we operate in the state. This matter grew out of an agency inspection of the facility and subsequent issuance of a Summary of Violations setting forth a number of alleged violations relating to hazardous waste management requirements. We were notified by the agency that our response to the Summary of Violations was not accepted and that the matter had been referred to the Attorney General, but to date we have received no communication from the Attorney General's Office concerning this matter. Based on the nature of the specific allegations, and the fact that the activities in question were conducted several years ago and are not ongoing, we do not believe the resolution of this threatened enforcement proceeding will be material to our financial position, results of operations, cash flows or liquidity.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Information about our executive officers is incorporated by reference from Part III, Item 10 of this annual report.

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

## PART II

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

Our Class A common stock is listed on the NASDAQ Global Select Market ("NASDAQ") under the symbol SCHN. There were 198 holders of record of Class A common stock on October 21, 2016. Our Class A common stock has been trading since November 16, 1993. The following table sets forth the high and low trading stock prices reported on NASDAQ and the dividends paid per share for the periods indicated.

	Fiscal 2016		
	High Price	Low Price	Dividends Per Share
First Quarter	\$ 17.81	\$ 12.64	\$ 0.1875
Second Quarter	\$ 16.93	\$ 11.70	\$ 0.1875
Third Quarter	\$ 21.57	\$ 14.49	\$ 0.1875
Fourth Quarter	\$ 20.65	\$ 14.83	\$ 0.1875

	Fiscal 2015		
	High Price	Low Price	Dividends Per Share
First Quarter	\$ 28.23	\$ 21.41	\$ 0.1875
Second Quarter	\$ 24.04	\$ 15.69	\$ 0.1875
Third Quarter	\$ 19.30	\$ 15.06	\$ 0.1875
Fourth Quarter	\$ 20.65	\$ 15.16	\$ 0.1875

Our Class B common stock is not publicly traded. There was one holder of record of Class B common stock on October 21, 2016.

## Issuer Purchases of Equity Securities

Pursuant to a share repurchase program as amended in 2001 and 2006, we were authorized to repurchase up to 6 million shares of our Class A common stock when management deems such repurchases to be appropriate. In November 2008, our Board of Directors approved an increase in the shares authorized for repurchase by 3 million, to 9 million. As of the beginning of fiscal 2015, we had repurchased approximately 6.9 million shares of our Class A common stock under the program. We repurchased approximately 68 thousand shares for a total of \$1 million and 203 thousand shares for a total of \$3 million in open-market transactions in fiscal 2015 and 2016, respectively. We did not repurchase any shares in the fourth quarter of fiscal 2016. At August 31, 2016, there were approximately 1.8 million shares available for repurchase under the program.

The share repurchase program does not require us to acquire any specific number of shares, and we may suspend, extend or terminate the program at any time without prior notice and the program may be executed through open-market purchases, privately negotiated transactions or utilizing Rule 10b5-1 programs. We evaluate long- and short-range forecasts as well as anticipated sources and uses of cash before determining the course of action that would best enhance shareholder value.

## Securities Authorized for Issuance under Equity Compensation Plans

See Note 14 - Share-Based Compensation in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for information regarding securities authorized for issuance under share-based compensation plans.

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

## Performance Graph

The following graph and related information compares cumulative total shareholder return on our Class A common stock for the five-year period from September 1, 2011 through August 31, 2016, with the cumulative total return for the same period of (i) the S&P 500 Index, (ii) the S&P Steel Index and (iii) the NASDAQ Composite Index. These comparisons assume an investment of \$100 at the commencement of the period and that all dividends are reinvested. The stock performance outlined in the performance graph below is not necessarily indicative of our future performance, and we do not endorse any predictions as to future stock performance.

	Year Ended August 31,					
	2011	2012	2013	2014	2015	2016
Schnitzer Steel Industries <sup>(1)</sup>	\$ 100	\$ 61	\$ 58	\$ 65	\$ 42	\$ 48
S&P 500	100	118	140	175	176	198
S&P Steel Index	100	72	73	94	75	87
NASDAQ	100	120	143	184	195	215

(1) Because we operate in two distinct but related businesses, we have no direct market peer issuers.

25 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

## ITEM 6. SELECTED FINANCIAL DATA

	Year Ended August 31,				
	2016	2015	2014	2013	2012
<b>STATEMENT OF OPERATIONS DATA:</b>					
(in thousands, except per share and dividend data)					
Revenues	\$1,352,543	\$1,915,399	\$2,534,926	\$2,616,792	\$3,340,938
Operating income (loss) <sup>(1)</sup>	\$(7,842)	\$(195,529)	\$24,364	\$(323,178)	\$53,668
Income (loss) from continuing operations	\$(16,240)	\$(187,849)	\$12,400	\$(275,781)	\$28,917
Loss from discontinued operations, net of tax <sup>(2)</sup>	\$(1,348)	\$(7,227)	\$(2,809)	\$(4,242)	\$—
Net income (loss) attributable to SSI	\$(19,409)	\$(197,009)	\$5,924	\$(281,442)	\$27,404
Income (loss) per share from continuing operations attributable to SSI (diluted)	\$(0.66)	\$(7.03)	\$0.32	\$(10.40)	\$0.99
Net income (loss) per share attributable to SSI (diluted)	\$(0.71)	\$(7.29)	\$0.22	\$(10.56)	\$0.99
Dividends declared per common share	\$0.750	\$0.750	\$0.750	\$0.750	\$0.410
<b>OTHER DATA:</b>					
Shipments (in thousands) <sup>(3)</sup> :					
Recycled ferrous metal (tons)	3,289	3,708	4,309	4,506	5,324
Recycled nonferrous metal (pounds)	510,283	585,435	614,518	580,353	709,057
Finished steel products (tons)	488	540	533	488	447
Average net selling price <sup>(3)(4)</sup> :					
Recycled ferrous metal (per ton)	\$194	\$269	\$348	\$354	\$410
Recycled nonferrous metal (per pound)	\$0.59	\$0.75	\$0.83	\$0.89	\$0.89
Finished steel products (per ton)	\$522	\$639	\$677	\$680	\$715
	August 31,				
	2016	2015	2014	2013	2012
<b>BALANCE SHEET DATA (in thousands):</b>					
Total assets	\$891,429	\$962,299	\$1,355,210	\$1,405,512	\$1,763,573
Long-term debt, net of current maturities	\$184,144	\$227,572	\$318,842	\$372,663	\$334,629
Redeemable noncontrolling interest	\$—	\$—	\$—	\$—	\$22,248

The operating loss in fiscal 2016 includes a goodwill impairment charge of \$9 million, other asset impairment charges of \$21 million and restructuring charges and other exit-related activities of \$7 million. Operating loss in fiscal 2015 includes a goodwill impairment charge of \$141 million, other asset impairment charges of \$45 million (1) and restructuring charges and other exit-related activities of \$13 million. Operating income in fiscal 2014 includes other asset impairment charges of \$1 million and restructuring charges and other exit-related activities of \$7 million. Operating loss in fiscal 2013 includes a goodwill impairment charge of \$321 million, other asset impairment charges of \$13 million and restructuring charges and other exit-related activities of \$8 million.

In fiscal 2015, the Company ceased operations at seven auto parts stores, six of which qualified for discontinued operations reporting and whose results have been removed from other data for all periods presented, as applicable.

(2) In fiscal 2014, the Company also released an environmental liability of \$1 million associated with operations disposed in fiscal 2010. See Note 8 - Discontinued Operations in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for further discussion.

(3) Tons for recycled ferrous metal are long tons (2,240 pounds) and for finished steel products are short tons (2,000 pounds).

(4)



In accordance with generally accepted accounting principles, the Company reports revenues that include amounts billed for freight to customers; however, average net selling prices are shown net of amounts billed for freight.

26 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

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

This section includes a discussion of our operations for the three fiscal years ended August 31, 2016, 2015 and 2014. The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of our results of operations and financial condition. The discussion should be read in conjunction with the Consolidated Financial Statements and the related notes thereto in Part II, Item 8 of this report and the Selected Financial Data contained in Part II, Item 6 of this report.

**Business**

We are one of North America's largest recyclers of ferrous and nonferrous scrap metal, including end-of-life vehicles, and a manufacturer of finished steel products.

We use operating income to measure our segment performance. Restructuring charges and other exit-related activities are not allocated to segment operating income because we do not include this information in our measurement of the segments' performance. Expense related to shared services that support operational activities and transactions is allocated from Corporate to the segments. Unallocated Corporate expense consists primarily of expense for management and certain administrative services that benefit both segments. The results of discontinued operations are excluded from segment operating income and are presented separately, net of tax, from the results of ongoing operations for all periods presented. See Note 18 – Segment Information in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for a discussion of the primary activities of each reportable segment, total assets by reportable segment, operating results from continuing operations, revenues from external customers and concentration of sales to foreign countries.

Our internal organizational and reporting structure supports two operating and reportable segments: the Auto and Metals Recycling ("AMR") business and the Steel Manufacturing Business ("SMB").

AMR sells and brokers ferrous scrap metal (containing iron) to foreign and domestic steel producers, including SMB, and nonferrous scrap metal (not containing iron) to both foreign and domestic markets. AMR procures scrap supply from salvaged vehicles, rail cars, home appliances, industrial machinery, manufacturing scrap and construction and demolition scrap. Our largest source of autobodies is our own network of auto parts stores, which operate under the commercial brand-name Pick-n-Pull. AMR procures salvaged vehicles and sells serviceable used auto parts from these vehicles through 52 self-service auto parts stores. The remaining portions of the vehicles, primarily autobodies and major parts containing ferrous and nonferrous materials, are shipped to our metal recycling facilities, or sold to wholesalers where geographically more economical. AMR then processes mixed and large pieces of scrap metal into smaller pieces by crushing, torching, shearing, shredding and sorting, resulting in scrap metal pieces of a size, density and metal content required by customers to meet their production needs. Processed recycled metals are shipped to our own domestic steel mill and to other metal producers globally.

SMB operates a steel mini-mill that produces a wide range of finished steel products. SMB's scrap metal raw material requirements are sourced almost entirely through AMR, which SMB purchases at rates that approximate market prices for shipments from the West Coast of the U.S. SMB uses its mini-mill in McMinnville, Oregon to melt recycled metal and other raw materials to produce finished steel products. SMB also maintains a mill depot in Southern California. Our results of operations depend in large part on the demand and prices for recycled metal in foreign and domestic markets and on the supply of raw materials, including end-of-life vehicles, available to be processed at our facilities. Our deep water port facilities on both the East and West Coasts of the U.S. (in Everett, Massachusetts; Providence, Rhode Island; Oakland, California; Portland, Oregon; and Tacoma, Washington) and access to public deep water port facilities (in Kapolei, Hawaii; and Salinas, Puerto Rico) allow us to efficiently meet the global demand for recycled ferrous metal by shipping bulk cargoes to steel manufacturers located in Europe, Africa, the Middle East, Asia, and North, Central and South America. Our exports of nonferrous recycled metal are shipped in containers through various public docks to specialty steelmakers, foundries, aluminum sheet and ingot manufacturers, copper refineries and smelters, brass and bronze ingot manufacturers and wire and cable producers globally. We also transport both ferrous and nonferrous metals by truck, rail and barge in order to transfer scrap metal between our facilities for further

processing, to load shipments at our export facilities and to meet regional domestic demand.

27 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

Prior to the fourth quarter of fiscal 2015, our internal organizational and reporting structure supported three operating and reportable segments: the Metals Recycling Business ("MRB"), the Auto Parts Business ("APB") and SMB. In the fourth quarter of fiscal 2015, we combined and integrated our auto parts and metals recycling businesses into a single operating platform. This change in organizational structure further optimized the efficiencies in our operating platform, enabling additional synergies to be captured throughout our supply chain and global sales channels and more effectively leveraging our shared services platform. The change in our internal organizational and reporting structure resulted in the formation of a new operating and reportable segment, AMR, replacing the former MRB and APB operating segments. We began reporting on this new segment in the fourth quarter of fiscal 2015 as reflected in our Annual Report on Form 10-K for the year ended August 31, 2015. The segment data for the comparable periods presented prior to the segment change has been recast to conform to the current presentation for all activities of AMR. Recasting this historical information did not have an impact on the consolidated financial performance of SSI for any of the periods presented.

**Strategic Priorities**

As we continue to closely monitor economic conditions, we remain focused on the following core strategies to meet our business objectives:

- Use of our seven deep water ports and ground-based logistics network to directly access customers domestically and internationally to meet demand for our products wherever it is greatest;

- Further optimization of our integrated operating platform to maximize opportunities for synergies, cost efficiencies and volumes;

- Continuous improvement initiatives to increase production efficiency, improve productivity, enhance effectiveness in our commercial activities and reduce operating expense;

- Technology and process improvement investments to increase the separation and recovery of recycled materials from our shredding process and to generate more value-added products; and

- Increase market share through initiatives to maximize volumes and through selective partnerships, alliances and acquisitions.

Our auto parts stores are key suppliers to our metal recycling facilities, and we opportunistically look to enhance the geographic proximity of operations among those facilities. AMR has an integrated presence in the Northwestern U.S., in Northern California and in the Northeastern U.S., near AMR's export facilities in Tacoma, Washington, Portland, Oregon, Oakland, California and Everett, Massachusetts, which benefit from the synergies of this enhanced access to supply.

In fiscal 2015, we initiated and implemented restructuring initiatives consisting of idling underutilized metals recycling assets, including a shredder in Johnston, Rhode Island and another shredder in Surrey, British Columbia, and closing seven auto parts stores at AMR to more closely align our business to market conditions. Additional cost saving and productivity improvement initiatives, including additional reductions in personnel, savings from procurement activities, streamlining of administrative and supporting services functions, and adjustments to our operating capacity through additional facility closures, were identified and initiated in fiscal 2016. Facility closures in fiscal 2016 included a shredding facility in Concord, New Hampshire. Six of the auto parts stores closed in fiscal 2015 qualified for discontinued operations reporting beginning in fiscal 2015. See Note 8 - Discontinued Operations and Note 10 - Restructuring Charges and Other Exit-Related Activities in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

**Key economic factors and trends affecting the industries in which we operate**

We sell recycled metals to the global steel industry for the production of finished steel. Our financial results largely depend on supply of raw materials in the U.S. and Western Canada and demand for recycled metal in foreign and domestic markets and for finished steel products in the Western U.S. and Western Canada. Global economic conditions, changes in supply and demand conditions and the strength of the U.S. dollar affect market prices for and sales volumes of recycled ferrous and nonferrous metal in global markets and steel products in the Western U.S. and Western Canada and can have a significant impact on the results of operations for our reportable segments. Weak global demand fueled by the overproduction of low-priced billets using blast furnace technology and iron ore as the

primary raw material, the limited availability of scrap metal raw materials, and the strong U.S. dollar contribute to lower sales volumes for recycled metals.

28 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

Our markets have been impacted by a slowdown of economic activity globally in recent years. The macroeconomic uncertainty, combined with global steel-making overproduction and a strengthening of the U.S. dollar, resulted in deteriorating market conditions for global steel manufacturers and volatile pricing swings. The overall downward trend in commodity prices and selling prices of ferrous and nonferrous recycled materials accelerated in fiscal 2015 and continued into the first half of fiscal 2016 before prices improved from near-decade lows. The falling scrap metal price environment was exacerbated by a decline in iron ore prices, a raw material used in steel-making blast furnaces which compete with EAF mills that use ferrous scrap metal as their primary feedstock. Iron ore prices increased near the end of fiscal 2016 but remained at low levels relative to historical levels. Low priced steel billets, which use iron ore as their primary raw material, and which are direct substitutes for ferrous scrap metal in the manufacturing of finished steel, also contributed to lower scrap metal demand and price. The persistently low economic growth in the U.S. and the lower scrap metal price environment also contributed to constrained scrap flows in our domestic supply markets which, combined with significant scrap recycling capacity and competition in certain regional markets, led to continued low margins in our AMR business during the first half of fiscal 2016 until prices increased significantly in the third quarter. Prices increased in the third quarter primarily due to increased demand for recycled metal, before decreasing in the fourth quarter and returning to the levels seen at the beginning of the fiscal year.

**Executive Overview of Financial Results**

We generated consolidated revenues of \$1.4 billion in fiscal 2016, a decrease of 29% from the \$1.9 billion of consolidated revenues in the prior year due to a combination of lower average net selling prices for ferrous and nonferrous scrap metal and finished steel products, and reduced sales volumes compared to the prior year. Average net selling prices for ferrous and nonferrous scrap metal in fiscal 2016 decreased by 28% and 21%, respectively, compared to the prior year. Ferrous and nonferrous sales volumes in fiscal 2016 decreased by 11% and 13%, respectively, compared to the prior year. Overall demand for recycled metals in our end-markets was weaker than in the prior year primarily due to continued low global economic growth, the relative strength of the U.S. dollar and the impact of lower iron ore prices during most of the fiscal year. Demand for our finished steel products was also weaker than in the prior year primarily due to increased competition from lower-priced imports.

Consolidated operating loss was \$8 million in fiscal 2016, compared to \$196 million in the prior year. Adjusted consolidated operating income in fiscal 2016 was \$28 million, compared to \$11 million in the prior year. Adjusted results in fiscal 2016 exclude the impact of a goodwill impairment charge of \$9 million, other asset impairment charges of \$21 million, restructuring charges and other exit-related activities of \$7 million, and benefits from contract settlements of \$1 million. Adjusted results in fiscal 2015 exclude the impact of a goodwill impairment charge of \$141 million, other asset impairment charges of \$45 million, restructuring charges and other exit-related activities of \$13 million, and the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments of \$7 million. See the reconciliation of adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7.

Operating results for fiscal 2016 and 2015 were adversely impacted by the lower price environment which included sharp declines in commodity selling prices during the first half of each year. We reported operating losses in fiscal 2016 and 2015 driven largely by asset impairment charges and restructuring charges and other exit-related activities recorded in each fiscal year. Operating results in the second half of fiscal 2016 benefited from an increase in ferrous average net selling prices after experiencing sharp declines during the first half of the fiscal year which resulted in the adverse impact from average inventory accounting in fiscal 2016 being significantly less than the adverse impact in fiscal 2015. Operating results in fiscal 2016 also benefited from cost saving and productivity improvement measures initiated in fiscal 2015, and further expanded in fiscal 2016, to reduce direct costs of production and selling, general and administrative ("SG&A") expense. Excluding the adverse impact of asset impairment charges, these benefits contributed to higher operating margins per ferrous ton sold at AMR compared to fiscal 2015 despite lower average net selling prices and sales volumes. Consolidated SG&A expense decreased by \$22 million, or 13%, compared to the prior year primarily resulting from reduced employee-related expenses and a \$6 million benefit from an insurance reimbursement recorded in fiscal 2016. SMB's operating results were lower than in the prior year primarily due to decreased selling prices for finished steel products, reduced sales volumes and lower rolling mill utilization driven by

increased competition from lower-priced imports.

In recent years, we implemented a number of cost reduction and productivity improvement measures to more closely align our business to market conditions. The combined benefit of the measures initiated since the beginning of fiscal 2015 represents a targeted annual improvement to operating performance of \$95 million. These initiatives include those announced in the first quarter of fiscal 2015 (the "Q1'15 Plan") followed by additional cost saving and exit-related measures announced in the second quarter of fiscal 2015 and further expanded in fiscal 2016 (the "Q2'15 Plan"). In fiscal 2016, we achieved approximately \$78 million in combined benefits related to the Q1'15 and Q2'15 Plans, compared to \$28 million achieved in the prior year. We expect to achieve substantially all of the combined annual improvement target of \$95 million associated with these Plans in fiscal 2017. Charges incurred in connection with the foregoing initiatives are discussed in Results of Operations, Operating Income (Loss) in this Item 7.

29 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Net loss from continuing operations attributable to SSI in fiscal 2016 was \$18 million, or \$(0.66) per diluted share, compared to \$190 million, or \$(7.03) per diluted share, in the prior year. Adjusted net income from continuing operations attributable to SSI in fiscal 2016 was \$19 million, or \$0.69 per diluted share, compared to \$4 million, or \$0.13 per diluted share, in the prior year. Adjusted net income from continuing operations attributable to SSI excludes the impact of goodwill impairment charges, other asset impairment charges, restructuring charges and other exit-related activities, the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments, net of recoveries, and the non-cash write-off of debt issuance costs. See the reconciliation of adjusted net income (loss) from continuing operations attributable to SSI in Non-GAAP Financial Measures at the end of this Item 7.

The following items further highlight selected liquidity and capital structure metrics for fiscal 2016:

• Net cash provided by operating activities of \$99 million, compared to \$145 million in the prior year;

• Debt of \$193 million, compared to \$228 million as of the prior year-end;

• Debt, net of cash, of \$166 million, compared to \$205 million as of the prior year-end (see the reconciliation of debt, net of cash, in Non-GAAP Financial Measures at the end of this Item 7); and

• Dividends paid of \$20 million, compared to the same amount in the prior year.

The following items highlight our reportable segment financial results for fiscal 2016:

• AMR revenues of \$1.2 billion and operating income of \$23 million, compared to revenues of \$1.7 billion and operating loss of \$164 million in the prior year;

• AMR adjusted operating income of \$49 million, compared to \$28 million in the prior year (see the reconciliation of

• AMR adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7);

• SMB revenues of \$270 million and operating income of \$4 million, compared to revenues of \$375 million and operating income of \$20 million in the prior year; and

• SMB adjusted operating income of \$6 million, compared to \$20 million in the prior year (see the reconciliation of

• SMB adjusted operating income in Non-GAAP Financial Measures at the end of this Item 7).



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Results of Operations

(\$ in thousands)	For the Year Ended August 31,			% Increase / (Decrease)	
	2016	2015	2014	2016 vs 2015	2015 vs 2014
<b>Revenues:</b>					
Auto and Metals Recycling	\$ 1,173,032	\$ 1,716,296	\$ 2,334,389	(32 )%	(26 )%
Steel Manufacturing Business	269,905	375,037	388,640	(28 )%	(4 )%
Intercompany revenue eliminations <sup>(1)</sup>	(90,394 )	(175,934 )	(188,103 )	(49 )%	(6 )%
Total revenues	1,352,543	1,915,399	2,534,926	(29 )%	(24 )%
<b>Cost of goods sold:</b>					
Auto and Metals Recycling	1,011,293	1,567,356	2,141,253	(35 )%	(27 )%
Steel Manufacturing Business	257,316	348,499	362,843	(26 )%	(4 )%
Intercompany cost of goods sold eliminations <sup>(1)</sup>	(92,621 )	(173,177 )	(188,141 )	(47 )%	(8 )%
Total cost of goods sold	1,175,988	1,742,678	2,315,955	(33 )%	(25 )%
<b>Selling, general and administrative expense:</b>					
Auto and Metals Recycling	112,631	129,117	138,255	(13 )%	(7 )%
Steel Manufacturing Business	6,631	6,160	7,259	8 %	(15 )%
Corporate <sup>(2)</sup>	29,646	35,315	41,999	(16 )%	(16 )%
Total selling, general and administrative expense	148,908	170,592	187,513	(13 )%	(9 )%
<b>(Income) from joint ventures:</b>					
Auto and Metals Recycling	(742 )	(1,541 )	(1,136 )	(52 )%	36 %
Change in intercompany profit elimination <sup>(3)</sup>	(77 )	51	(60 )	NM	NM
Total (income) from joint ventures	(819 )	(1,490 )	(1,196 )	(45 )%	25 %
<b>Goodwill impairment charges:</b>					
Auto and Metals Recycling	8,845	141,021	—	(94 )%	NM
<b>Other asset impairment charges:</b>					
Auto and Metals Recycling	18,379	44,374	928	(59 )%	4,682 %
Steel Manufacturing Business	2,224	—	—	NM	NM
Corporate	79	745	532	(89 )%	40 %
Total other asset impairment charges	20,682	45,119	1,460	(54 )%	2,990 %
<b>Operating income (loss):</b>					
Auto and Metals Recycling	22,626	(164,031 )	55,089	NM	NM
Steel Manufacturing Business	3,734	20,378	18,538	(82 )%	10 %
Segment operating income (loss)	26,360	(143,653 )	73,627	NM	NM
Restructuring charges and other exit-related activities <sup>(4)</sup>	(6,781 )	(13,008 )	(6,830 )	(48 )%	90 %
Corporate expense <sup>(2)</sup>	(29,725 )	(36,060 )	(42,531 )	(18 )%	(15 )%
Change in intercompany profit elimination <sup>(5)</sup>	2,304	(2,808 )	98	NM	NM
Total operating income (loss)	\$(7,842 )	\$(195,529 )	\$24,364	(96 )%	NM

---

NM = Not Meaningful

(1) AMR sells recycled ferrous metal to SMB at rates per ton that approximate West Coast U.S. market prices. These intercompany revenues and cost of goods sold are eliminated in consolidation.

(2) Corporate expense consists primarily of unallocated expenses for management and certain administrative services that benefit both reportable segments.

(3) The joint ventures sell recycled metal to AMR and to SMB at prices that approximate local market rates, which produces intercompany profit. This intercompany profit is eliminated while the products remain in inventory and is

not recognized until the finished products are sold to third parties.

(4) Restructuring charges consist of expense for severance, contract termination and other restructuring costs that management does not include in its measurement of the performance of the reportable segments. Other exit-related activities consist of asset impairments and accelerated depreciation, net of gains on exit-related disposals, related to site closures.

31 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

- (5) Intercompany profits are not recognized until the finished products are sold to third parties; therefore, intercompany profit is eliminated while the products remain in inventory.

## Revenues

## Fiscal 2016 compared with fiscal 2015

Consolidated revenues for fiscal 2016 were \$1.4 billion, a decrease of 29% compared to the \$1.9 billion of consolidated revenues for the prior year. After experiencing sharp declines in the first half of fiscal 2016, net selling prices for shipments of ferrous scrap metal increased significantly during the third quarter of fiscal 2016, primarily due to improved demand, before decreasing in the fourth quarter and returning to the levels seen at the beginning of the fiscal year. Overall demand for recycled metals in our end-markets was weaker than in the prior year primarily due to continued low global economic growth, the relative strength of the U.S. dollar and the impact of lower iron ore prices during most of the fiscal year. This resulted in significantly lower average net selling prices for ferrous and nonferrous scrap metal and finished steel products, and reduced sales volumes in fiscal 2016 compared to the prior year. Average net selling prices for ferrous and nonferrous scrap metal in fiscal 2016 decreased by 28% and 21%, respectively, compared to the prior year. Ferrous and nonferrous sales volumes in fiscal 2016 decreased by 11% and 13%, respectively, compared to the prior year. Demand for our finished steel products was also weaker than in the prior year due to increased competition from lower-priced imports.

## Fiscal 2015 compared with fiscal 2014

Consolidated revenues for fiscal 2015 decreased primarily due to significantly lower average net selling prices for ferrous and nonferrous scrap metal and reduced sales volumes compared to the prior year. Export net selling prices for shipments of recycled ferrous metal experienced multiple sharp declines throughout fiscal 2015, decreasing by approximately \$150 per ton, or approximately 40%, compared to the end of the fourth quarter of fiscal 2014. The decrease in ferrous and nonferrous scrap metal prices were driven by weaker global steel markets due to excess capacity and overproduction, a further strengthening of the U.S. dollar during the year, the impact of lower iron ore prices on market conditions for recycled metals and weaker demand in the end markets to which we sell. Domestic net selling prices for ferrous metal also decreased sharply during the year. Lower sales volumes of recycled scrap metal by AMR were primarily due to a combination of weaker export demand and, to a lesser extent, weaker domestic demand and competition for available raw materials including end-of-life vehicles, which were only partially offset by higher sales volumes of finished steel products at SMB. In fiscal 2015, we increased the share of domestic sales of ferrous material due to relatively stronger domestic demand compared to the export market.

## Operating Income (Loss)

## Fiscal 2016 compared with fiscal 2015

Consolidated operating loss was \$8 million in fiscal 2016, compared to \$196 million in the prior year. Adjusted consolidated operating income in fiscal 2016 was \$28 million, compared to \$11 million in the prior year. Adjusted results exclude the impact of goodwill impairment charges, other asset impairment charges, restructuring charges and other exit-related activities, and the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments, net of recoveries. See the reconciliation of adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7.

Operating results for fiscal 2016 and 2015 were adversely impacted by the lower price environment which included sharp declines in commodity selling prices during the first half of each year. We reported operating losses in fiscal 2016 and 2015 driven largely by asset impairment charges and restructuring charges and other exit-related activities recorded in each fiscal year. Operating results in the second half of fiscal 2016 benefited from an increase in ferrous average net selling prices after experiencing sharp declines during the first half of the fiscal year which resulted in the adverse impact from average inventory accounting during fiscal 2016 being significantly less than the adverse impact during fiscal 2015. Operating results in fiscal 2016 also benefited from cost saving and productivity improvement initiatives initiated in fiscal 2015, and further expanded in fiscal 2016, to reduce direct costs of production and SG&A expense. Excluding the adverse impact of asset impairment charges, these benefits contributed to higher operating margins per ferrous ton sold at AMR compared to fiscal 2015 despite lower average net selling prices and sales

volumes. Consolidated SG&A expense decreased by \$22 million, or 13%, compared to the prior year primarily resulting from reduced employee-related expenses and a \$6 million benefit from an insurance reimbursement recorded in fiscal 2016. SMB's operating results were lower than in the prior year primarily due to decreased selling prices for finished steel products, reduced sales volumes and lower rolling mill utilization driven by increased competition from lower-priced imports.

In the second quarter of fiscal 2016, we identified the combination of sustained weak market conditions, including the adverse effects of lower commodity selling prices and the constraining impact of the lower price environment on the supply of raw materials which negatively impacted volumes, our recent financial performance and a decline in our market capitalization as a triggering event requiring an interim impairment test of goodwill allocated to our reporting units. The impairment test resulted in a non-cash goodwill impairment charge of \$9 million at a reporting unit within the AMR operating segment.

32 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

In the second quarter of fiscal 2015, we identified a triggering event requiring an interim impairment test of goodwill which resulted in a non-cash goodwill impairment charge of \$141 million at the former MRB reporting unit. The impairment charge is reported within the results of AMR. We did not record any goodwill impairment charges in fiscal 2014. See further discussion in the Critical Accounting Policies section at the end of Part II, Item 7 of this report.

During fiscal 2016, 2015 and 2014, we also recorded non-cash impairment charges and accelerated depreciation on certain long-lived and other assets. Impairment charges and accelerated depreciation, excluding goodwill impairment charges, were as follows (in thousands):

	Fiscal 2016	Fiscal 2015	Fiscal 2014
Reported within other asset impairment charges <sup>(1)</sup> :			
Long-lived assets	\$7,336	\$41,676	\$—
Accelerated depreciation	6,208	—	—
Investment in joint venture	1,968	—	—
Assets held for sale	1,659	2,558	928
Supplies inventory <sup>(1)</sup>	2,224	—	—
Other assets <sup>(1)</sup>	1,287	885	532
	20,682	45,119	1,460
Reported within restructuring charges and other exit-related activities:			
Long-lived assets	468	—	—
Accelerated depreciation	630	3,836	—
Supplies inventory	1,047	—	—
Other assets	35	—	566
	2,180	3,836	566
Reported within discontinued operations:			
Long-lived assets	673	2,666	—
Accelerated depreciation	274	—	—
	947	2,666	—
Total	\$23,809	\$51,621	\$2,026

Other asset impairment charges were incurred in the AMR reportable segment, except for \$79 thousand, \$745 thousand and \$532 thousand of impairment charges on other assets related to Corporate recorded in fiscal 2016, (1) 2015 and 2014, respectively, and \$2,224 thousand of impairment charges on supplies inventory related to SMB recorded in fiscal 2016.

Consolidated operating results in fiscal 2016 also included restructuring charges and other exit-related activities of \$7 million, compared to charges of \$13 million in fiscal 2015. Additional restructuring charges and other exit-related activities of \$1 million were included in the results of discontinued operations in fiscal 2016, compared to charges of \$4 million for fiscal 2015.

Restructuring charges consisted of severance, contract termination and other restructuring costs. Other exit-related activities of \$2 million in fiscal 2016 consisted of asset impairments and accelerated depreciation of assets in connection with the closure of certain operations, net of gains on exit-related disposals, compared to other exit-related activities of \$7 million for fiscal 2015. These charges relate to restructuring initiatives under three separate plans: the plans announced in the first quarter of fiscal 2014 (the "Q1'14 Plan"), the "Q1'15 Plan" and the "Q2'15 Plan." In the first quarter of fiscal 2014, we initiated the Q1'14 Plan and began implementing restructuring and productivity initiatives to reduce our annual operating expenses by approximately \$30 million, which was subsequently increased to \$40 million later in the fiscal year. We achieved approximately \$29 million of benefits in fiscal 2014, with the full annual benefit achieved in fiscal 2015. The majority of the reduction in operating expenses occurred at AMR and resulted from a combination of headcount reductions, implementation of operational efficiencies, reduced lease costs and other productivity improvements.

Since the beginning of fiscal 2015, we have initiated and implemented a number of additional cost reduction and productivity improvement measures with a combined targeted annual improvement of \$95 million. These initiatives included those announced as part of the Q1'15 Plan followed by further cost-saving and exit-related measures as part of the Q2'15 Plan targeting a combined benefit to annual operating performance of approximately \$60 million, subsequently increased by \$5 million in the first quarter of fiscal 2016. In the second quarter of fiscal 2016, we expanded the Q2'15 Plan initiatives by an additional \$30 million.

33 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

The cost reduction and productivity improvements associated with the Q1'15 Plan are driven by a combination of revenue drivers and production and SG&A cost reduction initiatives with a targeted aggregate annual improvement of \$14 million, which was achieved in fiscal 2016. The improvements to performance associated with the Q2'15 Plan include two components. The first component reflects strategic actions initiated in the second quarter of fiscal 2015 consisting of idling shredding equipment and closing seven auto parts stores at AMR to align our business to market conditions, targeting an improvement in annual operating performance of approximately \$18 million, of which approximately one-third is from reduced depreciation expense. As part of the second component of the Q2'15 Plan, in April 2015, we initiated measures, and also announced the integration of the MRB and APB businesses into the combined AMR platform, in order to achieve operational synergies and further reduce our annual operating expenses, primarily SG&A expense, by approximately \$28 million through personnel reductions, reducing organizational layers, consolidating shared service functions and reducing other administrative costs. We expanded the Q2'15 Plan and target by initiating measures in fiscal 2016 with an additional \$35 million in expected benefits primarily through additional reductions in personnel, savings from procurement activities, streamlining of administrative and supporting services functions, and adjustments to our operating capacity through additional facility closures, with approximately two-thirds of the target coming from a reduction in SG&A expense and the rest from a reduction in production costs, primarily at AMR. Collectively, the initiatives commenced in the second quarter of fiscal 2015 and expanded in subsequent quarters including the initiatives commenced in fiscal 2016 are referred to as the Q2'15 Plan. In fiscal 2016, we achieved approximately \$78 million of combined benefits related to the Q1'15 and Q2'15 Plans, compared to \$28 million in fiscal 2015. We expect to achieve substantially all of the combined annual improvement target of \$95 million associated with the Q1'15 and Q2'15 Plans in fiscal 2017.

Restructuring charges and other exit-related activities incurred in connection with cost reduction and productivity improvement plans for the last three fiscal years ended August 31 were comprised of the following (in thousands):

	2016			2015			2014	
	All Other Plans	Q2'15 Plan	Total Charges	All Other Plans	Q2'15 Plan	Total Charges	All Other Plans	Total Charges
Restructuring charges:								
Severance costs	\$—	\$4,915	\$4,915	\$391	\$5,330	\$5,721	\$4,607	\$4,607
Contract termination costs	311	796	1,107	377	1,245	1,622	1,384	1,384
Other restructuring costs	—	—	—	1,223	2,048	3,271	410	410
Total restructuring charges	311	5,711	6,022	1,991	8,623	10,614	6,401	6,401
Other exit-related activities:								
Asset impairments and accelerated depreciation	—	3,127	3,127	—	6,502	6,502	566	566
Gains on exit-related disposals	—	(1,337)	(1,337)	—	—	—	—	—
Total other exit-related activities	—	1,790	1,790	—	6,502	6,502	566	566
Total restructuring charges and exit-related activities	\$311	\$7,501	\$7,812	\$1,991	\$15,125	\$17,116	\$6,967	\$6,967
Restructuring charges and other exit-related activities included in continuing operations			\$6,781			\$13,008		\$6,830
Restructuring charges and other exit-related activities included in discontinued operations			\$1,031			\$4,108		\$137

We do not include restructuring charges and other exit-related activities in the measurement of the performance of our reportable segments. The significant majority of restructuring charges require us to make cash payments.

See Note 10 - Restructuring Charges and Other Exit-Related Activities in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.





Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Fiscal 2015 compared with fiscal 2014

Consolidated operating loss was \$196 million in fiscal 2015, compared to consolidated operating income of \$24 million in the prior year. Adjusted consolidated operating income in fiscal 2015 was \$11 million, which excludes a goodwill impairment charge of \$141 million, other asset impairment charges of \$45 million, restructuring charges and other exit-related activities of \$13 million, and the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments of \$7 million. This compares to adjusted consolidated operating income of \$33 million in the prior year, which excludes other asset impairment charges of \$1 million and restructuring charges and other exit-related activities of \$7 million. See the reconciliation of adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7. In an environment of sharply declining commodity prices, average inventory costs in fiscal 2015 did not decrease as quickly as purchase costs for raw materials, resulting in a substantial adverse effect on cost of goods sold and compression of operating margins at AMR. The lower price environment during the year also adversely impacted the supply of scrap metal, which led to lower processed volumes further compressing operating margins. The effects of these adverse conditions on operating results were partially offset by benefits to cost of goods sold resulting from restructuring actions taken to reduce direct costs of production, including headcount and other non-employee costs. Consolidated operating results in fiscal 2015 also benefited from an increase in operating income at SMB of \$2 million primarily as a result of higher sales volumes, increased rolling mill utilization levels and lower SG&A expense.

Operating results in fiscal 2015 included a reduction in consolidated SG&A expense of \$17 million, or 9%, compared to the prior year primarily as a result of lower employee compensation of \$10 million associated with headcount reductions and productivity initiatives implemented in fiscal 2014 and 2015 and reduced incentive compensation from lower financial performance, a reduction in selling and marketing expense of \$3 million and a legal settlement resulting in an insurance reimbursement of \$2 million in fiscal 2015.

Consolidated operating results in fiscal 2015 also included restructuring charges and other exit-related activities of \$13 million, compared to charges of \$7 million in fiscal 2014. Additional restructuring charges and other exit-related activities of \$4 million were included in the results of discontinued operations in fiscal 2015, compared to charges of less than \$1 million for fiscal 2014. Restructuring charges consisted of severance, contract termination and other restructuring costs. Other exit-related activities of \$7 million in fiscal 2015 consisted of asset impairments and accelerated depreciation of assets in connection with the closure of certain operations, compared to other exit-related activities of \$1 million for fiscal 2014.

## Other Income, net

Other income, net was \$1 million, \$4 million and \$1 million for fiscal 2016, 2015 and 2014, respectively. The changes among the fiscal years presented were primarily due to changes in foreign currency gains and losses on transactions denominated in Canadian dollars. For more information about our foreign currency transactions, see Note 2 – Summary of Significant Accounting Policies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

## Interest Expense

Interest expense was \$9 million, \$9 million and \$11 million for fiscal 2016, 2015 and 2014, respectively. The decrease from fiscal 2014 to fiscal 2015 was primarily due to decreased average borrowings under our bank credit facilities. The impact on fiscal 2016 interest expense of reduced average borrowings compared to fiscal 2015 was offset by higher interest rates and the write-off of debt issuance costs of \$1 million. For more information about our outstanding debt balances, see Note 7 – Debt in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

## Income Tax (Expense) Benefit

	Year Ended August 31,		
	2016	2015	2014
Income (loss) from continuing operations before income taxes	\$(15,505)	\$(200,464)	\$14,982
Income tax (expense) benefit	\$(735)	\$12,615	\$(2,582)
Effective tax rate	(4.7)%	6.3%	17.2%

Income tax (expense) benefit from continuing operations was \$(1) million, \$13 million and \$(3) million for fiscal 2016, 2015 and 2014, respectively.

35 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

Our effective tax rate from continuing operations in fiscal 2016 was an expense of 4.7%, which was lower than the U.S. federal statutory rate of 35%. The effective tax rate was reduced for valuation allowances on deferred tax assets and the aggregate impact of foreign income taxed at different rates. Those reductions were partially offset by the realization of foreign investment basis for tax purposes. Our income tax expense is comprised primarily of the increase in deferred tax liabilities from indefinite-lived assets plus certain state cash tax expenses. The increase in valuation allowance on deferred tax assets was recognized as a result of negative evidence, including recent losses in all tax jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized. Realization of the deferred tax assets is dependent upon generating sufficient taxable income in the associated tax jurisdictions in future years to benefit from the reversal of net deductible temporary differences and from the utilization of net operating losses.

Our effective tax rate from continuing operations in fiscal 2015 was a benefit of 6.3%, which was lower than the U.S. federal statutory rate of 35%. The effective tax rate was reduced by 33% for valuation allowances on deferred tax assets and the aggregate impact of excluding foreign income taxed at different rates. Those expenses were partially offset by the recognition of a \$13 million benefit related to the realization of foreign investment basis for tax purposes. The increase in valuation allowance on deferred tax assets was recognized as a result of negative evidence, including recent losses in all tax jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized.

Our effective tax rate from continuing operations in fiscal 2014 was an expense of 17.2% and was lower than the U.S. federal statutory rate of 35%. The effective tax rate benefited from a fixed asset tax basis study performed during fiscal 2014 which resulted in the recognition of a tax benefit of \$2 million, as well as the aggregate impact of excluding income associated with noncontrolling interests, foreign income taxed at different rates, and certain deductions and credits. Other significant items impacting the effective tax rate included the recognition of a valuation allowance against certain foreign and state deferred tax assets and the recognition of a liability for unrecognized tax benefits of \$2 million. The valuation allowance on deferred tax assets of certain foreign and state tax jurisdictions increased by \$2 million compared to the prior year and was recognized as a result of negative evidence, including recent losses in certain foreign and state jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized.

We will continue to regularly assess the realizability of deferred tax assets. Changes in historical earnings performance and future earnings projections, among other factors, may cause us to adjust our valuation allowance on deferred tax assets, which would impact our results of operations in the period we determine that these factors have changed.

See Note 15 - Income Taxes in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for further discussion.

**Discontinued Operations**

In the third quarter of fiscal 2015, in connection with the Q2'15 Plan, we ceased operations at seven auto parts stores, six of which qualified for discontinued operations reporting in accordance with the accounting standards in effect at the time prior to adopting the accounting standard update on discontinued operations reporting in the first quarter of fiscal 2016. The operations of the six qualifying stores had previously been reported within the APB reportable segment, which was subsequently replaced by the AMR reportable segment in the fourth quarter of fiscal 2015. In fiscal 2016 and 2015, we recorded impairment charges and accelerated depreciation of \$1 million and \$3 million, respectively, on the long-lived assets of discontinued auto parts stores. Impaired assets in fiscal 2016 consisted primarily of capital lease assets associated with the buildings on two leased properties.

In fiscal 2014, we released certain environmental liabilities of \$1 million that arose from and were directly related to the operations of a component of our AMR business that qualified for separate classification as a discontinued operation in fiscal 2010 prior to the disposal.

Operating results of discontinued operations were comprised of the following (in thousands):

Year Ended August 31,		
2016	2015	2014

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

Revenues	\$—	\$8,263	\$15,682
Loss from discontinued operations before income taxes	\$(1,348)	\$(7,227)	\$(2,888 )
Income tax benefit	—	—	79
Loss from discontinued operations, net of tax	\$(1,348)	\$(7,227)	\$(2,809 )

See Note 8 - Discontinued Operations in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for further discussion.

36 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

## Financial results by reportable segment

We operate our business across two reportable segments: AMR and SMB. Additional financial information relating to these reportable segments is contained in Note 18 – Segment Information in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

## Auto and Metals Recycling

For the Year Ended August 31,

(\$ in thousands, except for prices)				% Increase / (Decrease)		
	2016	2015	2014	2016 vs 2015		vs 2014
Ferrous revenues	\$709,454	\$1,098,225	\$1,628,685	(35 )%	(33 )%	
Nonferrous revenues	340,025	488,036	556,139	(30 )%	(12 )%	
Retail and other revenues	123,553	130,035	149,565	(5 )%	(13 )%	
Total segment revenues	1,173,032	1,716,296	2,334,389	(32 )%	(26 )%	
Cost of goods sold	1,011,293	1,567,356	2,141,253	(35 )%	(27 )%	
Selling, general and administrative expense	112,631	129,117	138,255	(13 )%	(7 )%	
(Income) from joint ventures	(742 )	(1,541 )	(1,136 )	(52 )%	36 %	
Goodwill impairment charges	8,845	141,021	—	(94 )%	NM	
Other asset impairment charges	18,379	44,374	928	(59 )%	4,682 %	
Segment operating income (loss)	\$22,626	\$(164,031 )	\$55,089	NM	NM	
Average recycled ferrous metal sales prices (\$/LT): <sup>(1)</sup>						
Domestic	\$193	\$275	\$345	(30 )%	(20 )%	
Foreign	\$195	\$265	\$350	(26 )%	(24 )%	
Average	\$194	\$269	\$348	(28 )%	(23 )%	
Ferrous sales volume (LT, in thousands):						
Domestic	1,225	1,472	1,508	(17 )%	(2 )%	
Foreign	2,064	2,236	2,801	(8 )%	(20 )%	
Total ferrous sales volume (LT, in thousands)	3,289	3,708	4,309	(11 )%	(14 )%	
Average nonferrous sales price (\$/pound) <sup>(1)(2)</sup>	\$0.59	\$0.75	\$0.83	(21 )%	(10 )%	
Nonferrous sales volumes (pounds, in thousands) <sup>(2)</sup>	510,283	585,435	614,518	(13 )%	(5 )%	
Cars purchased (in thousands) <sup>(3)</sup>	319	337	360	(5 )%	(6 )%	
Number of auto parts stores at period end	52	55	56	(5 )%	(2 )%	
Outbound freight included in cost of goods sold	\$84,563	\$120,297	\$146,431	(30 )%	(18 )%	

LT = Long Ton, which is 2,240 pounds

NM = Not meaningful

(1) Price information is shown after netting the cost of freight incurred to deliver the product to the customer.

(2) Average sales price and volume information excludes platinum group metals ("PGMs") in catalytic converters.

(3) Cars purchased by auto parts stores only.

Fiscal 2016 compared with fiscal 2015

## Revenues

The 35% decrease in ferrous revenues and 30% decrease in nonferrous revenues were primarily due to significantly lower average net selling prices for ferrous and nonferrous scrap metal, as well as reduced sales volumes compared to the prior year. After experiencing sharp declines in the first half of fiscal 2016, net selling prices for shipments of ferrous scrap metal increased significantly during the third quarter of fiscal 2016, primarily due to improved demand, before decreasing in the fourth quarter and returning to the levels seen at the beginning of the fiscal year. Overall demand for recycled metals in our end-markets was weaker than in the prior year primarily due to continued low global economic growth, the relative strength of the U.S. dollar and the impact of lower iron ore prices during most of the fiscal year. This resulted in significantly lower average net selling prices for ferrous and nonferrous scrap metal

and reduced sales volumes in fiscal 2016 compared to the prior year.

37 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Segment Operating Income (Loss)

Operating income for fiscal 2016 was \$23 million, compared to operating loss of \$164 million in the prior year. Adjusted operating income in fiscal 2016 was \$49 million, which excludes a goodwill impairment charge of \$9 million, other asset impairment charges of \$18 million and benefits from contract settlements of \$1 million. Adjusted operating income in fiscal 2015 was \$28 million, which excludes a goodwill impairment charge of \$141 million, other asset impairment charges of \$44 million and the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments of \$7 million. See the reconciliation of AMR adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7.

Operating results during fiscal 2016 and 2015 were adversely impacted by the lower price environment which included sharp declines in commodity selling prices during the first half of each year and asset impairment charges recorded in each year. Operating results in the second half of fiscal 2016 benefited from an increase in ferrous average net selling prices after experiencing sharp declines during the first half of the fiscal year which resulted in the adverse impact from average inventory accounting in fiscal 2016 being significantly less than the adverse impact in fiscal 2015. Operating results in fiscal 2016 also benefited from cost saving and productivity improvement measures initiated in fiscal 2015, and further expanded in fiscal 2016, to reduce direct costs of production and selling, general and administrative ("SG&A") expense. Excluding the adverse impact of asset impairment charges, these benefits contributed to higher operating margins per ferrous ton sold at AMR compared to fiscal 2015 despite lower average net selling prices and sales volumes. SG&A expense in fiscal 2016 decreased by \$16 million, or 13%, compared to fiscal 2015 primarily resulting from reduced employee-related expenses.

In the second quarter of fiscal 2016, we identified a triggering event requiring an interim impairment test of goodwill allocated to our reporting units. The impairment test resulted in a non-cash goodwill impairment charge of \$9 million at a reporting unit within the AMR operating segment. We also recorded non-cash impairment charges and accelerated depreciation on certain long-lived and other assets at AMR of \$18 million primarily related to certain regional metals recycling operations and used auto parts store locations and certain previously-idled recycling equipment assets. In the second quarter of fiscal 2015, we identified a triggering event requiring an interim impairment test of goodwill which resulted in a non-cash goodwill impairment charge of \$141 million at the former MRB reporting unit. The impairment charge is reported within the results of AMR. We also recorded non-cash impairment charges and accelerated depreciation on certain long-lived and other assets at AMR of \$44 million primarily in connection with certain strategic actions we undertook to improve our operating performance which included reducing shredding capacity and closing auto parts stores.

AMR's results of operations do not include operating results from discontinued operations. See Note 8 – Discontinued Operations in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

## Fiscal 2015 compared with fiscal 2014

## Revenues

The 33% decrease in ferrous revenues and 12% decrease in nonferrous revenues were primarily due to significantly lower average net selling prices for ferrous and nonferrous scrap metal, as well as reduced sales volumes compared to the prior year. Export net selling prices for shipments of recycled ferrous metal experienced multiple sharp declines throughout fiscal 2015, decreasing by approximately \$150 per ton, or approximately 40%, compared to the end of the fourth quarter of fiscal 2014. These decreases were driven by weaker global steel markets due to excess capacity and overproduction, a further strengthening of the U.S. dollar during the year, the impact of lower iron ore prices on market conditions for recycled metals and weaker demand in the end-markets to which we sell. Domestic net selling prices for ferrous metal also decreased sharply during the year. Lower sales volumes were primarily due to a combination of weaker export demand and, to a lesser extent, weaker domestic demand and competition for available raw materials. In fiscal 2015, we increased the share of domestic sales of ferrous material due to relatively stronger domestic demand compared to the export market.





Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Segment Operating Income (Loss)

Operating loss for fiscal 2015 was \$164 million, compared to operating income of \$55 million in the prior year. Adjusted operating income in fiscal 2015, excluding a goodwill impairment charge of \$141 million, other asset impairment charges of \$44 million and the impact of reselling or modifying the terms of certain previously contracted bulk ferrous shipments of \$7 million, was \$28 million, compared to adjusted operating income of \$56 million in fiscal 2014. See the reconciliation of AMR adjusted operating income (loss) in Non-GAAP Financial Measures at the end of this Item 7. Operating results in fiscal 2015 were negatively impacted by the sharp decline in selling prices resulting in a significant adverse impact on cost of goods sold from average inventory accounting and compression of operating margins. The lower price environment also adversely impacted the supply of scrap metal, including end-of-life vehicles, which led to lower processed volumes further compressing operating margins. The effects of these adverse conditions on operating results were partially offset as operating results benefited from a decrease in SG&A expense of \$9 million compared to the prior year primarily as a result of lower employee compensation of \$6 million associated with headcount reduction and productivity initiatives implemented in fiscal 2014 and 2015 and by reduced incentive compensation from lower financial performance, and lower selling and marketing expense of \$3 million. In fiscal 2015, AMR achieved a total benefit of approximately \$28 million in connection with the cost saving and productivity initiatives and other strategic actions initiated in fiscal 2015, with the benefits from productivity improvements impacting cost of goods sold more than offset by the continued challenging ferrous and nonferrous market conditions and the impact of constrained supply conditions for raw materials.

## Steel Manufacturing Business

For the Year Ended August 31,

(\$ in thousands, except for price)				% Increase / (Decrease)	
	2016	2015	2014	2016 vs 2015	2015 vs 2014
Revenues <sup>(1)</sup>	\$269,905	\$375,037	\$388,640	(28)%	(4)%
Cost of goods sold	257,316	348,499	362,843	(26)%	(4)%
Selling, general and administrative expense	6,631	6,160	7,259	8%	(15)%
Other asset impairment charges	2,224	—	—	NM	NM
Segment operating income	\$3,734	\$20,378	\$18,538	(82)%	10%
Finished steel average sales price (\$/ST) <sup>(2)</sup>	\$522	\$639	\$677	(18)%	(6)%
Finished steel products sold (ST, in thousands)	488	540	533	(10)%	1%
Rolling mill utilization	63	% 73	% 70	% (14)%	% 4%

ST = Short Ton, equivalent to 2,000 pounds

(1) Revenues include sales of semi-finished goods (billets) and finished steel products.

(2) Price information is shown after netting the cost of freight incurred to deliver the product to the customer.

Fiscal 2016 compared with fiscal 2015

## Revenues

Revenues decreased by \$105 million, or 28%, compared to the prior year. This decrease was due to reduced average selling prices and sales volumes driven by increased competition from lower-priced imports of finished steel products and reduced steel-making raw material costs primarily during the first half of fiscal 2016. Sales volumes improved in the second half of fiscal 2016 compared to the first half of the fiscal year primarily due to the impact of seasonality, but remained lower than levels achieved in fiscal 2015.

## Segment Operating Income

Operating income for fiscal 2016 was \$4 million, a decrease of \$17 million compared to \$20 million in the prior year. Adjusted operating income in fiscal 2016, excluding other asset impairment charges of \$2 million, was \$6 million, compared to adjusted operating income of \$20 million in fiscal 2015. See the reconciliation of SMB adjusted operating income in Non-GAAP Financial Measures at the end of Item 7.

The year-over-year reduction in operating results was primarily due to the declining price environment during the first half of fiscal 2016 which led to selling prices falling faster than cost of goods sold. Additionally, sales volumes decreased primarily due to increased competition from imported steel products. The rolling mill utilization rate decreased primarily due to lower sales volumes compared to the prior year and the optimization of inventory levels.

39 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Fiscal 2015 compared with fiscal 2014

Revenues

Revenues decreased by \$14 million, or 4%, compared to the prior year primarily due to lower average sales prices for finished steel products reflecting lower raw material costs and higher import activity, which more than offset the increase in sales volumes due to higher demand in our West Coast markets mainly driven by improved business conditions for non-residential construction.

Segment Operating Income

Operating income for fiscal 2015 was \$20 million, an improvement of \$2 million compared to \$19 million in the prior year. The improved results were primarily due to higher sales volumes, increased rolling mill utilization levels and a decrease in SG&A expense due to recognition of bad debt expense of \$1 million in fiscal 2014.

Liquidity and Capital Resources

We rely on cash provided by operating activities as a primary source of liquidity, supplemented by current cash on hand and borrowings under our existing credit facilities.

Sources and Uses of Cash

We had cash balances of \$27 million and \$23 million as of August 31, 2016 and 2015, respectively. Cash balances are intended to be used primarily for working capital, capital expenditures, acquisitions, dividends and share repurchases. We also use excess cash on hand to reduce amounts outstanding under our credit facilities. As of August 31, 2016, debt was \$193 million, compared to \$228 million as of August 31, 2015, and debt, net of cash, was \$166 million compared to \$205 million (refer to Non-GAAP Financial Measures below), a decrease of \$40 million primarily as a result of the positive cash flows generated by operating activities. Our cash balances as of August 31, 2016 and 2015 include \$7 million and \$5 million, respectively, which are indefinitely reinvested in Puerto Rico and Canada.

Operating Activities

Net cash provided by operating activities in fiscal 2016 was \$99 million, compared to \$145 million in fiscal 2015 and \$141 million in fiscal 2014.

Net cash provided by operating activities in fiscal 2016 primarily benefited from improved operating performance compared to the prior year. Sources of cash in fiscal 2016 included a \$28 million decrease in inventories due to the impact of lower raw material prices and timing of purchases and sales, a \$6 million decrease in refundable income taxes due to collection of tax refunds, and a \$6 million insurance reimbursement. Uses of cash included a \$11 million increase in accounts receivable due to the timing of sales and collections. A significant amount of cash generated by operating activities in fiscal 2015 and 2016 stemmed from a reduction in net working capital primarily as a result of the declining price environment for ferrous and nonferrous scrap metal and finished steel and to a lesser extent lower inventory volumes, as well as positive operating performance. In an environment of stable or increasing scrap metal prices, which would require a greater use of cash for net working capital items, our ability to generate significant positive cash flows from operating activities would be largely dependent upon achieving positive operating performance.

Sources of cash in fiscal 2015 included a \$56 million decrease in accounts receivable primarily due to the timing of sales and collections and a \$69 million decrease in inventories due to the impacts of decreasing raw materials prices and timing of purchases and sales. Uses of cash included a \$36 million decrease in accounts payable due to lower raw material purchase prices and the timing of payments.

Cash provided by operating activities in fiscal 2014 included a decrease in inventories of \$36 million due to the timing of shipments. Uses of cash included an increase of \$16 million in accounts receivable due to the timing of shipments and collections.

Investing Activities

Net cash used in investing activities in fiscal 2016 was \$30 million, compared to \$28 million in fiscal 2015 and \$41 million in fiscal 2014.

Cash used in investing activities in fiscal 2016, 2015 and 2014 included \$35 million, \$32 million and \$39 million, respectively, in capital expenditures to upgrade our equipment and infrastructure and for additional investments in

environmental and safety-related assets. For all fiscal years presented, the significant majority of capital expenditures were associated with projects at AMR.

40 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

## Financing Activities

Net cash used in financing activities for fiscal 2016 was \$65 million, compared with \$119 million in fiscal 2015 and \$88 million in fiscal 2014.

Cash used in financing activities in fiscal 2016, 2015 and 2014 included \$20 million for cash dividends in each fiscal year and \$36 million, \$91 million and \$64 million, respectively, in net repayments of debt. Refer to Non-GAAP Financial Measures below.

## Credit Facilities

Following is a summary of our outstanding balances and availability on credit facilities and long-term debt, exclusive of capital lease obligations (in thousands):

	Outstanding as of 8/31/2016	Remaining Availability
Bank secured revolving credit facility <sup>(1)</sup>	\$ 180,000	\$ 150,743
Tax-exempt economic development revenue bonds due January 2021	\$ 7,700	N/A
Other debt obligations	\$ 765	N/A

(1) Remaining availability is net of \$16 million of outstanding stand-by letters of credit as of August 31, 2016.

On April 6, 2016, we and certain of our subsidiaries entered into the Third Amended and Restated Credit Agreement (the "Amended Credit Agreement"), by and among Schnitzer Steel Industries, Inc., as the U.S. borrower, Schnitzer Steel Canada Ltd., as a Canadian borrower, Bank of America, N.A., as administrative agent, and the other lenders party thereto, which amended and restated our existing credit agreement, dated as of February 9, 2011 (the "Prior Credit Agreement"). The Amended Credit Agreement provides for \$335 million and C\$15 million in senior secured revolving credit facilities maturing in April 2021. The \$335 million credit facility includes a \$50 million sublimit for letters of credit, a \$25 million sublimit for swingline loans and a \$50 million sublimit for multicurrency borrowings. Subject to the terms and conditions of the Amended Credit Agreement, the Company may request that the commitments under the U.S. credit facility be increased by an aggregate amount not exceeding \$100 million if certain conditions are met including pre-approval by our lenders and achievement of certain pro forma financial results. The Prior Credit Agreement provided for unsecured credit facilities with revolving loans of up to \$670 million and C\$30 million maturing in April 2017. We sized our credit facility renewal based on historic and expected future usage and believe the borrowing capacity of the Amended Credit Agreement is adequate to cover our short- and long-term financing needs.

Interest rates on outstanding indebtedness under the Amended Credit Agreement are based, at our option, on either the London Interbank Offered Rate ("LIBOR"), or the Canadian equivalent, plus a spread of between 1.75% and 2.75%, with the amount of the spread based on a pricing grid tied to the Company's leverage ratio but no less than 2.50% for the fiscal quarters ended or ending May 31, 2016, August 31, 2016 and November 30, 2016, or the greater of the prime rate, the federal funds rate plus 0.50% or the daily rate equal to one-month LIBOR plus 1.75%, in each case plus a spread of between zero and 1.00% based on a pricing grid tied to the Company's leverage ratio. In addition, commitment fees are payable on the unused portion of the credit facilities at rates between 0.20% and 0.40% based on a pricing grid tied to our leverage ratio.

We had borrowings outstanding under the credit facility of \$180 million and \$215 million as of August 31, 2016 and 2015, respectively. The weighted average interest rate on amounts outstanding under this facility was 3.01% and 1.95% as of August 31, 2016 and 2015, respectively.

We use this credit facility to fund working capital, capital expenditures, dividends, share repurchases and acquisitions. The Amended Credit Agreement contains various representations and warranties, events of default and financial and other customary covenants which limit (subject to certain exceptions) our ability to, among other things, incur or suffer to exist certain liens, make investments, incur or guaranty additional indebtedness, enter into consolidations, mergers, acquisitions, and sales of assets, make distributions and other restricted payments, change the nature of our business, engage in transactions with affiliates and enter into restrictive agreements, including agreements that restrict

the ability of our subsidiaries to make distributions. The financial covenants under the Amended Credit Agreement include (a) a consolidated fixed charge coverage ratio, defined as the four-quarter rolling sum of consolidated adjusted EBITDA less defined maintenance capital expenditures divided by consolidated fixed charges; (b) a consolidated leverage ratio, defined as consolidated funded indebtedness divided by the sum of consolidated net worth and consolidated funded indebtedness; and (c) a consolidated asset coverage ratio, defined as the consolidated asset value of eligible assets divided by the consolidated funded indebtedness. The financial covenants require maintenance of a minimum consolidated fixed charge coverage ratio of 1.25 to 1.00 for fiscal quarters ending May 31, 2016, August 31, 2016 and November 30, 2016, and 1.50 to 1.00 thereafter, a maximum leverage ratio of 0.55 to 1.00, and a minimum asset coverage ratio of 0.90 to 1.00 for fiscal quarters ending May 31, 2016, August 31, 2016 and November 30, 2016 and 1.00 to 1.00 thereafter.

41 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

As of August 31, 2016, we were in compliance with the financial covenants under the Amended Credit Agreement. The consolidated fixed charge coverage ratio was required to be no less than 1.25 to 1.00 and was 2.43 to 1.00 as of August 31, 2016. The consolidated leverage ratio was required to be no more than 0.55 to 1.00 and was 0.29 to 1.00 as of August 31, 2016. The asset coverage ratio was required to be no less than 0.90 to 1.00 and was 1.25 to 1.00 as of August 31, 2016.

The Company's obligations under the Amended Credit Agreement are guaranteed by substantially all of our subsidiaries. The credit facilities and the related guarantees are secured by senior first priority liens on certain of our and our subsidiaries' assets, including equipment, inventory and accounts receivable.

While we expect to remain in compliance with the financial covenants under the Amended Credit Agreement, there can be no assurances that we will be able to do so in the event market conditions or other negative factors which adversely impact our results of operations and financial position lead to a trend of consolidated net losses. If we do not maintain compliance with our financial covenants and are unable to obtain an amendment or waiver from our lenders, a breach of a financial covenant would constitute an event of default and allow the lenders to exercise remedies under the agreements, the most severe of which is the termination of the credit facility under our committed bank credit agreement and acceleration of the amounts owed under the agreement. In such case, we would be required to evaluate available alternatives and take appropriate steps to obtain alternative funds. There can be no assurances that any such alternative funds, if sought, could be obtained or, if obtained, would be adequate or on acceptable terms.

In addition, as of August 31, 2016 and 2015, we had \$8 million of tax-exempt economic development revenue bonds outstanding with the State of Oregon and scheduled to mature in January 2021. In August 2016, the Company exercised its option to redeem the bonds prior to maturity. The Company repaid the bonds in full in September 2016. The obligation is reported as a current liability within short-term borrowings as of August 31, 2016 on the Consolidated Balance Sheet.

#### Capital Expenditures

Capital expenditures totaled \$35 million, \$32 million and \$39 million for fiscal 2016, 2015 and 2014, respectively. Fiscal 2016 and 2015 capital expenditures were primarily to upgrade our equipment and infrastructure and for additional investments in environmental compliance and safety-related projects. Our capital expenditures in fiscal 2014 included completion of our investment in the construction of a nonferrous processing facility in Puerto Rico. We currently plan to invest in the range of \$45 million in capital expenditures on maintenance and environmental compliance and safety-related projects in fiscal 2017, an increase from the expenditures made in fiscal 2016 and 2015 primarily due to increased environmental project spending using cash generated from operations and available lines of credit.

#### Environmental Compliance

Our commitment to recycling and operating our business in an environmentally responsible manner requires us to continue to invest in facilities that improve our environmental presence in the communities in which we operate. As part of our capital expenditures, we invested \$14 million, \$10 million and \$8 million for environmental projects in fiscal 2016, 2015 and 2014, respectively. We plan to invest in the range of \$19 million in capital expenditures for environmental projects in fiscal 2017. These projects include investments in storm water systems and equipment to ensure ongoing compliance with air quality and other environmental regulations.

We have been identified by the United States Environmental Protection Agency ("EPA") as one of the potentially responsible parties that own or operate or formerly owned or operated sites which are part of or adjacent to the Portland Harbor Superfund site ("the Site"). See Note 9 – Commitments and Contingencies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report for a discussion of this matter. We have insurance policies that we believe will provide reimbursement for costs we incur for defense, remediation and mitigation for natural resource damages claims in connection with the Site, although there are no assurances that those policies will cover all of the costs which we may incur. Significant cash outflows in the future related to the Site could reduce the amounts available for borrowing that could otherwise be used for working capital, capital expenditures, dividends share repurchases, and acquisitions could result in our failure to maintain compliance with certain covenants in our debt agreements, and could adversely impact our liquidity.

Share Repurchase Program

Pursuant to our amended share repurchase program, we have existing authorization to repurchase up to approximately 1.8 million shares of our Class A common stock when we deem such repurchases to be appropriate. We evaluate long- and short-range forecasts as well as anticipated sources and uses of cash before determining the course of action in our share repurchase program. As of the beginning of fiscal 2015, we had repurchased approximately 6.9 million shares of our Class A common stock under the program.

42 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

We repurchased approximately 68 thousand shares for a total of \$1 million and 203 thousand shares for a total of \$3 million in open-market transactions in fiscal 2015 and 2016, respectively.

Assessment of Liquidity and Capital Resources

Historically, our available cash resources, internally generated funds, credit facilities and equity offerings have financed our acquisitions, capital expenditures, working capital and other financing needs.

We generally believe our current cash resources, internally generated funds, existing credit facilities and access to the capital markets will provide adequate short-term and long-term liquidity needs for working capital, capital expenditures, share repurchases, dividends, joint ventures, debt service requirements, environmental obligations and acquisitions. However, in the event of a sustained market deterioration, we may need additional liquidity, which would require us to evaluate available alternatives and take appropriate steps to obtain sufficient additional funds.

There can be no assurance that any such supplemental funding, if sought, could be obtained or, if obtained, would be adequate or on acceptable terms.

Off-Balance Sheet Arrangements

None.

Contractual Obligations and Commitments

We have certain contractual obligations to make future payments. The following table summarizes these future obligations as of August 31, 2016 (in thousands):

	Payment Due by Period						Total
	2017	2018	2019	2020	2021	Thereafter	
Contractual Obligations							
Long-term debt <sup>(1)</sup>	\$7,737	\$142	\$98	\$89	\$180,047	\$352	\$188,465
Interest payments on long-term debt <sup>(2)</sup>	5,454	5,469	5,452	5,446	3,636	80	25,537
Capital leases, including interest	1,164	951	845	845	708	2,081	6,594
Operating leases	21,190	17,946	14,649	10,667	6,065	22,212	92,729
Purchase obligations <sup>(3)</sup>	53,023	11,218	11,681	11,428	1,920	7,987	97,257
Other <sup>(4)</sup>	445	388	311	308	305	2,744	4,501
Total	\$89,013	\$36,114	\$33,036	\$28,783	\$192,681	\$35,456	\$415,083

(1) Long-term debt represents the principal amounts of all outstanding long-term debt, maturities of which extend to 2027.

Interest payments on long-term debt are based on interest rates in effect as of August 31, 2016. As contractual interest rates and the amount of debt outstanding is variable in certain cases, actual cash payments may differ from the estimates provided.

Purchase obligations include all enforceable, legally binding agreements to purchase goods or services that specify all significant terms, regardless of the duration of the agreement, including purchases of inventory items to be sold in the ordinary course of business.

(4) Other contractual obligations consist of pension funding obligations and other accrued liabilities.

We maintain stand-by letters of credit to provide support for certain obligations, including workers' compensation and performance bonds. At August 31, 2016, we had \$16 million outstanding under these arrangements.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires us to make certain judgments, estimates, and assumptions regarding uncertainties that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions and judgments about matters that are inherently uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably likely to occur could materially impact our consolidated financial statements. We deem critical accounting policies to be those that are most important to the portrayal of our financial condition and results of operations. Because of the uncertainty inherent in

these matters, actual results could differ from the estimates we use in applying the critical accounting policies. We are not currently aware of any reasonably likely events or circumstances that would result in materially different amounts being reported.

Our critical accounting estimates include those related to goodwill, long-lived assets, environmental costs, inventories, accounting for business combinations and revenue recognition.

43 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Goodwill

We evaluate goodwill for impairment annually and upon the occurrence of certain triggering events or substantive changes in circumstances that indicate that the fair value of goodwill may be impaired. Impairment of goodwill is tested at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment (referred to as a ‘component’). In the fourth quarter of fiscal 2015, we changed our internal organizational and reporting structure to combine the auto and metals recycling businesses, which resulted in the formation of a new operating and reportable segment, AMR, replacing our MRB and APB operating segments. This change led to the identification of components within AMR based on the disaggregation of financial information regularly reviewed by segment management by geographic area. Components with similar economic characteristics were aggregated into reporting units and goodwill was reassigned to the affected reporting units using the relative fair value approach as of the date of the reassessment, July 1, 2015. Beginning on that date, our goodwill was carried by two regionally-defined reporting units, one consisting of a single component with \$168 million of allocated goodwill, and the other consisting of two components with similar economic characteristics aggregated into a reporting unit with \$9 million of allocated goodwill. Our SMB operating segment has no goodwill allocated to it.

When testing goodwill for impairment, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If we elect to perform a qualitative assessment and determine that an impairment is more likely than not, we are then required to perform the two-step quantitative impairment test, otherwise no further analysis is required. We also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. In the first step of the quantitative impairment test, the fair value of a reporting unit is compared to its carrying value. If the carrying value of a reporting unit exceeds its fair value, the second step of the impairment test is performed for purposes of measuring the impairment. In the second step, the fair value of the reporting unit is allocated to all of the assets and liabilities of the reporting unit to determine an implied goodwill value. This allocation is similar to a purchase price allocation. If the carrying amount of the reporting unit’s goodwill exceeds the implied fair value of goodwill, an impairment loss is recognized in an amount equal to that excess.

We estimate the fair value of the reporting units using an income approach based on the present value of expected future cash flows utilizing a market-based weighted average cost of capital (“WACC”) determined separately for each reporting unit. To estimate the present value of the cash flows that extend beyond the final year of the discounted cash flow model, we employ a terminal value technique, whereby we use estimated operating cash flows minus capital expenditures, adjust for changes in working capital requirements in the final year of the model, and then discount these estimated cash flows by the WACC to establish the terminal value.

The determination of fair value using the income approach requires judgment and involves the use of significant estimates and assumptions about expected future cash flows derived from internal forecasts and the impact of market conditions on those assumptions. Critical assumptions primarily include revenue growth rates driven by future commodity prices and volume expectations, operating margins, capital expenditures, working capital requirements, tax rates, terminal growth rates, discount rates, benefits associated with a taxable transaction and synergistic benefits available to market participants.

We also use a market approach based on earnings multiple data and our Company’s market capitalization to corroborate our reporting units’ valuations. We reconcile the Company’s market capitalization to the aggregated estimated fair value of our reporting units, including consideration of a control premium representing the estimated amount a market participant would pay to obtain a controlling interest.

In the second quarter of fiscal 2016, we identified the combination of sustained weak market conditions, including the adverse effects of lower commodity selling prices and the constraining impact of the lower price environment on the supply of raw materials which negatively impacted volumes, our recent financial performance and a decline in our market capitalization as a triggering event requiring an interim impairment test of goodwill allocated to our reporting units. The measurement date for the interim goodwill impairment test was February 1, 2016.

For the reporting unit with \$9 million of goodwill as of February 1, 2016, the first step of the impairment test showed that the fair value of the reporting unit was less than its carrying amount, indicating a potential impairment. Based on the second step of the impairment test, we concluded that no implied fair value of goodwill remained for the reporting unit, resulting in an impairment of the carrying amount of the reporting unit's goodwill totaling \$9 million.

44 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

For the reporting unit with \$166 million of goodwill as of February 1, 2016, the estimated fair value of the reporting unit exceeded its carrying value by approximately 27%. The projections used in the income approach for the reporting unit took into consideration the impact of current market conditions for ferrous and nonferrous recycled metals, the cost of obtaining adequate supply flows of scrap metal including end-of-life vehicles, and recent trends of self-serve parts sales. The projections assumed a limited recovery of operating margins from current depressed levels over a multi-year period, including the benefits of recently initiated cost-saving and productivity improvement measures. The market-based WACC used in the income approach for the reporting unit was 11.2%. The terminal growth rate used in the discounted cash flow model was 2%. Assuming all other components of the fair value estimate were held constant, an increase in the WACC of 200 basis points or more or weaker than anticipated improvements in operating margins could have resulted in a failure of the step one quantitative impairment test for the reporting unit.

In the fourth quarter of fiscal 2016, we performed the annual goodwill impairment test as of July 1, 2016. As of the testing date, the balance of the Company's goodwill of \$167 million was carried by a single reporting unit within the AMR operating segment. We elected to first assess qualitative factors to determine whether the existence of events or circumstances led to a determination that it is more likely than not that the estimated fair value of the reporting unit is less than its carrying amount. As a result of the qualitative assessment, we concluded that it is not more likely than not that the fair value of the reporting unit is less than its carrying value as of the testing date and, therefore, no further impairment testing was required.

As a result of the inherent uncertainty associated with forming the estimates described above, actual results could differ from those estimates. Future events and changing market conditions may impact our assumptions as to future revenue and operating margin growth rates, market-based WACC, and other factors that may result in changes in our estimates of the reporting units' fair value. Although we believe the assumptions used in testing our reporting units' goodwill for impairment are reasonable, declines in market conditions from current levels, a trend of weaker than anticipated financial performance for the reporting unit with allocated goodwill, a decline in our share price from current levels for a sustained period of time, or an increase in the market-based WACC, among other factors, could significantly impact our impairment analysis and may result in future goodwill impairment charges that, if incurred, could have a material adverse effect on our financial condition and results of operations.

#### Long-Lived Assets

We test long-lived tangible and intangible assets for impairment at the asset group level, which is determined based on the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. For our metals recycling operations, an asset group is generally comprised of the regional shredding and export operation along with surrounding feeder yards. For regions with no shredding and export operations, each metals recycling yard is an asset group. For our auto parts operations, generally each auto parts store is an asset group. Our steel manufacturing business is a single asset group. We test our asset groups for impairment when certain triggering events or changes in circumstances indicate that the carrying value of the asset group may be impaired. If the carrying value of the asset group is not recoverable because it exceeds the estimate of future undiscounted cash flows from the use and eventual disposition of the asset group, an impairment loss is recognized by the amount the carrying value exceeds its fair value, if any. The impairment loss is allocated to the long-lived assets of the group on a pro rata basis using the relative carrying amounts of those assets, except that the loss allocated to an individual long-lived asset of the group shall not reduce the carrying amount of that asset below its fair value. Fair value is determined primarily using the cost and market approaches. During fiscal 2016, we recorded \$8 million of impairment charges on long-lived tangible and intangible assets associated with certain regional metals recycling operations and used auto parts store locations. These charges are reported in the Consolidated Statements of Operations within other asset impairment charges, restructuring charges and other exit related activities, or discontinued operations, if related to a component of the Company qualifying for discontinued operations reporting.

With respect to individual long-lived assets, changes in circumstances may merit a change in the estimated useful lives or salvage values of the assets, which are accounted for prospectively in the period of change. For such assets, the useful life is shortened based on our current plans to dispose of or abandon the asset before the end of its original useful life and depreciation is accelerated beginning when that determination is made. During fiscal 2016, we

recognized accelerated depreciation due to shortened useful lives in connection with site closures and idled equipment of \$7 million.

45 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

## Environmental Costs

We operate in industries that inherently possess environmental risks. To manage these risks, we employ both our own environmental staff and outside consultants. Environmental staff and finance personnel meet regularly to discuss environmental risks. We estimate future costs for known environmental remediation requirements and accrue for them on an undiscounted basis when it is probable that we have incurred a liability and the related costs can be reasonably estimated but the timing of incurring the estimated costs is unknown. The regulatory and government management of these projects is complex, which is one of the primary factors that make it difficult to assess the cost of potential and future remediation. When only a wide range of estimated amounts can be reasonably established and no other amount within the range is better than any other, the low end of the range is recorded in the financial statements. If further developments or resolution of an environmental matter result in facts and circumstances that are significantly different than the assumptions used to develop these liabilities, the accrual for environmental remediation could be materially understated or overstated. Adjustments to these liabilities are made when additional information becomes available that affects the estimated costs to study or remediate any environmental issues or when expenditures for which accruals are established are made. The factors we consider in the recognition and measurement of environmental liabilities include:

- Current regulations, both at the time the liability is established and during the course of the investigation or remediation process, which specify standards for acceptable remediation;

- Information about the site which becomes available as the site is studied and remediated;

- The professional judgment of senior level internal staff, who take into account similar, recent instances of environmental remediation issues, and studies of our sites, among other considerations;

- Available technologies that can be used for remediation; and

- The number and financial condition of other potentially responsible parties and the extent of their responsibility for the costs of study and remediation.

Our accrued environmental liabilities as of August 31, 2016 included \$1 million related to third party investigation costs for the Portland Harbor Superfund site. Because there has not been a determination of the total cost of the investigations, the remediation that will be required, the amount of natural resource damages or how the costs of the ongoing investigations and any remedy and natural resource damages will be allocated among the PRPs, we believe it is not possible to reasonably estimate the amount or range of costs which it is likely or reasonably possible that we may incur in connection with the Site, although such costs could be material to our financial position, results of operations, cash flows and liquidity. Therefore, no additional amounts have been accrued. See Contingencies – Environmental in Note 9 – Commitments and Contingencies in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

## Inventories

Our inventories primarily consist of processed and unprocessed scrap metal (ferrous, nonferrous, and nonferrous recovered joint product arising from the manufacturing process), semi-finished steel products (billets), finished steel products (primarily rebar, merchant bar and wire rod) and used and salvaged vehicles, which are reported within finished goods. Inventories are stated at the lower of cost or market. We consider estimated future selling prices when determining the estimated net realizable value for our inventory. As AMR generally sells its recycled ferrous metal under contracts that provide for shipment within 30 to 60 days after the price is agreed, we utilize the selling prices under committed contracts and sales orders for determining the estimated market price of quantities on hand.

The accounting process we use to record metal quantities relies on significant estimates. With respect to unprocessed metal inventory, we rely on weighed quantities that are reduced by estimated amounts that are moved into production. These estimates utilize estimated recoveries and yields that are based on historical trends. Over time, these estimates are reasonably good indicators of what is ultimately produced; however, actual recoveries and yields can vary depending on product quality, moisture content and source of the unprocessed metal. If ultimate recoveries and yields are significantly different than estimated, the value of our inventory could be materially overstated or understated. To assist in validating the reasonableness of these estimates, we periodically review shrink factors and perform monthly physical inventory estimates. However, due to variations in product density, holding period and production processes

utilized to manufacture the product, physical inventories will not necessarily detect all variances. To mitigate this risk, we adjust the ferrous physical inventories when the volume of a commodity is low and a physical inventory count can more accurately estimate the remaining volume.

46 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents

## SCHNITZER STEEL INDUSTRIES, INC.

**Business Combinations**

In a business combination, we recognize the assets acquired, the liabilities assumed, and any noncontrolling interests in the acquiree at the acquisition date, measured at their fair values as of that date, generally using a market-based income approach. Measuring assets and liabilities at fair value requires us to determine the price that would be paid by a third party market participant based on the highest and best use of the assets or interests acquired. We utilize management estimates that incorporate input from an independent third party valuation firm in our determination of these fair values. Such estimates and valuations require us to make significant assumptions, including projections of future events and operating performance and determining the highest and best use of the assets or interests acquired. Acquisition costs are expensed as incurred.

**Revenue Recognition**

We recognize revenue when we have a contract or purchase order from a customer with a fixed or determinable price, the title and risk of loss transfer to the buyer and collectibility is reasonably assured. Title for both metal and finished steel products transfers based on contract terms. A significant portion of our ferrous export sales of recycled metal are made with letters of credit, reducing credit risk. However, domestic recycled ferrous metal sales, nonferrous sales and sales of finished steel are generally made on open account. Nonferrous export sales typically require a deposit prior to shipment. All sales made on open account are evaluated for collectibility prior to revenue recognition. Additionally, when detailed documents support revenue recognition based on transfer of title and risk of loss we recognize revenues on partially loaded shipments, which requires an estimate of the product weight involved in any partial shipments at period end. Retail revenues are recognized when customers pay for parts. Historically, there have been very few sales returns and adjustments that impact the ultimate collection of revenues; therefore, no material provisions have been made when the sale is recognized. We present taxes assessed by governmental authorities collected from customers on a net basis. Therefore, the taxes are excluded from revenue and are shown as a liability on our Consolidated Balance Sheets until remitted. See the discussion on credit risk contained in Item 7A of this report.

**Recently Issued Accounting Standards**

For a description of recent accounting pronouncements that may have an impact on our financial condition, results of operations or cash flows, see Note 3 – Recent Accounting Pronouncements in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this report.

**Non-GAAP Financial Measures****Debt, net of cash**

Debt, net of cash is the difference between (i) the sum of long-term debt and short-term borrowings (i.e., total debt) and (ii) cash and cash equivalents. We believe that debt, net of cash is a useful measure for investors because, as cash and cash equivalents can be used, among other things, to repay indebtedness, netting this against total debt is a useful measure of our leverage.

The following is a reconciliation of debt, net of cash (in thousands):

	August 31, 2016	August 31, 2015	August 31, 2014
Short-term borrowings	\$ 8,374	\$ 584	\$ 523
Long-term debt, net of current maturities	184,144	227,572	318,842
Total debt	192,518	228,156	319,365
Less: cash and cash equivalents	26,819	22,755	25,672
Total debt, net of cash	\$ 165,699	\$ 205,401	\$ 293,693

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

## Net borrowings (repayment) of debt

Net borrowings (repayment) of debt is the sum of borrowings from long-term debt, repayments of long-term debt, proceeds from line of credit, and repayment of line of credit. We present this amount as the net change in our borrowings (repayments) for the period because we believe it is useful for investors as a meaningful presentation of the change in debt.

The following is a reconciliation of net borrowings (repayments) of debt (in thousands):

	Fiscal 2016	Fiscal 2015	Fiscal 2014
Borrowings from long-term debt	\$152,311	\$140,536	\$313,207
Proceeds from line of credit	135,500	266,500	469,500
Repayment of long-term debt	(187,951 )	(231,103 )	(368,496 )
Repayment of line of credit	(135,500 )	(266,500 )	(478,000 )
Net repayments of debt	\$(35,640 )	\$(90,567 )	\$(63,789 )

Adjusted consolidated operating income (loss), adjusted AMR operating income (loss), adjusted SMB operating income, adjusted net income (loss) from continuing operations attributable to SSI, and adjusted diluted earnings per share from continuing operations attributable to SSI

We present these non-GAAP measures as we believe they provide a meaningful presentation of our results from business operations excluding adjustments for goodwill impairment charges, other asset impairment charges, the non-cash write-off of debt issuance costs as a result of the renewal of our credit facility in April 2016, and restructuring charges and other exit-related activities, that are not related to underlying business operational performance and improve the period-to-period comparability of our results from business operations. These measures also exclude the impact on operating results in fiscal 2015 from the resale or modification of the terms, each at significantly lower prices, of certain previously contracted bulk ferrous shipments for delivery during the first and second quarters of fiscal 2015. Due to the sharp declines in selling prices that occurred in the first and second quarters of fiscal 2015, the revised prices associated with these shipments were significantly lower than the prices in the original sales contracts entered into between August and November 2014. Beginning in fiscal 2016, recoveries resulting from settlements with the original contract parties, which are reported within SG&A expense in the Consolidated Statements of Operations, are also excluded from the measures.

The following is a reconciliation of the adjusted consolidated operating income (loss) and adjusted AMR operating income (loss) (in thousands):

	Fiscal 2016	Fiscal 2015	Fiscal 2014
Consolidated operating income (loss):			
As reported	\$(7,842 )	\$(195,529 )	\$24,364
Goodwill impairment charges	8,845	141,021	—
Other asset impairment charges	20,682	45,119	1,460
Restructuring charges and other exit-related activities	6,781	13,008	6,830
Resale or modification of previously contracted shipments, net of recoveries	(694 )	6,928	—
Adjusted	\$27,772	\$10,547	\$32,654
AMR operating income (loss):			
As reported	\$22,626	\$(164,031 )	\$55,089
Goodwill impairment charges	8,845	141,021	—
Other asset impairment charges	18,379	44,374	928
Resale or modification of previously contracted shipments, net of recoveries	(694 )	6,928	—
Adjusted	\$49,156	\$28,292	\$56,017
SMB operating income:			

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

As reported	\$3,734	\$20,378	\$18,538
Other asset impairment charges	2,224	—	—
Adjusted	\$5,958	\$20,378	\$18,538

48 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.

The following is a reconciliation of adjusted net income (loss) from continuing operations attributable to SSI and adjusted diluted earnings per share from continuing operations attributable to SSI (in thousands, except per share data):

	Fiscal 2016	Fiscal 2015	Fiscal 2014
Net income (loss) from continuing operations attributable to SSI:			
As reported	\$(18,061)	\$(189,782)	\$8,733
Goodwill impairment charges	8,845	141,021	—
Other asset impairment charges	20,682	45,119	1,460
Restructuring charges and other exit-related activities	6,781	13,008	6,830
Resale or modification of previously contracted shipments, net of recoveries	(694)	) 6,928	—
Non-cash write-off of debt issuance costs	768	—	—
Income tax expense (benefit) allocated to adjustments <sup>(1)</sup>	529	(12,703)	) (1,430)
Adjusted	\$18,850	\$3,591	\$15,593
Diluted earnings per share from continuing operations attributable to SSI:			
As reported	\$(0.66)	) \$(7.03)	) \$0.32
Goodwill impairment charges, per share	0.32	5.22	—
Other asset impairment charges, per share	0.76	1.67	0.05
Restructuring charges and other exit-related activities per share	0.25	0.48	0.25
Resale or modification of certain previously contracted shipments, net of recoveries, per share	(0.03)	) 0.26	—
Non-cash write-off of debt issuance costs, per share	0.03	—	—
Income tax expense (benefit) allocated to adjustments, per share <sup>(1)</sup>	0.02	(0.47)	) (0.05)
Adjusted <sup>(2)</sup>	\$0.69	\$0.13	\$0.58

Income tax allocated to the aggregate adjustments reconciling reported and adjusted net income (loss) from (1) continuing operations attributable to SSI and diluted earnings per share from continuing operations attributable to SSI is determined based on a tax provision calculated with and without the adjustments.

(2) May not foot due to rounding.

We believe that these non-GAAP financial measures allow for a better understanding of our operating and financial performance. These non-GAAP financial measures should be considered in addition to, but not as a substitute for, the most directly comparable U.S. GAAP measures. Although we find these non-GAAP financial measures useful in evaluating the performance of our business, our reliance on these measures is limited because the adjustments often have a material impact on our consolidated financial statements presented in accordance with GAAP. Therefore, we typically use these adjusted amounts in conjunction with our GAAP results to address these limitations.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

## Commodity Price Risk

We are exposed to commodity price risk, mainly associated with variations in the market price for ferrous and nonferrous metals, including scrap metal, finished steel products, autodies and other commodities. The timing and magnitude of industry cycles are difficult to predict and are impacted by general economic conditions. We respond to increases and decreases in forward selling prices by adjusting purchase prices. We actively manage our exposure to commodity price risk and monitor the actual and expected spread between forward selling prices and purchase costs and processing and shipping expense. Sales contracts are based on prices negotiated with our customers, and generally orders are placed 30 to 60 days ahead of shipment date. However, financial results may be negatively impacted when forward selling prices fall more quickly than we can adjust purchase prices or when customers fail to meet their contractual obligations. We assess the net realizable value of inventory ("NRV") each quarter based upon contracted sales orders and estimated future selling prices. Based on contracted sales and estimates of future selling prices, a 10% decrease in the selling price of inventory would not have had a material NRV impact on any of our reportable segments as of August 31, 2016 and 2015.

## Interest Rate Risk

We are exposed to market risk associated with changes in interest rates related to our debt obligations. Our revolving credit facility is subject to variable interest rates and therefore have exposure to changes in interest rates. If market interest rates had changed 10% from actual interest rate levels in fiscal 2016 or 2015, the effect on our interest expense and net income would not have been material.

## Credit Risk

Credit risk relates to the risk of loss that might occur as a result of non-performance by counterparties of their contractual obligations to take delivery of scrap metal and finished steel products and to make financial settlements of these obligations, or to provide sufficient quantities of scrap metal or payment to settle advances, loans and other contractual receivables in connection with demolition and scrap extraction projects. We manage our exposure to credit risk through a variety of methods, including shipping ferrous scrap metal exports under letters of credit, collection of deposits prior to shipment for certain nonferrous export customers, establishment of credit limits for sales on open terms, credit insurance and designation of collateral and financial guarantees securing advances, loans and other contractual receivables.

AMR ships nearly all ferrous bulk sales to foreign customers under contracts supported by letters of credit issued or confirmed by banks it deems creditworthy. The letters of credit ensure payment by the customer. As AMR generally sells its export recycled ferrous metal under contracts or orders that generally provide for shipment within 30 to 60 days after the price is agreed, AMR's customers typically do not have difficulty obtaining letters of credit from their banks in periods of rising ferrous prices, as the value of the letters of credit are collateralized by the value of the inventory on the ship. However, in periods of significantly declining prices, AMR's customers may not be able to obtain letters of credit for the full sales value of the inventory to be shipped.

As of August 31, 2016 and 2015, 34% and 28%, respectively, of our trade accounts receivable balance were covered by letters of credit. Of the remaining balance, 94% and 95% was less than 60 days past due as of August 31, 2016 and 2015 respectively.

## Foreign Currency Exchange Rate Risk

We are exposed to foreign currency exchange rate risk, mainly associated with sales transactions and related accounts receivable denominated in the U.S. Dollar by our Canadian subsidiary with a functional currency of the Canadian Dollar. In certain instances, we use derivatives to manage some portion of this risk. Our derivatives are agreements with independent counterparties that provide for payments based on a notional amount. As of August 31, 2016, we did not have any derivative contracts.



Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Management's Annual Report on Internal Control Over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control over financial reporting is a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

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

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

Management of the Company assessed the effectiveness of the Company's internal control over financial reporting using the criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management determined that the Company's internal control over financial reporting was effective as of August 31, 2016.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the Company's consolidated financial statements included in this Annual Report, also audited the effectiveness of the Company's internal control over financial reporting as of August 31, 2016, as stated in their report included herein.

Tamara L. Lundgren  
President and Chief Executive  
Officer  
October 25, 2016

Richard D. Peach  
Senior Vice President, Chief Financial Officer and Chief of Corporate  
Operations  
October 25, 2016

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Schnitzer Steel Industries, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income (loss), equity and cash flows present fairly, in all material respects, the financial position of Schnitzer Steel Industries, Inc. and its subsidiaries at August 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended August 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it classifies deferred income taxes in fiscal 2016.

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

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



deteriorate.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP  
Portland, Oregon  
October 25, 2016

52 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
CONSOLIDATED BALANCE SHEETS  
(in thousands)

	August 31,	
	2016	2015
Assets		
Current assets:		
Cash and cash equivalents	\$26,819	\$22,755
Accounts receivable, net	113,952	111,492
Inventories	132,972	156,532
Deferred income taxes	—	2,792
Refundable income taxes	1,254	7,263
Prepaid expenses and other current assets	24,809	21,531
Total current assets	299,806	322,365
Property, plant and equipment, net	392,820	427,554
Investments in joint ventures	13,616	15,320
Goodwill	166,847	175,676
Intangibles, net	4,931	6,353
Other assets	13,409	15,031
Total assets	\$891,429	\$962,299
Liabilities and Equity		
Current liabilities:		
Short-term borrowings	\$8,374	\$584
Accounts payable	58,439	57,105
Accrued payroll and related liabilities	29,116	25,478
Environmental liabilities	1,967	924
Accrued income taxes	—	148
Other accrued liabilities	35,758	36,207
Total current liabilities	133,654	120,446
Deferred income taxes	16,682	19,138
Long-term debt, net of current maturities	184,144	227,572
Environmental liabilities, net of current portion	44,383	45,869
Other long-term liabilities	11,134	10,723
Total liabilities	389,997	423,748
Commitments and contingencies (Note 9)		
Schnitzer Steel Industries, Inc. (“SSI”) shareholders’ equity:		
Preferred stock – 20,000 shares \$1.00 par value authorized, none issued	—	—
Class A common stock – 75,000 shares \$1.00 par value authorized, 26,482 and 26,474 shares issued and outstanding	26,482	26,474
Class B common stock – 25,000 shares \$1.00 par value authorized, 306 and 306 shares issued and outstanding	306	306
Additional paid-in capital	30,948	26,211
Retained earnings	480,100	520,066
Accumulated other comprehensive loss	(40,115 )	(38,522 )
Total SSI shareholders’ equity	497,721	534,535
Noncontrolling interests	3,711	4,016
Total equity	501,432	538,551
Total liabilities and equity	\$891,429	\$962,299

See Notes to the Consolidated Financial Statements.

53 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
 CONSOLIDATED STATEMENTS OF OPERATIONS  
 (in thousands, except per share amounts)

	Year Ended August 31,		
	2016	2015	2014
Revenues	\$1,352,543	\$1,915,399	\$2,534,926
Operating expense:			
Cost of goods sold	1,175,988	1,742,678	2,315,955
Selling, general and administrative	148,908	170,592	187,513
Income from joint ventures	(819)	(1,490)	(1,196)
Goodwill impairment charges	8,845	141,021	—
Other asset impairment charges	20,682	45,119	1,460
Restructuring charges and other exit-related activities	6,781	13,008	6,830
Operating income (loss)	(7,842)	(195,529)	24,364
Interest expense	(8,889)	(9,191)	(10,597)
Other income, net	1,226	4,256	1,215
Income (loss) from continuing operations before income taxes	(15,505)	(200,464)	14,982
Income tax (expense) benefit	(735)	12,615	(2,582)
Income (loss) from continuing operations	(16,240)	(187,849)	12,400
Loss from discontinued operations, net of tax	(1,348)	(7,227)	(2,809)
Net income (loss)	(17,588)	(195,076)	9,591
Net income attributable to noncontrolling interests	(1,821)	(1,933)	(3,667)
Net income (loss) attributable to SSI	\$(19,409)	\$(197,009)	\$5,924
Net income (loss) per share attributable to SSI:			
Basic:			
Income (loss) per share from continuing operations attributable to SSI	\$(0.66)	\$(7.03)	\$0.33
Loss per share from discontinued operations attributable to SSI	(0.05)	(0.27)	(0.10)
Net income (loss) per share attributable to SSI <sup>(1)</sup>	\$(0.71)	\$(7.29)	\$0.22
Diluted:			
Income (loss) per share from continuing operations attributable to SSI	\$(0.66)	\$(7.03)	\$0.32
Loss per share from discontinued operations attributable to SSI	(0.05)	(0.27)	(0.10)
Net income (loss) per share attributable to SSI <sup>(1)</sup>	\$(0.71)	\$(7.29)	\$0.22
Weighted average number of common shares:			
Basic	27,229	27,010	26,834
Diluted	27,229	27,010	27,000
Dividends declared per common share	\$0.750	\$0.750	\$0.750

(1) May not foot due to rounding.

See Notes to the Consolidated Financial Statements.

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)  
 (in thousands)

Year Ended August 31,

2016      2015      2014

Net

~~\$(17,588)~~ \$(195,076) \$9,591

(loss)

Other

comprehensive

income

(loss),

net

of

tax:

Foreign

currency

translation

adjustments

Cash

flow

hedges,

net

Pension

obligations

net

Total

other

comprehensive

loss

net

of

tax

Comprehensive

income

(loss)

Less

comprehensive

income

attributable

to

noncontrolling

interests

Comprehensive

income

(loss)

attributable

to

SSI

See Notes to the Consolidated Financial Statements.

55 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
CONSOLIDATED STATEMENTS OF EQUITY  
(in thousands)

	Common Stock Class A		Class B		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total SSI Shareholders' Equity	Noncontrolling Interests	Total Equity
	Shares	Amount	Shares	Amount						
Balance as of August 31, 2013	26,171	\$26,171	393	\$393	\$7,476	\$751,879	\$(9,361)	\$776,558	\$4,641	\$781,199
Net income	—	—	—	—	—	5,924	—	5,924	3,667	9,591
Other comprehensive loss, net of tax	—	—	—	—	—	—	(3,280)	(3,280)	—	(3,280)
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(3,115)	(3,115)
Restricted stock withheld for taxes	(59)	(59)	—	—	(1,519)	—	—	(1,578)	—	(1,578)
Issuance of restricted stock	176	176	—	—	(176)	—	—	—	—	—
Stock options exercised	9	9	—	—	231	—	—	240	—	240
Class B common stock converted to Class A common stock	87	87	(87)	(87)	—	—	—	—	—	—
Share-based compensation expense	—	—	—	—	14,506	—	—	14,506	—	14,506
Excess tax deficiency from stock options exercised and restricted stock units vested	—	—	—	—	(1,354)	—	—	(1,354)	—	(1,354)
Cash dividends	—	—	—	—	—	(20,232)	—	(20,232)	—	(20,232)
Balance as of August 31, 2014	26,384	26,384	306	306	19,164	737,571	(12,641)	770,784	5,193	775,977
Net income (loss)	—	—	—	—	—	(197,009)	—	(197,009)	1,933	(195,076)
Other comprehensive loss, net of tax	—	—	—	—	—	—	(25,881)	(25,881)	—	(25,881)
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(3,110)	(3,110)
	(68)	(68)	—	—	(1,279)	—	—	(1,347)	—	(1,347)

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

Share repurchases										
Restricted stock withheld for taxes	(92 )	(92 )	—	—	(1,905 )	—	—	(1,997 )	—	(1,997 )
Issuance of restricted stock	250	250	—	—	(250 )	—	—	—	—	—
Share-based compensation expense	—	—	—	—	10,481	—	—	10,481	—	10,481
Cash dividends	—	—	—	—	—	(20,496 )	—	(20,496 )	—	(20,496 )
Balance as of August 31, 2015	26,474	26,474	306	306	26,211	520,066	(38,522 )	534,535	4,016	538,551
Net income (loss)	—	—	—	—	—	(19,409 )	—	(19,409 )	1,821	(17,588 )
Other comprehensive loss, net of tax	—	—	—	—	—	—	(1,593 )	(1,593 )	—	(1,593 )
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(2,126 )	(2,126 )
Share repurchases	(203 )	(203 )	—	—	(3,276 )	—	—	(3,479 )	—	(3,479 )
Restricted stock withheld for taxes	(132 )	(132 )	—	—	(2,081 )	—	—	(2,213 )	—	(2,213 )
Issuance of restricted stock	343	343	—	—	(343 )	—	—	—	—	—
Share-based compensation expense	—	—	—	—	10,437	—	—	10,437	—	10,437
Cash dividends	—	—	—	—	—	(20,557 )	—	(20,557 )	—	(20,557 )
Balance as of August 31, 2016	26,482	\$26,482	306	\$306	\$30,948	\$480,100	\$(40,115 )	\$497,721	\$3,711	\$501,432

See Notes to the Consolidated Financial Statements.

56 / Schnitzer Steel Industries, Inc. Form 10-K 2016



Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(in thousands)

	Year Ended August 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net income (loss)	\$(17,588)	\$(195,076)	\$9,591
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Goodwill impairment charges	8,845	141,021	—
Other asset impairment charges	20,682	45,119	1,460
Exit-related asset impairment charges, net of gains	1,790	6,502	566
Write-off of debt issuance costs	768	—	—
Depreciation and amortization	54,630	67,936	79,209
Inventory write-down	710	3,031	—
Deferred income taxes	507	(1,988)	(3,815)
Undistributed equity in earnings of joint ventures	(819)	(1,490)	(1,196)
Share-based compensation expense	10,437	10,481	14,506
Excess tax benefit from share-based payment arrangements	—	(343)	(194)
Gain on the disposal of assets	(465)	(2,875)	(1,126)
Unrealized foreign exchange (gain) loss, net	(109)	(1,909)	240
Bad debt expense (recoveries), net	131	(264)	449
Changes in assets and liabilities, net of acquisitions:			
Accounts receivable	(10,693)	55,600	(16,360)
Inventories	27,504	69,256	36,264
Income taxes	5,861	(5,846)	4,129
Prepaid expenses and other current assets	(1,864)	2,403	(2,453)
Other long-term assets	266	1,064	996
Accounts payable	(763)	(35,638)	9,409
Accrued payroll and related liabilities	3,633	(6,330)	8,114
Other accrued liabilities	(4,362)	(2,710)	(91)
Environmental liabilities	(451)	(702)	(1,581)
Other long-term liabilities	30	(3,384)	1,825
Distributed equity in earnings of joint ventures	560	770	1,310
Net cash provided by operating activities	99,240	144,628	141,252
Cash flows from investing activities:			
Capital expenditures	(34,571)	(32,297)	(39,147)
Acquisitions, net of cash acquired	—	(150)	(2,160)
Joint venture payments, net	(11)	(1)	(3,765)
Proceeds from sale of assets	4,106	4,270	3,841
Net cash used in investing activities	(30,476)	(28,178)	(41,231)
Cash flows from financing activities:			
Proceeds from line of credit	135,500	266,500	469,500
Repayment of line of credit	(135,500)	(266,500)	(478,000)
Borrowings from long-term debt	152,311	140,536	313,207
Repayment of long-term debt	(187,951)	(231,103)	(368,496)
Payment of debt issuance costs	(1,011)	(978)	—
Repurchase of Class A common stock	(3,479)	(1,347)	—
Taxes paid related to net share settlement of share-based payment arrangements	(2,213)	(1,997)	(1,578)
Excess tax benefit from share-based payment arrangements	—	343	194

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

Stock options exercised	—	—	240
Distributions to noncontrolling interest	(2,126 )	(3,110 )	(3,115 )
Contingent consideration paid relating to business acquisitions	—	(759 )	—
Dividends paid	(20,444 )	(20,336 )	(20,126 )
Net cash used in financing activities	(64,913 )	(118,751 )	(88,174 )
Effect of exchange rate changes on cash	213	(616 )	344
Net increase (decrease) in cash and cash equivalents	4,064	(2,917 )	12,191
Cash and cash equivalents as of beginning of year	22,755	25,672	13,481
Cash and cash equivalents as of end of year	\$26,819	\$22,755	\$25,672

57 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

	Year Ended August 31,		
	2016	2015	2014
SUPPLEMENTAL DISCLOSURES:			
Cash paid (received) during the year for:			
Interest	\$6,077	\$7,138	\$8,838
Income taxes paid (refunds received), net	\$(5,691)	\$(1,866)	\$69
Schedule of noncash investing and financing transactions:			
Purchases of property, plant and equipment included in current liabilities	\$8,268	\$6,086	\$7,249

See Notes to the Consolidated Financial Statements.

58 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SCHNITZER STEEL INDUSTRIES, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1 – Nature of Operations

Founded in 1906, Schnitzer Steel Industries, Inc. (the “Company”), an Oregon corporation, is one of North America’s largest recyclers of ferrous and nonferrous scrap metal, including end-of-life vehicles, and a manufacturer of finished steel products.

The Company has two reportable segments as follows: the Auto and Metals Recycling (“AMR”) business and the Steel Manufacturing Business (“SMB”). AMR buys, collects, processes, recycles, sells and brokers scrap metal through its operation of one of the largest metals recycling businesses in North America and operates one of the country’s leading networks of self-service used auto parts stores which supplies AMR’s shredding facilities with autobodies that are processed into saleable recycled metal. SMB purchases substantially all of its recycled metal from AMR and uses its mini-mill to process the recycled metal into finished steel products.

As of August 31, 2016, all of the Company’s facilities were located in the United States (“U.S.”) and its territories and Canada.

Note 2 – Summary of Significant Accounting Policies

Principles of Consolidation

The Consolidated Financial Statements include the accounts of the Company and its majority-owned and wholly-owned subsidiaries. The equity method of accounting is used for investments in joint ventures over which the Company has significant influence but does not have effective control. All significant intercompany account balances, transactions, profits and losses have been eliminated. All transactions and relationships with potential variable interest entities are evaluated to determine whether the Company is the primary beneficiary of the entities, therefore requiring consolidation. The Company does not have any variable interest entities requiring consolidation.

Accounting Changes

In April 2014, an accounting standard update was issued that amends the requirements for reporting discontinued operations, which may include a component of an entity or a group of components of an entity. The amendments limit discontinued operations reporting to disposals of components of an entity that represent strategic shifts that have, or will have, a major effect on an entity’s operations and financial results. The amendments require expanded disclosure about the assets, liabilities, revenues and expenses of discontinued operations. Further, the amendments require an entity to disclose the pretax profit or loss of an individually significant component that is being disposed of that does not qualify for discontinued operations reporting. The Company adopted the new requirement in the first quarter of fiscal 2016 with no impact to the Consolidated Financial Statements. The standard is to be applied prospectively to all disposals or classifications as held for sale of components and all businesses that, on acquisition, are classified as held for sale that occur beginning in the first quarter of fiscal 2016, and interim periods within that fiscal year.

In November 2015, an accounting standard update was issued that requires deferred tax liabilities and assets be classified as noncurrent in a statement of financial position. To simplify the presentation of the Company’s deferred tax liabilities and assets, along with valuation allowances against deferred tax assets, the Company early-adopted the new requirement as of the beginning of the first quarter of fiscal 2016 and is applying the amendments prospectively. Adoption of the new requirement impacted the classification of the Company’s deferred tax liabilities and assets reported in its Consolidated Balance Sheet beginning as of November 30, 2015, and had no impact on its consolidated results of operations and cash flows. The comparative period Consolidated Balance Sheet has not been retrospectively adjusted.

In April 2015, an accounting standard update was issued that clarifies the accounting for cloud computing arrangements that include software licenses. The guidance requires that a cloud computing arrangement that includes a software license be accounted for in the same manner as the acquisition of other software licenses. If the cloud computing arrangement does not include a software license, then it should be accounted for as a service contract. To reduce the complexity of evaluating the accounting for fees paid in a cloud computing arrangement, the Company early-adopted the new requirement as of the beginning of the third quarter of fiscal 2016 and is applying the amendments prospectively to all arrangements entered into or materially modified after adoption. Adoption of the new

requirement results in the recognition of software licenses acquired as part of a cloud computing arrangement within property, plant and equipment in the Company's Consolidated Balance Sheet and recognition of amortization expense within either cost of goods sold or selling, general and administrative expense, depending on the nature of the software license, in the Company's Consolidated Statement of Operations. The new requirement does not represent a substantial change from the manner in which the Company accounted for fees paid in cloud computing arrangements prior to adoption.

59 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### Discontinued Operations

The results of discontinued operations are presented separately, net of tax, from the results of ongoing operations for all periods presented. The expenses included in the results of discontinued operations are the direct operating expenses incurred by the disposed components that may be reasonably segregated from the costs of the ongoing operations of the Company. Asset impairments related to the disposed components are also included in the results of discontinued operations. See Note 8 - Discontinued Operations and the Asset Impairment Charges section of this Note for further detail.

#### Cash and Cash Equivalents

Cash and cash equivalents include short-term securities that are not restricted by third parties and have an original maturity date of 90 days or less. Included in accounts payable are book overdrafts representing outstanding checks in excess of funds on deposit of \$3 million and \$11 million as of August 31, 2016 and 2015, respectively.

#### Accounts Receivable, net

Accounts receivable represent amounts primarily due from customers on product and other sales. These accounts receivable, which are reduced by an allowance for doubtful accounts, are recorded at the invoiced amount and do not bear interest. The Company evaluates the collectability of its accounts receivable based on a combination of factors, including whether sales were made pursuant to letters of credit or credit insurance is in place. In cases where management is aware of circumstances that may impair a customer's ability to meet its financial obligations, management records a specific allowance against amounts due and reduces the net recognized receivable to the amount the Company believes will be collected. For all other customers, the Company maintains an allowance that considers the total receivables outstanding, historical collection rates and economic trends. Accounts are written off when all efforts to collect have been exhausted. The allowance for doubtful accounts was \$2 million as of August 31, 2016 and 2015.

#### Inventories

The Company's inventories primarily consist of processed and unprocessed scrap metal (ferrous, nonferrous, and nonferrous recovered joint product arising from the manufacturing process), semi-finished steel products (billets), finished steel products (primarily rebar, wire rod and merchant bar) and used and salvaged vehicles, which are reported within finished goods. Inventories are stated at the lower of cost or market. AMR determines the cost of ferrous and nonferrous inventories using the average cost method and capitalizes substantially all direct costs and yard costs into inventory. AMR allocates material and production costs to joint products using the gross margin method. AMR determines the cost of used and salvaged vehicle inventory based on the average price the Company pays for a vehicle and capitalizes the vehicle cost and substantially all production costs into inventory. SMB determines the cost of its finished steel product inventory based on average costs and capitalizes all direct and indirect costs of manufacturing into inventory. Indirect costs of manufacturing include general plant costs, maintenance and yard costs. The Company considers estimated future selling prices when determining the estimated net realizable value of its inventory. As AMR generally sells its export recycled ferrous metal under contracts that provide for shipment within 30 to 60 days after the price is agreed, it utilizes the selling prices under committed contracts and sales orders for determining the estimated market price of quantities on hand that will be shipped under these contracts and orders. The Company performs periodic physical inventories to verify the quantity of inventory on hand. Due to variations in scrap metal product density, holding period and production processes utilized to manufacture the products, physical inventories will not necessarily detect all variances for scrap metal inventory such that estimates of quantities are required. To mitigate this risk, the Company adjusts its ferrous physical inventories when the volume of a commodity is low and a physical inventory count can more accurately estimate the remaining volume.

#### Property, Plant and Equipment, net

Property, plant and equipment are recorded at cost. Expenditures for major additions and improvements are capitalized, while routine repair and maintenance costs are expensed as incurred. Interest related to the construction of qualifying assets is capitalized as part of the construction costs and was not material to any of the periods presented. When assets are retired or sold, the related cost and accumulated depreciation are removed from the accounts and

resulting gains or losses are generally included in operating expense. Gains and losses from sales of assets related to an exit activity are reported within restructuring charges and other exit-related activities in the Consolidated Statements of Operations. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets. Upon idling an asset, depreciation continues to be recorded. Leasehold improvements are amortized over the shorter of their estimated useful lives or the remaining lease term.

60 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

As of August 31, 2016, the useful lives used for depreciation and amortization were as follows:

	Useful Life (In Years)
Machinery and equipment	3 to 40
Land improvements	3 to 35
Buildings and leasehold improvements	5 to 40
Office equipment	2 to 20
Enterprise Resource Planning (“ERP”) system	3 to 17
Other Assets	

The Company’s other assets, exclusive of prepaid expenses, consist primarily of receivables from insurers, debt issuance costs, notes and other contractual receivables from suppliers, and assets held for sale. Other assets are reported within either prepaid expenses and other current assets or other assets in the Consolidated Balance Sheets based on their expected use either during or beyond the current operating cycle of one year from the reporting date. Receivables from insurers represent the portion of insured losses expected to be recovered from the Company’s insurance carriers. The receivable is recorded at an amount not to exceed the recorded loss and only if the terms of legally enforceable insurance contracts support that the insurance recovery will not be disputed and is deemed collectible.

Debt issuance costs consist primarily of costs incurred by the Company to enter into or modify its revolving credit facility. The Company reports deferred debt issuance costs within other assets in the Consolidated Balance Sheets and amortizes them to interest expense on a straight-line basis over the contractual term of the arrangement.

Notes and other contractual receivables from suppliers consist primarily of advances to entities in the business of extracting scrap metal through demolition and other activities. Repayment of these advances is in either cash or scrap metal. The Company performs periodic reviews of its notes and other contractual receivables from suppliers to identify credit risks and to assess the overall collectability of the receivables, which typically involves consideration of the value of collateral in the form of scrap metal extracted from demolition and construction projects. A note or other contractual receivable from a supplier is considered impaired when, based on current information and events, it is probable that the Company will be unable to collect all amounts due in accordance with the contractual terms of the agreement. Once a note or other contractual receivable from a supplier has been identified as impaired, it is measured based on the present value of payments expected to be received, discounted at the receivable’s contractual interest rate, or for arrangements that are solely dependent on collateral for repayment, the estimated fair value of the collateral less estimated costs to sell. If the carrying value of the receivable exceeds its recoverable amount, an impairment is recorded for the difference.

A long-lived asset is classified as held for sale upon meeting criteria specified in the accounting standards. An asset classified as held for sale is measured at the lower of its carrying amount or fair value less cost to sell. As of August 31, 2016 and 2015, the Company reported less than \$1 million and \$2 million, respectively, of assets held for sale within prepaid expenses and other current assets in the Consolidated Balance Sheets. An impairment loss is recognized for any initial or subsequent write-down of the asset to its fair value less cost to sell. The Company determines fair value using Level 3 inputs under the fair value hierarchy consisting of information provided by brokers and other external sources along with management’s own assumptions. See the Asset Impairment Charges section of this Note below for tabular presentation of impairment charges recorded by the Company during the fiscal years ended August 31, 2016, 2015 and 2014 on assets held for sale.



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Long-Lived Assets

The Company tests long-lived tangible and intangible assets for impairment at the asset group level, which is determined based on the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. For the Company's metals recycling operations, an asset group is generally comprised of the regional shredding and export operation along with surrounding feeder yards. For regions with no shredding and export operations, each metals recycling yard is an asset group. For the Company's auto parts operations, generally each auto parts store is an asset group. The Company's steel manufacturing business is a single asset group. The Company tests its asset groups for impairment when certain triggering events or changes in circumstances indicate that the carrying value of the asset group may be impaired. If the carrying value of the asset group is not recoverable because it exceeds the Company's estimate of future undiscounted cash flows from the use and eventual disposition of the asset group, an impairment loss is recognized by the amount the carrying value exceeds its fair value, if any. The impairment loss is allocated to the long-lived assets of the group on a pro rata basis using the relative carrying amounts of those assets, except that the loss allocated to an individual long-lived asset of the group shall not reduce the carrying amount of that asset below its fair value. Fair value is determined primarily using the cost and market approaches.

During fiscal 2016 and 2015, the Company recorded impairment charges on long-lived tangible and intangible assets associated with certain regional metals recycling operations and used auto parts store locations.

With respect to individual long-lived assets, changes in circumstances may merit a change in the estimated useful lives or salvage values of the assets, which are accounted for prospectively in the period of change. For such assets, the useful life is shortened based on the Company's current plans to dispose of or abandon the asset before the end of its original useful life and depreciation is accelerated beginning when that determination is made. During fiscal 2016 and 2015, the Company recognized accelerated depreciation due to shortened useful lives in connection with site closures and idled equipment.

See the Asset Impairment Charges section of this Note for tabular presentation of long-lived asset impairment charges and accelerated depreciation. Long-lived asset impairment charges and accelerated depreciation are reported in the Consolidated Statements of Operations within (1) other asset impairment charges; (2) restructuring charges and other exit-related activities if related to a site closure not qualifying for discontinued operations reporting; or (3) discontinued operations, if related to a component of the Company qualifying for discontinued operations reporting.

### Investments in Joint Ventures

As of August 31, 2016 and 2015, the Company had five 50%-owned joint venture interests which were accounted for under the equity method of accounting and presented as part of AMR operations. The Company's investments in equity method joint ventures have resulted in cumulative undistributed earnings of \$11 million as of August 31, 2016 and 2015. The joint ventures sell recycled metal to AMR and to SMB at prices that approximate local market rates, which produces intercompany profit. This intercompany profit is eliminated while the products remain in inventory and is not recognized until the finished products are sold to third parties.

A loss in value of an investment in a joint venture that is other than a temporary decline is recognized. Management considers all available evidence to evaluate the realizable value of its investments including the length of time and the extent to which the fair value has been less than cost, the financial condition and near-term prospects of the joint venture business, and the Company's intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value. Once management determines that an other-than-temporary impairment exists, the investment is written down to its fair value, which establishes a new cost basis. The Company determines fair value using Level 3 inputs under the fair value hierarchy using an income approach based on a discounted cash flow analysis. During fiscal 2016, the Company recorded an impairment charge of \$2 million related to an investment in a joint venture, which is reported within other asset impairment charges in the Consolidated Statements of Operations. See Note 17 - Related Party Transactions for further detail on transactions with joint ventures.



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Asset Impairment Charges

The following asset impairment charges, excluding goodwill impairment charges discussed below in this Note, were recorded in the Consolidated Statements of Operations (in thousands):

	Year Ended August 31,		
	2016	2015	2014
Reported within other asset impairment charges <sup>(1)</sup> :			
Long-lived assets	\$7,336	\$41,676	\$—
Accelerated depreciation	6,208	—	—
Investment in joint venture	1,968	—	—
Assets held for sale	1,659	2,558	928
Supplies inventory <sup>(1)</sup>	2,224	—	—
Other assets <sup>(1)</sup>	1,287	885	532
	20,682	45,119	1,460
Reported within restructuring charges and other exit-related activities:			
Long-lived assets	468	—	—
Accelerated depreciation	630	3,836	—
Supplies inventory	1,047	—	—
Other assets	35	—	566
	2,180	3,836	566
Reported within discontinued operations:			
Long-lived assets	673	2,666	—
Accelerated depreciation	274	—	—
	947	2,666	—
Total	\$23,809	\$51,621	\$2,026

Other asset impairment charges were incurred in the AMR reportable segment, except for \$79 thousand, \$745 thousand and \$532 thousand of impairment charges on other assets related to Corporate recorded in fiscal 2016, <sup>(1)</sup> 2015 and 2014, respectively, and \$2,224 thousand of impairment charges on supplies inventory related to SMB recorded in fiscal 2016.

### Goodwill and Other Intangible Assets, net

Goodwill represents the excess of the purchase price over the net amount of identifiable assets acquired and liabilities assumed in a business combination measured at fair value. The Company evaluates goodwill for impairment annually on July 1 and upon the occurrence of certain triggering events or substantive changes in circumstances that indicate that the fair value of goodwill may be impaired. Impairment of goodwill is tested at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment (referred to as a component). A component of an operating segment is required to be identified as a reporting unit if the component is a business for which discrete financial information is available and segment management regularly reviews its operating results. In the fourth quarter of fiscal 2015, the Company changed its internal organizational and reporting structure to combine the auto and metals recycling businesses, which resulted in the formation of a new operating and reportable segment, AMR, replacing the former Metals Recycling Business ("MRB") and Auto Parts Business ("APB") operating segments. This change led to the identification of components within AMR based on the disaggregation of financial information regularly reviewed by segment management by geographic area. Components with similar economic characteristics were aggregated into reporting units and goodwill was reassigned to the affected reporting units using the relative fair value approach as of the date of the reassessment, July 1, 2015. Beginning on that date, the Company's goodwill was carried by two regionally-defined reporting units, one consisting of a single component with \$168 million of allocated goodwill, and the other consisting of two components with similar economic characteristics aggregated into a reporting unit with \$9 million of allocated goodwill.



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

When testing goodwill for impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If the Company elects to perform a qualitative assessment and determines that an impairment is more likely than not, the Company is then required to perform the two-step quantitative impairment test, otherwise no further analysis is required. The Company also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. In the first step of the two-step quantitative impairment test, the fair value of a reporting unit is compared to its carrying value. If the carrying value of a reporting unit exceeds its fair value, the second step of the impairment test is performed for purposes of measuring the impairment. In the second step, the fair value of the reporting unit is allocated to all of the assets and liabilities of the reporting unit to determine an implied goodwill value. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of goodwill, an impairment loss will be recognized in an amount equal to that excess.

The Company estimates the fair value of its reporting units using an income approach based on the present value of expected future cash flows, including terminal value, utilizing a market-based weighted average cost of capital ("WACC") determined separately for each reporting unit. The determination of fair value involves the use of significant estimates and assumptions, including revenue growth rates driven by future commodity prices and volume expectations, operating margins, capital expenditures, working capital requirements, tax rates, terminal growth rates, discount rates, benefits associated with a taxable transaction and synergistic benefits available to market participants. In addition, to corroborate the reporting units' valuation, the Company uses a market approach based on earnings multiple data and a reconciliation of the Company's estimate of the aggregate fair value of the reporting units to the Company's market capitalization, including consideration of a control premium. See Note 6 - Goodwill and Other Intangible Assets, net for further detail including the recognition of goodwill impairment charges of \$9 million and \$141 million during the fiscal years ended August 31, 2016 and 2015, respectively.

The Company tests indefinite-lived intangible assets for impairment by first assessing qualitative factors to determine whether it is necessary to perform a quantitative impairment test. If the Company believes, as a result of its qualitative assessment, that it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. The Company did not record impairment charges on indefinite-lived intangible assets in any of the periods presented.

#### Acquisitions

The Company recognizes the assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree at the acquisition date, measured at their fair values as of that date. Contingent purchase consideration is recorded at fair value at the date of acquisition. Any excess purchase price over the fair value of the net assets acquired is recorded as goodwill. Within one year from the date of acquisition, the Company may update the value allocated to the assets acquired and liabilities assumed and the resulting goodwill balance as a result of information received regarding the valuation of such assets and liabilities that was not available at the time of purchase. Measuring assets and liabilities at fair value requires the Company to determine the price that would be paid by a third party market participant based on the highest and best use of the assets or interests acquired. Acquisition costs are expensed as incurred.

The Company did not complete any significant acquisitions in fiscal 2016 and 2015. During fiscal 2014, the Company acquired all of the equity interests of a used auto parts business. The acquisition was not material to the Company's financial position or results of operations. Pro forma operating results for this acquisition are not presented, since the aggregate results would not be significantly different than reported results.

#### Restructuring Charges

Restructuring charges consist of severance, contract termination and other restructuring-related costs. A liability for severance costs is typically recognized when the plan of termination has been communicated to the affected employees and is measured at its fair value at the communication date. Contract termination costs consist primarily of costs that will continue to be incurred under operating leases for their remaining terms without economic benefit to the Company. A liability for contract termination costs is recognized at the date the Company ceases using the rights

conveyed by the lease contract and is measured at its fair value, which is determined based on the remaining contractual lease rentals reduced by estimated sublease rentals. A liability for other restructuring-related costs is measured at its fair value in the period in which the liability is incurred. See Note 10 - Restructuring Charges and Other Exit-Related Activities for further detail.

64 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### Accrued Workers' Compensation Costs

The Company is self-insured for the significant majority of workers' compensation claims with exposure limited by various stop-loss insurance policies. The Company estimates the costs of workers' compensation claims based on the nature of the injury incurred and on guidelines established by the applicable state. An accrual is recorded based upon the amount of unpaid claims as of the balance sheet date. Accrued amounts recorded for individual claims are reviewed periodically as treatment progresses and adjusted to reflect additional information that becomes available. The estimated cost of claims incurred but not reported is included in the accrual. The Company accrued \$10 million for the estimated cost of unpaid workers' compensation claims as of August 31, 2016 and 2015, which are included in other accrued liabilities in the Consolidated Balance Sheets.

#### Environmental Liabilities

The Company estimates future costs for known environmental remediation requirements and accrues for them on an undiscounted basis when it is probable that the Company has incurred a liability and the related costs can be reasonably estimated but the timing of incurring the estimated costs is unknown. The Company considers various factors when estimating its environmental liabilities. Adjustments to the liabilities are recorded to selling, general and administrative expense and made when additional information becomes available that affects the estimated costs to study or remediate any environmental issues or when expenditures are made for which liabilities were established. Legal costs incurred in connection with environmental contingencies are expensed as incurred.

When only a wide range of estimated amounts can be reasonably established and no other amount within the range is a better estimate than another, the low end of the range is recorded in the financial statements. In a number of cases, it is possible that the Company may receive reimbursement through insurance or from other potentially responsible parties for a site. In these situations, recoveries of environmental remediation costs from other parties are recognized when the claim for recovery is either realized or realizable. The amounts recorded for environmental liabilities are reviewed periodically as site assessment and remediation progresses at individual sites and adjusted to reflect additional information that becomes available. Due to evolving remediation technology, changing regulations, possible third party contributions, the subjective nature of the assumptions used and other factors, amounts accrued could vary significantly from amounts paid. See "Contingencies – Environmental" in Note 9 – Commitments and Contingencies for further detail.

#### Loss Contingencies

The Company is subject to certain legal proceedings and contingencies in addition to those related to environmental liabilities discussed above in this Note, the outcomes of which are subject to significant uncertainty. The Company accrues for estimated losses if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. The Company uses judgment and evaluates whether a loss contingency arising from litigation or an unasserted claim should be disclosed or recorded. The outcome of legal proceedings and other contingencies is inherently uncertain and often difficult to estimate. Accordingly, if the outcome of legal proceedings and other contingencies is different than the amount accrued by the Company, the Company would record the difference between any previously recorded amount and the full amount at which the matter was resolved, in earnings in the period resolved. As of August 31, 2016 and 2015, accruals for legal contingencies net of corresponding receivables from insurers were not material.

#### Financial Instruments

The Company's financial instruments include cash and cash equivalents, accounts receivable, accounts payable, debt and derivative contracts. The Company uses the market approach to value its financial assets and liabilities, determined using available market information. The net carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to the short-term nature of these instruments. For long-term debt, which is primarily at variable interest rates, fair value is estimated using observable inputs (Level 2) and approximates its carrying value. Derivative contracts are reported at fair value. See Note 12 - Derivative Financial Instruments for further detail.





Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### Fair Value Measurements

Fair value is measured using inputs from the three levels of the fair value hierarchy. Classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The three levels are described as follows:

Level 1 – Unadjusted quoted prices in active markets for identical assets and liabilities.

Level 2 – Inputs other than quoted prices included in Level 1 that are observable for the determination of the fair value of the asset or liability, either directly or indirectly.

Level 3 – Unobservable inputs that are significant to the determination of fair value of the asset or liability.

When developing the fair value measurements, the Company uses quoted market prices whenever available or seeks to maximize the use of observable inputs and minimize the use of unobservable inputs when quoted market prices are not available. See Note 6 - Goodwill and Other Intangible Assets, net, and Note 12 - Derivative Financial Instruments for further detail.

#### Derivatives

The Company records derivative instruments in prepaid expenses and other current assets or other accrued liabilities in the Consolidated Balance Sheets at fair value, and changes in the fair value are either recognized in other comprehensive income (loss) in the Consolidated Statements of Comprehensive Income (Loss) or net income (loss) in the Consolidated Statements of Operations, as applicable, depending on the nature of the underlying exposure, whether the derivative has been designated as a hedge and, if designated as a hedge, the extent to which the hedge is effective. Amounts included in accumulated other comprehensive loss are reclassified to earnings in the period in which earnings are impacted by the hedged items, in the period that the hedged transaction is deemed no longer likely to occur, or in the period that the derivative is terminated. For cash flow hedges, a formal assessment is made, both at the hedge's inception and on an ongoing basis, to determine whether the derivatives that are designated as hedging instruments have been highly effective in offsetting changes in the cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. To the extent the hedge is determined to be ineffective, the ineffective portion is immediately recognized in earnings. When available, quoted market prices or prices obtained through external sources are used to measure a derivative instrument's fair value. The fair value of these instruments is a function of underlying forward commodity prices or foreign currency exchange rates, related volatility, counterparty creditworthiness and duration of the contracts. Cash flows from derivatives are recognized in the Consolidated Statements of Cash Flows in a manner consistent with the underlying transactions. See Note 12 - Derivative Financial Instruments for further detail.

Derivative contracts for commodities used in normal business operations that are settled by physical delivery, among other criteria, are eligible for and may be designated as normal purchases and normal sales. Contracts that qualify as normal purchases or normal sales are not marked-to-market. The Company does not use derivative instruments for trading or speculative purposes.

#### Foreign Currency Translation and Transactions

Assets and liabilities of the Company's operations in Canada are translated into U.S. dollars at the period-end exchange rate, revenues and expenses of these operations are translated into U.S. dollars at the average exchange rate for the period, and cash flows of these operations are translated into U.S. dollars using the exchange rates in effect at the time of the cash flows. Translation adjustments are not included in determining net income (loss) for the period, but are recorded in accumulated other comprehensive loss, a separate component of shareholders' equity. Foreign currency transaction gains and losses are generated from the effects of exchange rate changes on transactions denominated in a currency other than the functional currency. Gains and losses on foreign currency transactions are generally included in determining net income (loss) for the period. The Company records these gains and losses in other income, net in the Consolidated Statements of Operations. Net realized and unrealized foreign currency transaction gains and losses were not material for the fiscal years ended August 31, 2016, 2015 and 2014.

#### Common Stock

Each share of Class A and Class B common stock is entitled to one vote. Additionally, each share of Class B common stock may be converted to one share of Class A common stock. As such, the Company reserves one share of Class A common stock for each share of Class B common stock outstanding. There are currently no meaningful distinctions between the rights of holders of Class A shares and Class B shares.

#### Share Repurchases

The Company accounts for the repurchase of stock at par value. All shares repurchased are deemed retired. Upon retirement of the shares, the Company records the difference between the weighted average cost of such shares and the par value of the stock as an adjustment to additional paid-in capital, with the excess recorded to retained earnings when additional paid-in capital is not sufficient.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### Revenue Recognition

The Company recognizes revenue when it has a contract or purchase order from a customer with a fixed or determinable price, the title and risk of loss transfer to the buyer and collectibility is reasonably assured. Title for both recycled metal and finished steel products transfers based on contract terms. Nearly all of the Company's ferrous export sales of recycled metal are made with letters of credit, reducing credit risk. However, domestic recycled ferrous metal sales, nonferrous sales and sales of finished steel are generally made on open account. Nonferrous export sales typically require a deposit prior to shipment. All sales made on open account are evaluated for collectibility prior to revenue recognition. Additionally, the Company recognizes revenues on partially loaded shipments when detailed documents support revenue recognition based on transfer of title and risk of loss. The Company reports revenue net of the payments made to the supplier of scrap metal when the supplier, and not the Company, is responsible for fulfillment, including the acceptability of the products purchased by the customer. Retail revenues are recognized when customers pay for parts. Historically, there have been very few sales returns and adjustments that impact the ultimate collection of revenues; therefore, no material provisions for returns have been made when sales are recognized. The Company presents taxes assessed by governmental authorities collected from customers on a net basis. Therefore, the taxes are excluded from revenues and are shown as a liability on the Consolidated Balance Sheets until remitted.

### Freight Costs

The Company classifies shipping and handling costs billed to customers as revenue and the related costs incurred as a component of cost of goods sold.

### Share-Based Compensation

The Company recognizes compensation cost relating to share-based payment transactions with employees and non-employee directors over the vesting period, with the cost measured based on the grant-date fair value of the equity instruments issued, net of an estimated forfeiture rate. See Note 14 – Share-Based Compensation for further detail.

### Income Taxes

Income taxes are accounted for using the asset and liability method. This requires the recognition of taxes currently payable or refundable and the recognition of deferred tax assets and liabilities for the future tax consequences of events that are recognized in one reporting period on the Consolidated Financial Statements but in a different reporting period on the tax returns. Tax credits are recognized as a reduction of income tax expense in the year the credit arises. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. Tax benefits arising from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination by the relevant tax authorities. The amount recognized in the financial statements is the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. The Company recognizes interest and penalties, if any, related to uncertain tax positions in income tax expense. See Note 15 – Income Taxes for further detail.

### Net Income (Loss) Per Share

Basic net income (loss) per share attributable to SSI is computed by dividing net income (loss) by the weighted average number of outstanding common shares during the periods presented including vested deferred stock units ("DSUs") and restricted stock units ("RSUs") meeting certain criteria. Diluted net income (loss) per share attributable to SSI is computed by dividing net income (loss) by the weighted average number of common shares outstanding, assuming dilution. Potentially dilutive common shares include the assumed exercise of stock options and assumed vesting of performance shares, DSU and RSU awards using the treasury stock method. Certain of the Company's stock options, RSUs and performance share awards were excluded from the calculation of diluted net income (loss) per share because they were antidilutive; however, these options and awards could be dilutive in the future. Net income attributable to noncontrolling interests is deducted from income (loss) from continuing operations to arrive at income (loss) from continuing operations attributable to SSI for purposes of calculating income (loss) per share from continuing operations attributable to SSI. Loss per share from discontinued operations attributable to SSI is presented

separately in the Consolidated Statements of Operations. See Note 16 – Net Income (Loss) Per Share for further detail.

67 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### Use of Estimates

The preparation of the Company's Consolidated Financial Statements in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and reported amounts of revenue and expenses during the reporting period. Examples include valuation of assets received in acquisitions; revenue recognition; the allowance for doubtful accounts; estimates of contingencies, including environmental liabilities and other legal liabilities; goodwill, long-lived asset and indefinite-lived intangible asset valuation; valuation of investments in joint ventures; valuation of certain share-based awards; other asset valuation; inventory valuation; pension plan assumptions; and the assessment of the valuation of deferred income taxes and income tax contingencies. Actual results may differ from estimated amounts.

#### Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentration of credit risk consist primarily of cash and cash equivalents, accounts receivable, notes and other contractual receivables from suppliers and derivative financial instruments. The majority of cash and cash equivalents is maintained with one major financial institution. Balances with this and certain other institutions exceeded the Federal Deposit Insurance Corporation insured amount of \$250,000 as of August 31, 2016. Concentration of credit risk with respect to accounts receivable is limited because a large number of geographically diverse customers make up the Company's customer base. The Company controls credit risk through credit approvals, credit limits, credit insurance, letters of credit or other collateral, cash deposits and monitoring procedures. The Company is exposed to a residual credit risk with respect to open letters of credit by virtue of the possibility of the failure of a bank providing a letter of credit. The Company had \$40 million and \$33 million of open letters of credit as of August 31, 2016 and 2015, respectively.

#### Note 3 – Recent Accounting Pronouncements

In May 2014, an accounting standard update was issued that clarifies the principles for recognizing revenue from contracts with customers. The update will supersede the existing standard for recognizing revenue. Additional updates have been issued since May 2014 amending aspects of the initial update and providing implementation guidance. The guidance is applicable to all contracts with customers regardless of industry-specific or transaction-specific fact patterns. Further, the guidance requires improved disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of revenue that is recognized. The standard is effective for the Company beginning in the first quarter of fiscal 2019, including interim periods within that fiscal year. Upon becoming effective, the Company will apply the amendments in the standard either retrospectively to each prior reporting period presented, or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application. The Company is evaluating the impact of adopting this standard on its consolidated financial position, results of operations and cash flows.

In April 2015, an accounting standard update was issued that amends the requirements for presenting debt issuance costs. The guidance requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the debt liability, consistent with the presentation of a debt discount. This is not applicable to debt issuance costs related to line-of-credit arrangements, as specified in a related accounting standard update issued in August 2015. The standard is effective for the Company beginning in the first quarter of fiscal 2017, including interim periods within that fiscal year, and is to be applied retrospectively to each prior reporting period presented. Adoption of the standard is not expected to have a material impact on the Company's consolidated financial position.

In July 2015, an accounting standard update was issued that requires an entity to measure certain types of inventory, including inventory that is measured using the first-in, first out (FIFO) or average cost method, at the lower of cost and net realizable value. The current accounting standard requires an entity to measure inventory at the lower of cost or market, whereby market could be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. The amendments do not apply to inventory that is measured using the last-in,

first-out (LIFO) or retail inventory method. The standard is effective for the Company beginning in the first quarter of fiscal 2018, including interim periods within that fiscal year. Adoption of the standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

68 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

In September 2015, an accounting standard update was issued that eliminates the requirement to retrospectively adjust provisional amounts recognized in a business acquisition recorded in previous reporting periods. The amendments, instead, require that the acquirer recognize adjustments to provisional amounts that are identified during the one-year measurement period in the reporting period in which the adjustment amount is determined. The acquirer is required to also record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The standard is effective for the Company beginning in the first quarter of fiscal 2017, including interim periods within that fiscal year. Adoption of the standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

In February 2016, an accounting standard was issued that will supersede the existing lease standard and requiring a lessee to recognize a lease liability and a lease asset on its balance sheet for all leases, including those classified as operating leases under the existing lease standard. The update also expands the required quantitative and qualitative disclosures surrounding leases. This standard is effective for the Company beginning in the first quarter of fiscal 2020, including interim periods within that fiscal year. This standard will be applied using a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The Company is evaluating the impact of adopting this standard on its consolidated financial position, results of operations and cash flows.

In March 2016, an accounting standard update was issued that amends several aspects of the accounting for share-based payments, including accounting for income taxes, forfeitures and statutory tax withholding requirements, and classification within the statement of cash flows. The standard is effective for the Company beginning in the first quarter of fiscal 2018, including interim periods within that fiscal year. Early adoption is permitted in any interim or annual period; however, if the Company elects early adoption, it must adopt all of the amendments in the same period. The Company does not expect adoption to have an immediate material impact on its consolidated financial position, results of operations and cash flows.

In June 2016, an accounting standard update was issued that amends guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. For assets held at amortized cost basis, which include trade and other receivables, loans and other financial instruments, the update eliminates the probable initial recognition threshold in current GAAP and, instead, requires an entity to reflect its current estimate of all expected credit losses. For available for sale debt securities, credit losses should be measured in a manner similar to current GAAP; however, the update requires that credit losses be presented as an allowance rather than as a write-down. This standard is effective for the Company beginning in the first quarter of fiscal 2021, including interim periods within that fiscal year. The standard will be applied using a modified retrospective transition approach through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is evaluating the impact of adopting this standard on its consolidated financial position, results of operations and cash flows.

In August 2016, an accounting standard update was issued that addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. Among the cash flow matters addressed in the update are payments for costs related to debt prepayments or extinguishments, payments related to settlement of certain types of debt instruments, payments of contingent consideration made after a business combination, proceeds from insurance claims and corporate-owned life insurance policies, and distributions received from equity method investees, among others. The standard is effective for the Company beginning in the first quarter of fiscal 2019, including interim periods within that fiscal year. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period, and all of the amendments must be adopted together in the same period. The amendments will be applied using a retrospective transition method to each period presented, unless impracticable for specific cash flow matters, in which case the amendments would be applied prospectively as of the earliest date practicable. The Company is evaluating the impact of adopting this standard on its consolidated statement of cash

flows.

69 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



## Note 4 – Inventories

Inventories consisted of the following as of August 31 (in thousands):

	2016	2015
Processed and unprocessed scrap metal	\$49,061	\$56,860
Semi-finished goods (billets)	8,320	10,648
Finished goods	40,646	50,440
Supplies	34,945	38,584
Inventories	\$132,972	\$156,532

## Note 5 – Property, Plant and Equipment, net

Property, plant and equipment, net consisted of the following as of August 31 (in thousands):

	2016	2015
Machinery and equipment	\$659,641	\$662,018
Land and improvements	245,266	250,545
Buildings and leasehold improvements	104,121	106,804
Office equipment	49,924	50,083
ERP systems	17,735	17,340
Construction in progress	31,098	19,799
Property, plant and equipment, gross	1,107,785	1,106,589
Less: accumulated depreciation	(714,965 )	(679,035 )
Property, plant and equipment, net	\$392,820	\$427,554

Depreciation expense for property, plant and equipment, which includes amortization expense for assets under capital leases, was \$53 million, \$66 million and \$75 million for the years ended August 31, 2016, 2015 and 2014, respectively. Included in these amounts is depreciation expense of \$1 million reported within discontinued operations for the years ended August 31, 2015 and 2014, respectively. No depreciation expense was reported within discontinued operations for the year ended August 31, 2016.

## Note 6 – Goodwill and Other Intangible Assets, net

In the fourth quarter of fiscal 2014, the Company performed its annual goodwill impairment test and determined that the fair value of each reporting unit for which goodwill was allocated was in excess of its respective carrying value and, therefore, no goodwill impairment was identified. For the former MRB reporting unit with goodwill of \$147 million as of July 1, 2014, the calculated fair value exceeded the carrying value by approximately 13%. The projections used in the income approach for MRB took into consideration the challenging market conditions for recycled metals, including the continued constrained supply of scrap metal and level of competition in the Company's domestic markets, the generally weak macroeconomic indicators in the markets in which the Company's customers are based, and the cyclical nature of the industry. The projections assumed a recovery of operating margins over a multi-year period, eventually returning to levels of profitability in the range of average historical levels. Assuming all other components of the fair value estimate were held constant, an increase in the WACC in excess of 100 basis points, or weaker-than-anticipated improvements in either operating margins or volumes, could have resulted in a failure of the step one quantitative impairment test for the MRB reporting unit.

In the second quarter of fiscal 2015, management identified the combination of a significant further weakening in market conditions, continued constrained supply of raw materials due to the lower price environment which negatively impacted volumes, the planned idling or closure of certain production facilities and retail stores, the Company's recent financial performance and a decline in the Company's market capitalization during the first half of fiscal 2015 as a triggering event requiring an interim impairment test of goodwill allocated to its reporting units. In connection with the interim impairment test performed in the second quarter of fiscal 2015, the Company used a measurement date of February 1, 2015.



For the former MRB reporting unit with goodwill of \$141 million as of February 1, 2015, the first step of the impairment test showed that the fair value of the MRB reporting unit was less than its carrying amount, indicating a potential impairment. Based on the second step of the impairment test, the Company concluded that no implied fair value of goodwill remained for the MRB reporting unit, resulting in an impairment of the entire carrying amount of MRB's goodwill totaling \$141 million. The impairment charge is reported within the results of AMR in this report. For the former APB reporting unit with goodwill of \$176 million as of February 1, 2015, the estimated fair value of the reporting unit exceeded its carrying value by approximately 20%. The projections used in the income approach for APB took into consideration the impact of current market conditions for ferrous and nonferrous commodities, the cost of obtaining adequate supply flows of end-of-life vehicles and recent trends of self-serve parts sales. The projections assumed a recovery of operating margins from current depressed levels over a multi-year period, including the benefits from recently initiated productivity improvements and cost-saving measures, but remaining significantly below the level of operating margins experienced in fiscal years 2010 and 2011. The market-based WACC used in the income approach for APB was 10.37%. The terminal growth rate used in the discounted cash flow model was 1%. Assuming all other components of the fair value estimate were held constant, an increase in the WACC of 150 basis points or more or weaker-than-anticipated improvements in operating margins could have resulted in a failure of the step one quantitative impairment test for the APB reporting unit.

In the fourth quarter of fiscal 2015, the Company changed its internal organizational and reporting structure to combine the auto and metals recycling businesses, which resulted in the formation of a new operating and reportable segment, AMR, replacing the former MRB and APB operating segments. This change led to the identification of components within AMR based on the disaggregation of financial information regularly reviewed by segment management by geographic area. Components with similar economic characteristics were aggregated into reporting units and goodwill was reassigned to the affected reporting units using the relative fair value approach as of the date of the reassessment, July 1, 2015. Beginning on that date, the Company's goodwill was carried by two regionally-defined reporting units, one consisting of a single component with \$168 million of allocated goodwill, and the other consisting of two components with similar economic characteristics aggregated into a reporting unit with \$9 million of allocated goodwill.

During the second quarter of fiscal 2016, management identified the combination of sustained weak market conditions, including the adverse effects of lower commodity selling prices and the constraining impact of the lower price environment on the supply of raw materials which negatively impacted volumes, the Company's recent financial performance and a decline in the Company's market capitalization as a triggering event requiring an interim impairment test of goodwill allocated to its reporting units. In connection with the interim impairment test performed in the second quarter of fiscal 2016, the Company used a measurement date of February 1, 2016.

For the reporting unit with \$9 million of goodwill as of February 1, 2016, the first step of the impairment test showed that the fair value of the reporting unit was less than its carrying amount, indicating a potential impairment. Based on the second step of the impairment test, the Company concluded that no implied fair value of goodwill remained for the reporting unit, resulting in an impairment of the entire carrying amount of the reporting unit's goodwill totaling \$9 million.

For the reporting unit with \$166 million of goodwill as of February 1, 2016, the estimated fair value of the reporting unit exceeded its carrying value by approximately 27%. The projections used in the income approach for the reporting unit took into consideration the impact of current market conditions for ferrous and nonferrous recycled metals, the cost of obtaining adequate supply flows of scrap metal including end-of-life vehicles, and recent trends of self-serve parts sales. The projections assumed a limited recovery of operating margins from current depressed levels over a multi-year period, including the benefits of recently initiated cost-saving and productivity improvement measures. The market-based WACC used in the income approach for the reporting unit was 11.2%. The terminal growth rate used in the discounted cash flow model was 2%. Assuming all other components of the fair value estimate were held constant, an increase in the WACC of 200 basis points or more or weaker than anticipated improvements in operating margins could have resulted in a failure of the step one quantitative impairment test for the reporting unit.

The Company also used a market approach based on earnings multiple data and the Company's market capitalization to corroborate the reporting units' valuations. The Company reconciled its market capitalization to the aggregated estimated fair value of its reporting units, including consideration of a control premium representing the estimated

amount a market participant would pay to obtain a controlling interest. The implied control premium resulting from the difference between the Company's market capitalization (based on the average trading price of the Company's Class A common stock for the two-week period ended February 1, 2016) and the higher aggregated estimated fair value of all of its reporting units was within the historical range of average and mean premiums observed on historical transactions within the steel-making, scrap processing and metals industries. The Company identified specific reconciling items, including market participant synergies, which supported the implied control premium as of February 1, 2016.

71 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

In the fourth quarter of fiscal 2016, the Company performed the annual goodwill impairment test as of July 1, 2016. As of the testing date, the balance of the Company's goodwill of \$167 million was carried by a single reporting unit within the AMR operating segment. The Company elected to first assess qualitative factors to determine whether the existence of events or circumstances led to a determination that it is more likely than not that the estimated fair value of the reporting unit is less than its carrying amount. As a result of the qualitative assessment, the Company concluded that it was not more likely than not that the fair value of the reporting unit was less than its carrying value as of the testing date and, therefore, no further impairment testing was required.

The determination of fair value of the reporting units used to perform the first step of the impairment test requires judgment and involves significant estimates and assumptions about the expected future cash flows and the impact of market conditions on those assumptions. Due to the inherent uncertainty associated with forming these estimates, actual results could differ from those estimates. Future events and changing market conditions may impact the Company's assumptions as to future revenue and operating margin growth rates, market-based WACC, and other factors that may result in changes in the estimates of the Company's reporting units' fair value. Although management believes the assumptions used in testing the Company's reporting units' goodwill for impairment are reasonable, declines in market conditions from current levels, a trend of weaker than anticipated financial performance for the reporting unit with allocated goodwill, a decline in the Company's share price from current levels for a sustained period of time, or an increase in the market-based WACC, among other factors, could significantly impact the impairment analysis and may result in future goodwill impairment charges that, if incurred, could have a material adverse effect on the Company's financial condition and results of operations.

The gross changes in the carrying amount of goodwill by reportable segment for the years ended August 31, 2016 and 2015 were as follows (in thousands):

	AMR
Balance as of August 31, 2014	\$325,903
Acquisitions	201
Foreign currency translation adjustment	(9,407 )
Goodwill impairment charge	(141,021 )
Balance as of August 31, 2015	175,676
Foreign currency translation adjustment	16
Goodwill impairment charge	(8,845 )
Balance as of August 31, 2016	\$166,847

Accumulated goodwill impairment charges were \$471 million and \$462 million, respectively, as of August 31, 2016 and 2015.

The following table presents the Company's intangible assets as of August 31 (in thousands):

	2016		2015	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Covenants not to compete	\$6,145	\$ (2,791 )	\$10,382	\$ (5,991 )
Other intangible assets subject to amortization <sup>(1)</sup>	1,162	(666 )	1,716	(927 )
Indefinite-lived intangibles <sup>(2)</sup>	1,081	—	1,173	—
Total	\$8,388	\$ (3,457 )	\$13,271	\$ (6,918 )

(1) Other intangible assets subject to amortization include leasehold interests, permits and licenses.

(2) Indefinite-lived intangibles include trade names, permits and licenses and real property options.

Total intangible asset amortization expense was \$1 million, \$2 million and \$4 million, respectively, for the years ended August 31, 2016, 2015 and 2014. Included in these amounts is amortization expense of less than \$1 million reported within discontinued operations for the years ended August 31, 2015 and 2014. No amortization expense was reported within discontinued operations for the year ended August 31, 2016. Impairments of intangible assets were

immaterial for all periods presented.

72 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

The estimated amortization expense, based on current intangible asset balances, during the next five fiscal years and thereafter is as follows (in thousands):

Years Ending August 31,	Estimated Amortization Expense
2017	\$ 553
2018	410
2019	303
2020	274
2021	274
Thereafter	2,036
Total	\$ 3,850

Note 7 – Debt

Debt consisted of the following as of August 31 (in thousands):

	2016	2015
Bank revolving credit facility, interest at LIBOR plus a spread	\$180,000	\$215,000
Tax-exempt economic development revenue bonds due January 2021, interest payable monthly at a variable rate (0.7% as of August 31, 2016), secured by a letter of credit	7,700	7,700
Capital lease obligations due through February 2028	4,053	4,608
Other debt obligations	765	848
Total debt	192,518	228,156
Less current maturities	(8,374 )	(584 )
Debt, net of current maturities	\$184,144	\$227,572

On April 6, 2016, the Company and certain of its subsidiaries entered into the Third Amended and Restated Credit Agreement (the "Amended Credit Agreement") with Bank of America, N.A. as administrative agent, and the other lenders party thereto, which amends and restates the Company's existing unsecured credit agreement. The Amended Credit Agreement provides for \$335 million and C\$15 million in senior secured revolving credit facilities maturing in April 2021. Subject to the terms and conditions of the Amended Credit Agreement, the Company may request that the commitments under the U.S. credit facility be increased by an aggregate amount not exceeding \$100 million if certain conditions are met including pre-approval by the lenders and achievement of certain pro forma financial results. Prior to its amendment and renewal, the credit agreement provided for revolving loans of \$670 million and C\$30 million maturing in April 2017. The Company had \$198 million in borrowings outstanding under the credit agreement as of April 5, 2016 prior to its amendment and renewal. As of August 31, 2016 and 2015, borrowings outstanding under the credit facility were \$180 million and \$215 million, respectively. The weighted average interest rate on amounts outstanding under this facility was 3.01% and 1.95% as of August 31, 2016 and 2015, respectively.

Interest rates on outstanding indebtedness under the Amended Credit Agreement are based, at the Company's option, on either the London Interbank Offered Rate ("LIBOR"), or the Canadian equivalent, plus a spread of between 1.75% and 2.75%, with the amount of the spread based on a pricing grid tied to the Company's leverage ratio but no less than 2.50% for the fiscal quarters ended or ending May 31, 2016, August 31, 2016 and November 30, 2016, or the greater of the prime rate, the federal funds rate plus 0.50% or the daily rate equal to one-month LIBOR plus 1.75%, in each case plus a spread of between zero and 1.00% based on a pricing grid tied to the Company's leverage ratio. In addition, commitment fees are payable on the unused portion of the credit facilities at rates between 0.20% and 0.40% based on a pricing grid tied to the Company's leverage ratio.

The Amended Credit Agreement contains certain customary covenants, including covenants that limit the ability of the Company and its subsidiaries to enter into certain types of transactions. Financial covenants include covenants requiring maintenance of a minimum fixed charge coverage ratio, a maximum leverage ratio and a minimum asset coverage ratio. The Company's obligations under the Amended Credit Agreement are guaranteed by substantially all of its subsidiaries. The credit facilities and the related guarantees are secured by senior first priority liens on certain of the Company's and its subsidiaries' assets, including equipment, inventory and accounts receivable.





Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

As of August 31, 2016 and 2015, the Company had \$8 million of tax-exempt economic development revenue bonds outstanding with the State of Oregon and scheduled to mature in January 2021. In August 2016, the Company exercised its option to redeem the bonds prior to maturity. The Company repaid the bonds in full in September 2016. The obligation is reported as a current liability within short-term borrowings as of August 31, 2016 on the Consolidated Balance Sheet.

Principal payments on long-term debt and capital lease obligations during the next five fiscal years and thereafter are as follows (in thousands):

Years Ending August 31,	Long-Term Debt	Capital Lease Obligations	Total
2017	\$ 7,737	\$ 1,164	\$ 8,901
2018	142	951	1,093
2019	98	845	943
2020	89	845	934
2021	180,047	708	180,755
Thereafter	352	2,081	2,433
Total	188,465	6,594	195,059
Amounts representing interest and executory costs	—	(2,541 )	(2,541 )
Total less interest	\$ 188,465	\$ 4,053	\$ 192,518

The Company maintains stand-by letters of credit to provide for certain obligations including workers' compensation and performance bonds. The Company had \$16 million outstanding under these arrangements as of August 31, 2016 and 2015.

The Company also had an unsecured, uncommitted \$25 million credit line with Wells Fargo Bank, N.A. that expired on April 1, 2016. Interest rates were set by the bank at the time of borrowing. The Company had no borrowings outstanding under this credit line as of August 31, 2015.

#### Note 8 - Discontinued Operations

In fiscal 2015, the Company ceased operations at seven auto parts stores, six of which qualified for discontinued operations reporting in accordance with the accounting standards in effect at the time prior to adopting the accounting standard update on discontinued operations reporting in the first quarter of fiscal 2016. The operations of the six qualifying stores had previously been reported within the APB reportable segment, which was subsequently replaced by the AMR reportable segment in the fourth quarter of fiscal 2015. In fiscal 2016 and 2015, the Company recorded impairment charges and accelerated depreciation of \$1 million and \$3 million, respectively, on the long-lived assets of discontinued auto parts stores. Impaired assets in fiscal 2016 consisted primarily of capital lease assets associated with the buildings on two leased properties.

In fiscal 2014, the Company released an environmental liability of \$1 million associated with a component disposed of through sale in a prior period. The release was the result of a periodic review of the Company's estimate of future environmental remediation costs associated with the disposed sites, for which it bears responsibility based on contractual agreements.

Operating results of discontinued operations were comprised of the following for the years ended August 31 (in thousands):

	2016	2015	2014
Revenues	\$—	\$8,263	\$15,682
Loss from discontinued operations before income taxes	\$(1,348)	\$(7,227)	\$(2,888 )
Income tax benefit	—	—	79

Loss from discontinued operations, net of tax	\$ (1,348)	\$ (7,227)	\$ (2,809 )
---	------------	------------	-------------

74 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 9 – Commitments and Contingencies

Commitments

The Company leases a portion of its capital equipment and certain of its facilities under leases that expire at various dates through fiscal 2047. Rent expense was \$24 million, \$26 million and \$27 million for fiscal 2016, 2015 and 2014, respectively.

The table below sets forth the Company's future minimum obligations under non-cancelable operating leases as of August 31, 2016 (in thousands):

Years ending August 31,	Operating Leases
2017	\$ 21,190
2018	17,946
2019	14,649
2020	10,667
2021	6,065
Thereafter	22,212
Total	\$ 92,729

Contingencies – Environmental

Changes in the Company's environmental liabilities for the years ended August 31, 2016 and 2015 were as follows (in thousands):

	Balance 8/31/2014	Liabilities Established (Released), Net	Payments and Other	Ending Balance 8/31/2015	Liabilities Established (Released), Net	Payments and Other	Ending Balance 8/31/2016	Short-Term	Long-Term
AMR	\$ 47,961	\$ 505	\$(1,972 )	\$ 46,494	\$ 480	\$(852 )	\$ 46,122	\$ 1,859	\$ 44,263
Corporate	388	—	(89 )	299	—	(71 )	228	108	120
Total	\$ 48,349	\$ 505	\$(2,061 )	\$ 46,793	\$ 480	\$(923 )	\$ 46,350	\$ 1,967	\$ 44,383

Auto and Metals Recycling

As of August 31, 2016, AMR had environmental liabilities of \$46 million for the potential remediation of locations where it has conducted business or has environmental liabilities from historical or recent activities.

Portland Harbor

In December 2000, the Company was notified by the United States Environmental Protection Agency ("EPA") under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") that it is one of the potentially responsible parties ("PRPs") that own or operate or formerly owned or operated sites which are part of or adjacent to the Portland Harbor Superfund site (the "Site"). The precise nature and extent of any cleanup of the Site, the parties to be involved, the process to be followed for any cleanup and the allocation of the costs for any cleanup among responsible parties have not yet been determined, but the process of identifying additional PRPs and beginning allocation of costs is underway. It is unclear to what extent the Company will be liable for environmental costs or natural resource damage claims or third party contribution or damage claims with respect to the Site. While the Company participated in certain preliminary Site study efforts, it is not party to the consent order entered into by the EPA with certain other PRPs, referred to as the "Lower Willamette Group" ("LWG"), for a remedial investigation/feasibility study ("RI/FS"). During fiscal 2007, the Company and certain other parties agreed to an interim settlement with the LWG under which the Company made a cash contribution to the LWG RI/FS. The Company has also joined with more than 80 other PRPs, including the LWG, in a voluntary process to establish an allocation of costs at the Site. These parties have selected an allocation team and have entered into an allocation process design agreement. The LWG has also commenced federal court litigation, which has been stayed, seeking to bring additional parties into the allocation

process.

75 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

In January 2008, the Natural Resource Damages Trustee Council (“Trustees”) for Portland Harbor invited the Company and other PRPs to participate in funding and implementing the Natural Resource Injury Assessment for the Site. Following meetings among the Trustees and the PRPs, a funding and participation agreement was negotiated under which the participating PRPs agreed to fund the first phase of the natural resource damage assessment. The Company joined in that Phase I agreement and paid a portion of those costs. The Company did not participate in funding the second phase of the natural resource damage assessment.

On March 30, 2012, the LWG submitted to the EPA and made available on its website a draft feasibility study (“FS”) for the Site based on approximately ten years of work and \$100 million in costs classified by the LWG as investigation-related. The draft FS submitted by the LWG identified ten possible remedial alternatives which ranged in estimated cost from approximately \$170 million to \$250 million (net present value) for the least costly alternative to approximately \$1.08 billion to \$1.76 billion (net present value) for the most costly alternative and estimated a range of two to 28 years to implement the remedial work, depending on the selected alternative. However, the EPA largely rejected this draft FS, and took over the drafting process. The EPA provided their revised draft FS to the LWG and other key stakeholders in sections, with the final section being made available in August 2015. The revised draft FS identified five possible remedial alternatives which ranged in estimated cost from approximately \$550 million to \$1.19 billion (net present value) for the least costly alternative to approximately \$1.71 billion to \$3.67 billion (net present value) for the most costly alternative and estimated a range of four to 18 years to implement the remedial work, depending on the selected alternative.

In November 2015, EPA Region 10 presented its preferred alternative remedy to the National Remedy Review Board (“NRRB”), a peer review group that has been established to review proposed Superfund cleanup decisions for consistency with the Superfund statute, regulations, and guidance. EPA Region 10’s preferred alternative presented to the NRRB was a modified version of one of the alternatives (Alternative E) in the revised draft FS, and EPA Region 10 estimated that its preferred alternative would take seven years to implement, with an estimated cost of \$1.4 billion (net present value).

In June 2016, the EPA issued its Proposed Plan for the cleanup of the in-river portion of the Site. In the Proposed Plan, the EPA identified its preferred alternative, which includes a combination of dredging, capping, and enhanced natural recovery and which the EPA estimates will take approximately seven years to construct with additional time for monitored natural recovery to occur and cost an estimated \$746 million (net present value). This is approximately half of the estimated \$1.4 billion (net present value) cost of the very similar preferred alternative that EPA Region 10 presented in November 2015. The Proposed Plan also describes other alternatives that were considered and the criteria the EPA used to compare the alternatives, including estimated costs and construction timelines. In conjunction with the Proposed Plan, the EPA issued its final FS in June 2016. The final FS identifies eight possible remedial alternatives (some of which contain two disposal alternatives, for a total of 13 possible alternative remedial scenarios) which ranged in estimated cost from approximately \$316 million to \$677 million (net present value) for the least costly alternative to approximately \$1.21 billion to \$2.67 billion (net present value) for the most costly alternative that the EPA did not screen out and estimates a range of four to 19 years to implement the remedial work, depending on the selected alternative. The final FS includes one alternative (Alternative H) which would involve capping/dredging the entire Site with an estimated cost range from approximately \$6.61 billion to \$14.29 billion and 62 years to implement. The EPA screened out this Alternative H due to implementability and cost considerations. Each of the draft and final FS also contains a No Action alternative considered as a baseline for comparison with the other alternatives. The FS and the Proposed Plan do not determine or allocate the responsibility for remediation costs. Issuance of the Proposed Plan is part of the continuing process for evaluation and remediation of the Site. There was a 90-day public comment period on the Proposed Plan that closed on September 6, 2016. Approximately 5,300 commenters submitted comments. Following its review and consideration of these comments, the EPA will prepare a summary responding to the submitted comments and select a remedy for the Site in a Record of Decision (“ROD”). The EPA has indicated that it plans to issue the ROD by the end of 2016 or in early January 2017. In the ROD, the EPA may modify the preferred alternative or select a different alternative than that presented in the Proposed Plan based on

new information or public comments. It is uncertain whether the preferred alternative identified by EPA in the Proposed Plan will be the selected remedy in the ROD or whether the EPA will be able to maintain its proposed schedule for issuing the ROD. Even when the ROD is issued, it is likely that there will continue to be significant uncertainty regarding the costs of the selected remedy.

76 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The Company and other stakeholders have identified a number of serious concerns regarding the EPA's risk and remedial alternatives assessments and the EPA's cost estimates, scheduling assumptions and conclusions regarding the feasibility, effectiveness, community impact and assignment of remediation technologies. The EPA's FS and Proposed Plan are based on data that are more than a decade old and may not accurately represent site or background conditions. In its Proposed Plan, the EPA acknowledged that the assumptions used to estimate costs for the remedial alternatives were developed based on the existing data and will be finalized during the remedial design, after design level data to refine the baseline conditions are obtained. In addition, the FS and Proposed Plan provide only site-wide cost estimates and do not provide sufficient detail regarding costs for specific sediment management areas. Accordingly, it is anticipated that additional pre-remedial design investigative work will need to occur after the ROD is issued in order to provide a re-baseline for costs and determine particular remedial actions for specific areas within the Site. The next phase in the process following the ROD is the remedial design. The remedial design phase is an engineering phase during which additional technical information and data will be collected, identified and incorporated into technical drawings and specifications developed for the subsequent remedial action. The EPA will be seeking a new coalition of PRPs to perform the remedial design activities. Remediation activities are not expected to commence for a number of years and responsibility for implementing and funding the EPA's selected remedy will be determined in a separate allocation process. While an allocation process is currently underway, the EPA's FS and its approach to the proposed alternative remedies have raised questions and uncertainty as to how that allocation process will proceed. Because there has not been a determination of the total cost of the investigations, the remediation that will be required, the amount of natural resource damages or how the costs of the ongoing investigations and any remedy and natural resource damages will be allocated among the PRPs, the Company believes it is not possible to reasonably estimate the amount or range of costs which it is likely to or which it is reasonably possible that it will incur in connection with the Site, although such costs could be material to the Company's financial position, results of operations, cash flows and liquidity. Among the facts currently being developed are detailed information on the history of ownership of and the nature of the uses of and activities and operations performed on each property within the Site, which are factors that will play a substantial role in determining the allocation of investigation and remedy costs among the PRPs. The Company has insurance policies that it believes will provide reimbursement for costs it incurs for defense, remediation and mitigation for natural resource damages claims in connection with the Site, although there is no assurance that those policies will cover all of the costs which the Company may incur. The Company previously recorded a liability for its estimated share of the costs of the investigation of \$1 million.

The Oregon Department of Environmental Quality is separately providing oversight of voluntary investigations by the Company involving the Company's sites adjacent to the Portland Harbor which are focused on controlling any current "uplands" releases of contaminants into the Willamette River. No liabilities have been established in connection with these investigations because the extent of contamination (if any) and the Company's responsibility for the contamination (if any) has not yet been determined.

#### Other AMR Sites

As of August 31, 2016, the Company had environmental liabilities related to various AMR sites other than Portland Harbor of \$45 million. The liabilities relate to the potential future remediation of soil contamination, groundwater contamination and storm water runoff issues and were not individually material at any site.

#### Steel Manufacturing Business

SMB's electric arc furnace generates dust ("EAF dust") that is classified as hazardous waste by the EPA because of its zinc and lead content. As a result, the Company captures the EAF dust and ships it in specialized rail cars to a firm that applies a treatment that allows the EAF dust to be delisted as hazardous waste.

SMB has an operating permit issued under Title V of the Clean Air Act Amendments of 1990, which governs certain air quality standards. The permit is based upon an annual production capacity of 950 thousand tons. The permit was first issued in 1998 and has since been renewed through February 1, 2018.

SMB had no environmental liabilities as of August 31, 2016.

Other than the Portland Harbor Superfund site, which is discussed above, management currently believes that adequate provision has been made for the potential impact of these issues and that the ultimate outcomes will not have a material adverse effect on the Consolidated Financial Statements of the Company as a whole. Historically, the amounts the Company has ultimately paid for such remediation activities have not been material in any given period.

77 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

In addition, the Company is party to various legal proceedings arising in the normal course of business. Management believes that adequate provisions have been made for these contingencies. The Company does not anticipate that the resolution of legal proceedings arising in the normal course of business, after taking into consideration expected insurance recoveries, will have a material adverse effect on its results of operations, financial condition, or cash flows.

Note 10 - Restructuring Charges and Other Exit-Related Activities

The Company has implemented a number of restructuring initiatives designed to reduce operating expenses and improve profitability and to achieve further integration and synergistic cost efficiencies in its operating platform. The restructuring charges incurred by the Company during the periods presented pertain primarily to three separate plans: the plans announced in the first quarter of fiscal 2014 (the "Q1'14 Plan"), the Q1'15 Plan and the Q2'15 Plan.

The Q1'14 Plan was designed to reduce the Company's annual operating expenses through headcount reductions, productivity improvements, procurement savings and other operational efficiencies.

The Q1'15 Plan included additional productivity initiatives to improve profitability through a combination of revenue drivers and cost reduction initiatives.

At the end of the second quarter of fiscal 2015, the Company commenced additional restructuring and exit-related initiatives by undertaking strategic actions consisting of idling underutilized assets at AMR and initiating the closure of seven auto parts stores to align the Company's business to market conditions. The Company expanded these initiatives in April 2015 and also announced the integration of the MRB and APB businesses into the combined AMR platform in order to achieve operational synergies and reduce the Company's annual operating expenses, primarily selling, general and administrative expenses, through headcount reductions, reducing organizational layers, consolidating shared service functions and other non-headcount measures. Additional cost savings and productivity improvement initiatives, including additional reductions in personnel, savings from procurement activities, streamlining of administrative and supporting services functions, and adjustments to its operating capacity through facility closures, were identified and initiated in fiscal 2016. Collectively, these initiatives are referred to as the Q2'15 Plan.

The Company incurred restructuring charges of \$6 million, \$11 million and \$6 million in fiscal 2016, 2015 and 2014, respectively. The remaining charges relating to these initiatives are expected to be substantially incurred by the end of fiscal 2017. The significant majority of the restructuring charges require the Company to make cash payments.

In addition to the restructuring charges related to these initiatives, the Company incurred other exit-related activities of \$2 million, \$7 million and \$1 million in fiscal 2016, 2015 and 2014, respectively, consisting primarily of long-lived asset impairments and accelerated depreciation due to shortened useful lives of long-lived assets, including from abandonment, in connection with site closures and idled equipment. Other exit-related activities in fiscal 2016 also included \$1 million in gains recorded in connection with the disposition of business assets leading to the elimination of certain auto and metals recycling operations.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Restructuring charges and other exit-related activities were comprised of the following (in thousands):

	2016			2015			2014	
	All Other Plans	Q2'15 Plan	Total Charges	All Other Plans	Q2'15 Plan	Total Charges	All Other Plans	Total Charges
Restructuring charges:								
Severance costs	\$—	\$4,915	\$4,915	\$391	\$5,330	\$5,721	\$4,607	\$4,607
Contract termination costs	311	796	1,107	377	1,245	1,622	1,384	1,384
Other restructuring costs	—	—	—	1,223	2,048	3,271	410	410
Total restructuring charges	311	5,711	6,022	1,991	8,623	10,614	6,401	6,401
Other exit-related activities:								
Asset impairments and accelerated depreciation	—	3,127	3,127	—	6,502	6,502	566	566
Gains on exit-related disposals	—	(1,337)	(1,337)	—	—	—	—	—
Total other exit-related activities	—	1,790	1,790	—	6,502	6,502	566	566
Total restructuring charges and other exit-related activities	\$311	\$7,501	\$7,812	\$1,991	\$15,125	\$17,116	\$6,967	\$6,967

Restructuring charges and other exit-related activities included in continuing operations	\$6,781	\$13,008	\$6,830
Restructuring charges and other exit-related activities included in discontinued operations	\$1,031	\$4,108	\$137

	All Other Plans	Q2'15 Plan	Total
Total restructuring charges to date	\$8,072	\$14,334	\$22,406
Total expected restructuring charges	\$8,072	\$14,500	\$22,572

Total restructuring charges to date and total expected restructuring charges presented throughout this Note include costs associated with the Q1'14, Q1'15 and Q2'15 Plans. Fiscal 2014 restructuring charges also include an immaterial amount of costs incurred in connection with restructuring measures initiated prior to fiscal 2014.

The following illustrates the reconciliation of the restructuring liability by major type of activities for the years ended August 31, 2016 and 2015 (in thousands):

	Q2'15 Plan						
	Balance Charges 8/31/2014	Payments and Other	Balance 8/31/2015	Charges	Payments and Other	Balance 8/31/2016	
Severance costs	\$—	\$5,330	\$ (4,104)	\$ 1,226	\$4,915	\$(5,223)	\$ 918
Contract termination costs	—	1,245	75	1,320	796	(957)	1,159
Other restructuring costs	—	2,048	(2,048)	—	—	—	—
Total	\$—	\$8,623	\$(6,077)	\$ 2,546	\$5,711	\$(6,180)	\$ 2,077
	All Other Plans						
	Balance Charges 8/31/2014	Payments and Other	Balance 8/31/2015	Charges	Payments and Other	Balance 8/31/2016	
Severance costs	\$669	\$391	\$(1,060)	\$ —	\$ —	\$ —	\$ —
Contract termination costs	1,489	377	(1,504)	362	311	(644)	29

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

Other restructuring costs	—	1,223	(1,223 )	—	—	—	—
Total	\$2,158	\$1,991	\$(3,787 )	\$ 362	\$ 311	\$(644 )	\$ 29

79 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Due to the individual immateriality of the activity and liability balances for each of the Q1'14 Plan and Q1'15 Plan, the disclosure of restructuring activity and the reconciliation of the restructuring liability for these two plans is provided in the aggregate ("All Other Plans").

	Total Charges to Date	Total Expected Charges
Severance costs	\$ 15,151	\$ 15,151
Contract termination costs	3,573	3,739
Other restructuring costs	3,682	3,682
Total	\$ 22,406	\$ 22,572

Restructuring charges and other exit-related activities by reportable segment were as follows (in thousands):

	Fiscal 2016 Charges	Fiscal 2015 Charges	Fiscal 2014 Charges	Total Charges to Date	Total Expected Charges
Restructuring charges:					
Auto and Metals Recycling	\$ 4,995	\$ 6,944	\$ 5,191	\$ 15,793	\$ 15,895
Unallocated (Corporate)	943	2,228	1,073	4,950	4,950
Discontinued operations	84	1,442	137	1,663	1,727
Total restructuring charges	6,022	10,614	6,401	22,406	\$ 22,572
Other exit-related activities:					
Asset impairments and accelerated depreciation					
Auto and Metals Recycling	2,180	3,836	566	6,582	
Discontinued operations	947	2,666	—	3,613	
Total asset impairments and accelerated depreciation	3,127	6,502	566	10,195	
Gain on exit-related disposals					
Auto and Metals Recycling	(1,337 )	—	—	(1,337 )	
Total gain on exit-related disposals	(1,337 )	—	—	(1,337 )	
Total exit-related activities	1,790	6,502	566	8,858	
Total restructuring charges and other exit-related activities	\$ 7,812	\$ 17,116	\$ 6,967	\$ 31,264	

The Company does not allocate restructuring charges and other exit-related activities to the segments' operating results because management does not include this information in its measurement of the performance of the operating segments.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## Note 11 – Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss, net of tax, are as follows as of August 31, 2016, 2015 and 2014 (in thousands):

	Foreign Currency Translation Adjustments	Pension Obligations, net	Net Unrealized Gain (Loss) on Cash Flow Hedges	Total
Balance as of August 31, 2013	\$ (6,423 )	\$ (2,817 )	\$ (121 )	\$ (9,361 )
Other comprehensive income (loss) before reclassifications	(4,240 )	(234 )	325	(4,149 )
Income tax benefit (expense)	—	74	(81 )	(7 )
Other comprehensive income (loss) before reclassifications, net of tax	(4,240 )	(160 )	244	(4,156 )
Amounts reclassified from accumulated other comprehensive loss	—	1,483	(151 )	1,332
Income tax (benefit) expense	—	(542 )	86	(456 )
Amounts reclassified from accumulated other comprehensive loss, net of tax	—	941	(65 )	876
Net periodic other comprehensive income (loss)	(4,240 )	781	179	(3,280 )
Balance as of August 31, 2014	(10,663 )	(2,036 )	58	(12,641 )
Other comprehensive loss before reclassifications	(23,346 )	(2,874 )	(5,310 )	(31,530 )
Income tax benefit	—	260	428	688
Other comprehensive loss before reclassifications, net of tax	(23,346 )	(2,614 )	(4,882 )	(30,842 )
Amounts reclassified from accumulated other comprehensive loss	—	575	4,923	5,498
Income tax benefit	—	(198 )	(339 )	(537 )
Amounts reclassified from accumulated other comprehensive loss, net of tax	—	377	4,584	4,961
Net periodic other comprehensive loss	(23,346 )	(2,237 )	(298 )	(25,881 )
Balance as of August 31, 2015	(34,009 )	(4,273 )	(240 )	(38,522 )
Other comprehensive loss before reclassifications	(530 )	(2,139 )	—	(2,669 )
Income tax benefit	—	167	—	167
Other comprehensive loss before reclassifications, net of tax	(530 )	(1,972 )	—	(2,502 )
Amounts reclassified from accumulated other comprehensive loss	—	688	312	1,000
Income tax benefit	—	(19 )	(72 )	(91 )
Amounts reclassified from accumulated other comprehensive loss, net of tax	—	669	240	909
Net periodic other comprehensive income (loss)	(530 )	(1,303 )	240	(1,593 )
Balance as of August 31, 2016	\$ (34,539 )	\$ (5,576 )	\$ —	\$ (40,115 )

Reclassifications from accumulated other comprehensive loss, both individually and in the aggregate, were immaterial to the impacted captions in the Consolidated Statements of Operations in all periods presented.

## Note 12 – Derivative Financial Instruments

## Foreign Currency Exchange Rate Risk Management

To manage exposure to foreign exchange rate risk, the Company has entered into foreign currency forward contracts to stabilize the U.S. dollar amount of the transaction at settlement. The Company previously entered into a series of foreign currency exchange forward contracts to sell U.S. dollars in order to hedge a portion of its exposure to fluctuating rates of exchange on anticipated U.S. dollar-denominated sales by its Canadian subsidiary with a functional currency of the Canadian dollar. The Company utilized intercompany foreign currency derivatives and offsetting derivatives with external counterparties in order to designate the intercompany derivatives as hedging instruments. Once the U.S. dollar-denominated sales have been recognized and the corresponding receivables collected, the Company utilized foreign currency exchange forward contracts to sell Canadian dollars, achieving a result similar to net settling the contracts to sell U.S. dollars. The foreign currency exchange forward contracts to sell Canadian dollars are not designated as hedging instruments.

The Company did not have any foreign currency exchange forward contracts as of August 31, 2016, and the results of contracts that expired during fiscal 2016 were immaterial. Accordingly, the results of foreign currency exchange forward contracts for fiscal 2016 are excluded from the tabular disclosures below.

The fair value of derivative instruments in the Consolidated Balance Sheet as of August 31, 2015 is as follows (in thousands):

	Asset (Liability) Derivatives	August 31, 2015
	Balance Sheet Location	
Foreign currency exchange forward contracts	Prepaid expenses and other current assets	\$—
Foreign currency exchange forward contracts	Other accrued liabilities	\$(751)

The following table summarizes the results of foreign currency exchange derivatives for the years ended August 31 (in thousands):

	Derivative Gain (Loss) Recognized in					
	Fiscal 2015			Fiscal 2014		
	Other Comprehensive Income	Revenues Effective Portion	Other Income (Expense), net	Other Comprehensive Income	Revenues Effective Portion	Other Income (Expense), net
Foreign currency exchange forward contracts - designated as cash flow hedges	\$(5,310)	\$(4,923)	\$ 216	\$325	\$ 249	\$ 112
Foreign currency exchange forward contracts - not designated as cash flow hedges	—	—	(87)	—	—	(12)

There was no hedge ineffectiveness with respect to the foreign currency exchange cash flow hedges for any of the periods presented.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 13 – Employee Benefits

The Company and certain of its subsidiaries have qualified and nonqualified retirement plans covering substantially all employees. These plans include a defined benefit pension plan, a supplemental executive retirement benefit plan (“SERBP”), multiemployer pension plans and defined contribution plans.

Defined Benefit Pension Plan and Supplemental Executive Retirement Benefit Plan

The Company maintains a qualified defined benefit pension plan for certain nonunion employees. Effective June 30, 2006, the Company froze this plan and ceased accruing further benefits for employee service. The Company reflects the funded status of the defined benefit pension plan as a net asset or liability in its Consolidated Balance Sheets. Changes in its funded status are recognized in comprehensive income (loss). The Company amortizes as a component of net periodic pension benefit cost a portion of the net gain or loss reported within accumulated other comprehensive loss if the beginning-of-year net gain or loss exceeds 5% of the greater of the benefit obligation or the market value of plan assets. Net periodic pension benefit cost was not material for the years ended August 31, 2016, 2015 and 2014. The fair value of the plan assets was \$15 million as of August 31, 2016 and 2015, and the projected benefit obligation was \$15 million and \$13 million as of August 31, 2016 and 2015, respectively. The plan was fully funded with the plan assets exceeding the projected benefit obligation by \$1 million and \$2 million as of August 31, 2016 and 2015, respectively. Plan assets were comprised entirely of Level 1 investments as of August 31, 2016 and 2015. Level 1 investments are valued based on quoted market prices of identical securities in the principal market. No contributions are expected to be made to the defined benefit pension plan in the future; however, changes in the discount rate or actual investment returns that are lower than the long-term expected return on plan assets could result in the need for the Company to make additional contributions. The assumed discount rate used to calculate the projected benefit obligations was 3.22% and 4.10% as of August 31, 2016 and 2015, respectively. The Company estimates future annual benefit payments to be between \$1 million and \$3 million per year.

The Company also has a nonqualified SERBP for certain executives. A restricted trust fund has been established with assets invested in life insurance policies that can be used for plan benefits, although the fund is subject to claims of the Company’s general creditors. The trust fund is included in other assets and the pension liability is included in other long-term liabilities in the Company’s Consolidated Balance Sheets. The trust fund is valued at \$3 million as of August 31, 2016 and 2015. The trust fund assets’ gains and losses are included in other income, net in the Company’s Consolidated Statements of Operations. The benefit obligation and the unfunded amount were \$4 million as of August 31, 2016 and 2015. Net periodic pension cost under the SERBP was not material for the years ended August 31, 2016, 2015 and 2014.

Because the defined benefit pension plan and the SERBP are not material to the Consolidated Financial Statements, other disclosures required by U.S. GAAP have been omitted.

Multiemployer Pension Plans

The Company contributes to 14 multiemployer pension plans in accordance with its collective bargaining agreements. Multiemployer pension plans are defined benefit plans sponsored by multiple employers in accordance with one or more collective bargaining agreements. The plans are jointly managed by trustees that include representatives from both management and labor unions. Contributions to the plans are made based upon a fixed rate per hour worked and are agreed to by contributing employers and the unions in collective bargaining. Benefit levels are set by a joint board of trustees based on the advice of an independent actuary regarding the level of benefits that agreed-upon contributions can be expected to support. To the extent that the pension obligation of other participating employers is unfunded, the Company may be required to make additional contributions in the future to fund these obligations. One of the multiemployer plans that the Company contributes to is the Steelworkers Western Independent Shops Pension Plan (“WISPP”, EIN 90-0169564, Plan No. 001) benefiting the union employees of SMB, which are covered by a collective bargaining agreement that will expire on March 31, 2019. As of October 1, 2012, the WISPP had an accumulated funding deficiency (i.e., a failure to satisfy the minimum funding requirements) and was certified in a Red Zone Status, as defined by the Pension Protection Act of 2006. As of October 1, 2013, the WISPP was no longer in Red Zone Status, having been certified by the plan’s actuaries as being in the Green Zone. The Company contributed

\$3 million to the WISPP for each of the years ended August 31, 2016, 2015 and 2014. These contributions represented more than 5% of total contributions to the WISPP for each year.

83 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---



Table of Contents      SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

In 2004, the Internal Revenue Service (“IRS”) approved a seven-year extension of the period over which the WISPP may amortize unfunded liabilities, conditioned upon maintenance of certain minimum funding levels. In 2014, the WISPP obtained relief from the specified funding requirements from the IRS, which requires that the WISPP meet a minimum funded percentage on each valuation date and achieve a funded percentage of 100% as of October 1, 2029. Based on the actuarial valuation for the WISPP as of October 1, 2015, the funded percentage (based on the ratio of the market value of assets to the accumulated benefits liability (present value of accrued benefits) using the valuation method prescribed by the IRS) was 74.3%, which satisfies the minimum funded percentage requirements of the IRS. Company contributions to all of the multiemployer plans were \$4 million for the years ended August 31, 2016, 2015 and 2014.

**Defined Contribution Plans**

The Company has several defined contribution plans covering certain employees. Company contributions to the defined contribution plans totaled \$3 million, \$3 million and \$2 million, respectively, for the years ended August 31, 2016, 2015 and 2014.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 14 – Share-Based Compensation

The Company's 1993 Stock Incentive Plan, as amended, ("the Plan") was established for its employees, consultants and directors. There are 12.2 million shares of Class A common stock reserved for issuance under the Plan, of which 4.9 million are available for future grants as of August 31, 2016. Share-based compensation expense was \$10 million, \$10 million and \$15 million for the years ended August 31, 2016, 2015 and 2014, respectively. Tax benefits used for option exercises and vesting of restricted stock units were \$3 million and \$2 million for the years ended August 31, 2016 and August 31, 2015, respectively, and immaterial for the year ended August 31, 2014.

Restricted Stock Units

The Plan provides for the issuance of RSUs. The estimated fair value of the RSUs is based on the market closing price of the underlying Class A common stock on the date of grant. The compensation expense associated with RSUs is recognized over the respective requisite service period of the awards, net of estimated forfeitures.

During the years ended August 31, 2016, 2015 and 2014, the Compensation Committee granted 361,131 RSUs, 287,180 RSUs and 219,504 RSUs, respectively, to its key employees, officers and employee directors under the Plan. The RSUs vest 20% per year over five years commencing October 31 or June 1 of the year after grant. In addition, in the first quarter of fiscal 2016 the Compensation Committee granted 48,163 RSUs with a two-year vesting term and no retirement-eligibility provisions under the SIP. The estimated fair value of the RSUs granted during the years ended August 31, 2016, 2015 and 2014 was \$7 million, \$6 million and \$7 million, respectively.

A summary of the Company's restricted stock unit activity is as follows:

	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value	Fair Value <sup>(1)</sup>
Outstanding as of August 31, 2013	311	\$ 39.11	
Granted	220	\$ 30.55	
Vested	(93 )	\$ 42.13	\$ 25.01
Forfeited	(49 )	\$ 35.73	
Outstanding as of August 31, 2014	389	\$ 33.97	
Granted	287	\$ 22.58	
Vested	(151 )	\$ 35.96	\$ 20.34
Forfeited	(40 )	\$ 26.59	
Outstanding as of August 31, 2015	485	\$ 27.21	
Granted	409	\$ 18.28	
Vested	(145 )	\$ 30.86	\$ 16.36
Forfeited	(14 )	\$ 22.61	
Outstanding as of August 31, 2016	735	\$ 21.59	

(1) Amounts represent the weighted average value of the Company's Class A common stock on the date that the restricted stock units vested.

The Company recognized compensation expense associated with RSUs of \$6 million, \$7 million and \$6 million for the years ended August 31, 2016, 2015 and 2014, respectively. As of August 31, 2016, total unrecognized compensation costs related to unvested RSUs amounted to \$6 million, which is expected to be recognized over a weighted average period of 2.8 years.

Performance Share Awards

The Plan authorizes performance-based awards to certain employees subject to certain conditions and restrictions. A participant generally must be employed by the Company on October 31 following the end of the performance period to receive an award payout, although adjusted awards will be paid if employment terminates earlier on account of death, disability, retirement, termination without cause after the first year of the performance period or a sale of the Company or the reportable segments for which the participant works. Awards will be paid in Class A common stock

as soon as practicable after October 31 following the end of the performance period.

85 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The Company accrues compensation cost for performance share awards based on the probable outcome of specified performance conditions, net of estimated forfeitures. The Company accrues compensation cost if it is probable that the performance conditions will be achieved. The Company reassesses whether achievement of the performance conditions are probable at each reporting date. If it is probable that the actual performance results will exceed the stated target performance conditions, the Company accrues additional compensation cost for the additional performance shares to be awarded. If, upon reassessment, it is no longer probable that the actual performance results will exceed the stated target performance conditions, or that it is no longer probable that the target performance condition will be achieved, the Company reverses any recognized compensation cost for shares no longer probable of being issued. If the performance conditions are not achieved at the end of the service period, all related compensation cost previously recognized is reversed.

Fiscal 2014 – 2015 (August) Performance Share Awards

The Compensation Committee approved performance-based awards under the Plan with a grant date of August 13, 2013. The Compensation Committee established performance targets based on the Company's EBITDA (weighted at 50%) and return on equity (weighted at 50%) for the two years of the performance period, with award payouts ranging from a threshold of 50% to a maximum of 200% for each portion of the awards.

Fiscal 2014 – 2015 (November) Performance Share Awards

The Compensation Committee approved performance-based awards under the Plan with a grant date of November 21, 2013. The Compensation Committee established performance targets based on divisional volume metrics (weighted at 50%) and divisional operating income metrics (weighted at 50%) for the two years of the performance period, with award payouts ranging from a threshold of 50% to a maximum of 200% for each portion of the awards.

Fiscal 2015 – 2016 Performance Share Awards

The Compensation Committee approved performance-based awards under the Plan with a grant date of November 25, 2014. The performance targets are based on the Company's EBITDA (weighted at 50%) and return on equity (weighted at 50%) for the two years of the performance period, with award payouts ranging from a threshold of 50% to a maximum of 200% for each portion of the awards.

Fiscal 2016 – 2018 (November) Performance Share Awards

In the first quarter of fiscal 2016, the Compensation Committee approved performance-based awards under the Plan with a grant date of November 9, 2015. The 201,702 performance share awards granted by the Compensation Committee are comprised of two separate and distinct awards with different vesting conditions.

The Compensation Committee granted 99,860 of the performance share awards based on a relative Total Shareholder Return ("TSR") metric over a performance period spanning November 9, 2015 to August 31, 2018. Award share payouts range from a threshold of 50% to a maximum of 200% based on the relative ranking of the Company's TSR among a designated peer group of 16 companies. The TSR award stipulates certain limitations to the payout in the event the payout reaches a defined ceiling level or the Company's TSR is negative. The TSR awards contain a market condition and, therefore, once the award recipients complete the requisite service period, the related compensation expense based on the grant-date fair value is not changed, regardless of whether the market condition has been satisfied. The estimated fair value of the TSR awards at the date of grant was \$2 million. The Company estimated the fair value of the TSR awards using a Monte-Carlo simulation model utilizing several key assumptions including expected Company and peer company share price volatility, correlation coefficients between peers, the risk-free rate of return, the expected dividend yield and other award design features.

The remaining 101,842 performance share awards have a three-year performance period consisting of the Company's fiscal 2016, 2017 and 2018. The performance targets are based on the Company's cash flow return on investment ("CFROI") over the three-year performance period, with award payouts ranging from a threshold of 50% to a maximum of 200%. The fair value of the awards granted was based on the market closing price of the underlying Class A common stock on the grant date and totaled \$2 million.

Fiscal 2016 – 2018 (April) Performance Share Awards

In the third quarter of fiscal 2016, the Compensation Committee approved the second half of the fiscal 2016 performance-based awards with a grant date of April 27, 2016. The Compensation Committee granted 152,221 performance share awards consisting of 73,546 TSR awards and 78,675 CFROI awards to the Company's key employees and officers under the Plan with terms substantially similar to the awards granted in the first quarter of fiscal 2016, as described above in this Note, except that the performance period for the TSR awards started on April 27, 2016 and for the CFROI awards on March 1, 2016. The estimated fair value of each of the TSR awards and CFROI awards at the date of grant was \$2 million.

86 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

A summary of the Company's performance-based awards activity is as follows:

	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value	Fair Value <sup>(1)</sup>
Outstanding as of August 31, 2013	573	\$ 32.47	
Granted	220	\$ 30.55	
Vested	(62 )	\$ 55.43	\$ 28.87
Forfeited	(108 )	\$ 41.48	
Outstanding as of August 31, 2014	623	\$ 27.93	
Granted	269	\$ 24.02	
Vested	(98 )	\$ 26.27	\$ 23.60
Forfeited	(159 )	\$ 26.36	
Outstanding as of August 31, 2015	635	\$ 26.92	
Granted	364	\$ 19.19	
Vested	(194 )	\$ 28.82	\$ 16.86
Forfeited	(210 )	\$ 28.48	
Outstanding as of August 31, 2016	595	\$ 21.02	

(1) Amounts represent the weighted average value of the Company's Class A common stock on the date that the performance share awards vested.

Compensation expense associated with performance-based awards was calculated using management's current estimate of the expected level of achievement of the performance targets under the Plan. Compensation expense for anticipated awards based on the Company's financial performance was \$4 million, \$2 million and \$6 million for the years ended August 31, 2016, 2015 and 2014, respectively. As of August 31, 2016, unrecognized compensation costs related to non-vested performance shares amounted to \$5 million, which is expected to be recognized over a weighted average period of 1.3 years.

#### Deferred Stock Units

The Deferred Compensation Plan for Non-Employee Directors ("DSU Plan") provides for the issuance of DSUs to non-employee directors to be granted under the Plan. Each DSU gives the director the right to receive one share of Class A common stock at a future date. Immediately following the annual meeting of shareholders, each non-employee director will receive DSUs which will become fully vested on the day before the next annual meeting, subject to continued service on the Board. The compensation expense associated with the DSUs granted is recognized over the respective requisite service period of the awards.

The Company will issue Class A common stock to a director pursuant to vested DSUs in a lump sum in January of the first year after the director ceases to be a director of the Company, subject to the right of the director to elect an installment payment program under the DSU Plan.

DSUs granted during the years ended August 31, 2016, 2015 and 2014 were for a total of 57,780 shares, 48,590 shares and 30,848 shares, respectively. The compensation expense associated with DSUs and the total value of shares vested during each of the years ended August 31, 2016, 2015 and 2014, as well as the unrecognized compensation expense as of August 31, 2016, were not material.

#### Stock Options

Under the Plan, stock options are granted to employees at exercise prices that are set at the sole discretion of the Board of Directors. The fair value of each option grant under the Plan is estimated at the date of grant using the Black-Scholes Option Pricing Model, which utilizes assumptions related to volatility, the risk-free interest rate, the dividend yield and employee exercise behavior. Expected volatilities utilized in the model are based on the historical volatility of the Company's stock price. The risk-free interest rate is derived from the U.S. Treasury yield curve in

effect at the time of grant. The expected term of the options is based on an analysis of expected post-vesting exercise behavior including historical exercise patterns when available.

No options were granted in fiscal 2016, 2015, and 2014.

87 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

A summary of the Company's stock option activity and related information is as follows:

	Options (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands) <sup>(1)</sup>
Outstanding as of August 31, 2013	555	\$ 32.07	3.1	\$ 47
Granted	—	\$ —		
Exercised	(9 )	\$ 25.56		
Canceled	(20 )	\$ 30.55		
Outstanding as of August 31, 2014	526	\$ 32.25	2.2	\$ 335
Granted	—	\$ —		
Exercised	—	\$ —		
Canceled	(122 )	\$ 24.95		
Outstanding as of August 31, 2015	404	\$ 34.46	1.3	\$ —
Granted	—	\$ —		
Exercised	—	\$ —		
Canceled	(182 )	\$ 34.11		
Outstanding as of August 31, 2016	222	\$ 34.75	1.0	\$ —

(1) Amounts represent the difference between the exercise price and the closing price of the Company's stock on the last trading day of the corresponding fiscal year, multiplied by the number of in-the-money options.

All outstanding stock options were vested as of August 31, 2016 and 2015. The aggregate intrinsic value of stock options exercised, which was zero for the years ended August 31, 2016 and 2015 and immaterial for the year ended August 31, 2014, represents the difference between the exercise price and the value of the Company's stock at the time of exercise. No stock options vested in the years ended August 31, 2016 and August 31, 2015 and 307,855 stock options vested in the year ended August 31, 2014. Compensation expense associated with stock options, the total proceeds received from option exercises and the tax benefits realized from options exercised was zero for the years ended August 31, 2016 and 2015 and not material during the year ended August 31, 2014.



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## Note 15 – Income Taxes

Income (loss) from continuing operations before income taxes was as follows for the years ended August 31 (in thousands):

	2016	2015	2014
United States	\$(4,303 )	\$(113,084)	\$12,286
Foreign	(11,202 )	(87,380 )	2,696
Total	\$(15,505)	\$(200,464)	\$14,982

Income tax expense (benefit) from continuing operations consisted of the following for the years ended August 31 (in thousands):

	2016	2015	2014
Current:			
Federal	\$23	\$(11,275)	\$6,508
State	180	(84 )	229
Foreign	25	732	177
Total current tax expense (benefit)	\$228	\$(10,627)	\$6,914
Deferred:			
Federal	\$502	\$(4,752 )	\$(4,911)
State	54	2,805	880
Foreign	(49 )	(41 )	(301 )
Total deferred tax expense (benefit)	507	(1,988 )	(4,332 )
Total income tax expense (benefit)	\$735	\$(12,615)	\$2,582

A reconciliation of the difference between the federal statutory rate and the Company's effective tax rate for the years ended August 31 is as follows:

	2016	2015	2014
Federal statutory rate	35.0 %	35.0 %	35.0 %
State taxes, net of credits	1.3	1.1	(2.5 )
Foreign income taxed at different rates	(12.0)	(7.7 )	(8.6 )
Section 199 deduction	—	—	(5.3 )
Non-deductible officers' compensation	(2.0 )	(0.1 )	2.0
Noncontrolling interests	4.1	0.3	(8.7 )
Research and development credits	2.4	0.3	(0.8 )
Fixed asset tax basis adjustment	—	—	(15.3)
Valuation allowance on deferred tax assets	(59.0)	(25.2)	10.2
Unrecognized tax benefits	(3.6 )	(0.6 )	12.9
Non-deductible goodwill	(0.9 )	(2.5 )	—
Realized foreign investment basis	29.4	6.3	—
Other	0.6	(0.6 )	(1.7 )
Effective tax rate	(4.7 )%	6.3 %	17.2 %

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The Company's effective tax rate from continuing operations in fiscal 2016 was an expense of 4.7%, which was lower than the U.S. federal statutory rate of 35%. The effective tax rate was reduced for valuation allowances on deferred tax assets and the aggregate impact of foreign income taxed at different rates. Those reductions were partially offset by the realization of foreign investment basis for tax purposes. The Company's income tax expense is comprised primarily of the increase in deferred tax liabilities from indefinite-lived assets plus certain state cash tax expenses. The increase in valuation allowance on deferred tax assets was recognized as a result of negative evidence, including recent losses in all tax jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized. Realization of the deferred tax assets is dependent upon generating sufficient taxable income in the associated tax jurisdictions in future years to benefit from the reversal of net deductible temporary differences and from the utilization of net operating losses.

The Company's effective tax rate from continuing operations in fiscal 2015 was a benefit of 6.3% which was lower than the U.S. federal statutory rate of 35%. The effective tax rate was reduced by 33% for valuation allowances on deferred tax assets and the aggregate impact of excluding foreign income taxed at different rates. Those expenses were partially offset by the recognition of a \$13 million benefit related to the realization of foreign investment basis for tax purposes. The increase in valuation allowance on deferred tax assets was recognized as a result of negative evidence, including recent losses in all tax jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized.

The Company's effective tax rate from continuing operations in fiscal 2014 was an expense of 17.2% and was lower than the U.S. federal statutory rate of 35%. The effective tax rate benefited from a fixed asset tax basis study performed during fiscal 2014 which resulted in the recognition of a tax benefit of \$2 million, as well as the aggregate impact of excluding income associated with noncontrolling interests, foreign income taxed at different rates, and certain deductions and credits. Other significant items impacting the effective tax rate included the recognition of a valuation allowance against certain foreign and state deferred tax assets and the recognition of a liability for unrecognized tax benefits of \$2 million. The valuation allowance on deferred tax assets of certain foreign and state tax jurisdictions increased by \$2 million compared to the prior year and was recognized as a result of negative evidence, including recent losses in certain foreign and state jurisdictions, outweighing the more subjective positive evidence, indicating that it is more likely than not that the associated tax benefit will not be realized. Realization of the foreign subsidiaries' deferred tax assets is dependent upon generating sufficient taxable income in the foreign tax jurisdiction in future years to benefit from the reversal of net deductible temporary differences and from the utilization of net operating losses.

Deferred tax assets and liabilities were comprised of the following as of August 31 (in thousands):

	2016	2015
Deferred tax assets:		
Environmental liabilities	\$11,048	\$11,623
Employee benefit accruals	12,620	13,471
State income tax and other	8,518	4,601
Net operating loss carryforwards	19,723	20,485
State credit carryforwards	6,352	5,935
Inventory valuation methods	—	975
Amortizable goodwill and other intangibles	47,023	51,459
Valuation allowances	(86,917 )	(78,304 )
Total deferred tax assets	\$18,367	\$30,245
Deferred tax liabilities:		
Accelerated depreciation and other basis differences	\$32,528	\$44,131
Prepaid expense acceleration	2,402	2,460
Inventory valuation methods	119	—
Total deferred tax liabilities	35,049	46,591

Net deferred tax liability \$16,682 \$16,346

As of August 31, 2016, the Company had federal net operating loss carryforwards of \$35 million, which will expire if not used by 2035. Foreign operating loss carryforwards were \$32 million, which expire if not used between 2022 and 2036. State credit carryforwards will expire if not used between 2017 and 2026.

90 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Accounting for Uncertainty in Income Taxes

The following table summarizes the activity related to the Company's reserve for unrecognized tax benefits, excluding interest and penalties, for the years ended August 31 (in thousands):

	2016	2015	2014
Unrecognized tax benefits, as of the beginning of the year	\$3,970	\$2,780	\$526
Additions for tax positions of prior years	—	—	1
Reductions for tax positions of prior years	(56 )	—	—
Additions for tax positions of the current year	810	1,571	2,253
Settlements with tax authorities	—	(381 )	—
Unrecognized tax benefits, as of the end of the year	\$4,724	\$3,970	\$2,780

The Company does not anticipate any material changes to the reserve in the next 12 months. Reserves pertaining to positions claimed on the fiscal year 2014, 2015 and 2016 tax returns would result in net operating loss offsets in the event the positions were successfully challenged. Pursuant to FASB's Accounting Standards Update 2013-11, the reserves are netted against deferred tax assets related to net operating loss carryforwards.

The recognized amounts of tax-related penalties and interest were not material for all periods presented.

The Company files federal and state income tax returns in the U.S. and foreign tax returns in Puerto Rico and Canada. For U.S. federal income tax returns, fiscal years 2012 to 2015 remain subject to examination under the statute of limitations.

Note 16 – Net Income (Loss) Per Share

The following table sets forth the information used to compute basic and diluted net income (loss) per share attributable to SSI for the years ended August 31 (in thousands):

	2016	2015	2014
Income (loss) from continuing operations	\$(16,240)	\$(187,849)	\$12,400
Net income attributable to noncontrolling interests	(1,821 )	(1,933 )	(3,667 )
Income (loss) from continuing operations attributable to SSI	(18,061 )	(189,782 )	8,733
Loss from discontinued operations, net of tax	(1,348 )	(7,227 )	(2,809 )
Net income (loss) attributable to SSI	\$(19,409)	\$(197,009)	\$5,924
Computation of shares:			
Weighted average common shares outstanding, basic	27,229	27,010	26,834
Incremental common shares attributable to dilutive stock options, performance share awards, DSUs and RSUs	—	—	166
Weighted average common shares outstanding, diluted	27,229	27,010	27,000

Common stock equivalent shares of 1,016,745, 1,018,858 and 618,348 were considered antidilutive and were excluded from the calculation of diluted net income (loss) per share attributable to SSI for the years ended August 31, 2016, 2015 and 2014, respectively.

Note 17 – Related Party Transactions

The Company purchases recycled metal from its joint venture operations at prices that approximate fair market value. These purchases totaled \$12 million, \$22 million and \$30 million for the years ended August 31, 2016, 2015 and 2014, respectively. Net advances to these joint ventures were zero for the years ended August 31, 2016 and 2015, and \$3 million for the year ended August 31, 2014.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Thomas D. Klauer, Jr., who had been President of the Company's former Auto Parts Business prior to his retirement on January 5, 2015, is the sole shareholder of a corporation that is the 25% minority partner in a partnership in which the Company is the 75% partner and which operates five self-service stores in Northern California. Mr. Klauer's 25% share of the profits of this partnership, through the date of his retirement, totaled \$1 million and \$2 million for the years ended August 31, 2015 and 2014, respectively. The partnership leases properties from entities in which Mr. Klauer has ownership interests under agreements that expire in December 2020 with options to renew the leases, upon expiration, for multiple periods. The rent paid by the partnership to the entities in which Mr. Klauer has ownership interests, through the date of his retirement, was less than \$1 million for the year ended August 31, 2015, and \$1 million for the year ended August 31, 2014.

Certain members of the Schnitzer family own significant interests in, or are related to owners of, MMGL Corp ("MMGL," formerly known as Schnitzer Investment Corp.), which is engaged in the real estate business and was a subsidiary of the Company prior to 1989. The Company and MMGL are involved in a cost sharing arrangement with respect to defense costs related to Portland Harbor. MMGL was considered a related party for financial reporting purposes prior to January 2015 due to the involvement of Kenneth M. Novack, a former member of the Company's board of directors, in the management of MMGL. As of January 2015, Mr. Novack was no longer a member of the Company's board of directors and, thus, MMGL ceased being a related party. As of August 31, 2014, \$1 million was receivable from MMGL, which was paid in full in the first quarter of fiscal 2015.

Note 18 – Segment Information

The accounting standards for reporting information about operating segments define an operating segment as a component of an enterprise that engages in business activities from which it may earn revenues and incur expenses for which discrete financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

Prior to the fourth quarter of fiscal 2015, the Company's internal organizational and reporting structure supported three operating and reportable segments: the Metals Recycling Business ("MRB"), the Auto Parts Business ("APB") and the Steel Manufacturing Business ("SMB"). In the fourth quarter of fiscal 2015, in accordance with its plan announced in April 2015, the Company combined and integrated its auto parts and metals recycling businesses into a single operating platform. This resulted in a realignment of how the Chief Executive Officer, who is considered the Company's chief operating decision maker, reviews performance and makes decisions on resource allocation. The change in the Company's internal organizational and reporting structure resulted in the formation of a new operating and reportable segment, the Auto and Metals Recycling ("AMR") business, replacing the former MRB and APB segments. The Company began reporting on this new segment in the fourth quarter of fiscal 2015 as reflected in its Annual Report on Form 10-K for the year ended August 31, 2015. The segment data for the comparable periods presented prior to the segment change has been revised to conform to the current period presentation for all activities of AMR. Recasting this historical information did not have an impact on the Company's consolidated financial performance for any of the periods presented.

Additionally, the Company is a noncontrolling partner in joint ventures, which are either in the metals recycling business or are suppliers of unprocessed metal.

AMR buys and processes ferrous and nonferrous metal for sale to foreign and other domestic steel producers or their representatives and to SMB. AMR also purchases ferrous metal from other processors for shipment directly to SMB. AMR also procures salvaged vehicles and sells serviceable used auto parts from these vehicles through a network of self-service auto parts stores.

SMB operates a steel mini-mill that produces a wide range of finished steel products using recycled metal and other raw materials.

Intersegment sales from AMR to SMB are made at rates that approximate market prices for shipments from the West Coast of the U.S. These intercompany sales tend to produce intercompany profits which are not recognized until the finished products are ultimately sold to third parties.

The information provided below is obtained from internal information that is provided to the Company's chief operating decision maker for the purpose of corporate management. The Company uses segment operating income to measure segment performance. The Company does not allocate corporate interest income and expense, income taxes and other income to its reportable segments. Expenses related to shared services that support operational activities and transactions is allocated from Corporate to the segments. Unallocated Corporate expense consists primarily of expense for management and certain administrative services that benefit both reportable segments. In addition, the Company does not allocate restructuring charges and other exit-related activities to the segment operating income because management does not include this information in its measurement of the performance of the operating segments. The results of discontinued operations are excluded from segment operating income and are presented separately, net of tax, from the results of ongoing operations for all periods presented.

Table of Contents            SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The following is a summary of the Company's total assets as of August 31 (in thousands):

	2016	2015
Total assets:		
Auto and Metals Recycling <sup>(1)</sup>	\$ 1,510,688	\$ 1,492,906
Steel Manufacturing Business	373,130	370,955
Total segment assets	1,883,818	1,863,861
Corporate and eliminations <sup>(2)</sup>	(992,389 )	(901,562 )
Total assets	\$ 891,429	\$ 962,299
Property, plant and equipment, net <sup>(3)</sup>	\$ 392,820	\$ 427,554

(1) AMR total assets include \$14 million and \$15 million as of August 31, 2016 and 2015 respectively, for investments in joint ventures.

(2) The substantial majority of Corporate and eliminations total assets is comprised of Corporate intercompany payables to the Company's operating segments and intercompany eliminations.

(3) Property, plant and equipment, net includes \$19 million and \$29 million as of August 31, 2016 and 2015, respectively, at our Canadian locations.

Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The table below illustrates the Company's results from continuing operations by reportable segment for the years ended August 31 (in thousands):

	2016	2015	2014
Auto and Metals Recycling:			
Revenues	\$1,173,032	\$1,716,296	\$2,334,389
Less: Intersegment revenues	(90,394 )	(175,934 )	(188,103 )
AMR external customer revenues	1,082,638	1,540,362	2,146,286
Steel Manufacturing Business:			
Revenues	269,905	375,037	388,640
Total revenues	\$1,352,543	\$1,915,399	\$2,534,926
Depreciation and amortization:			
Auto and Metals Recycling	\$44,719	\$56,767	\$66,894
Steel Manufacturing Business	7,366	7,523	8,256
Segment depreciation and amortization	52,085	64,290	75,150
Corporate	2,545	2,825	2,724
Total depreciation and amortization	\$54,630	\$67,115	\$77,874
Capital expenditures:			
Auto and Metals Recycling	\$27,879	\$22,762	\$29,281
Steel Manufacturing Business	5,788	6,899	5,379
Segment capital expenditures	33,667	29,661	34,660
Corporate	904	2,636	4,487
Total capital expenditures	\$34,571	\$32,297	\$39,147
Reconciliation of the Company's segment operating income (loss) to income (loss) from continuing operations before income taxes:			
Auto and Metals Recycling <sup>(1)</sup>	\$22,626	\$(164,031 )	\$55,089
Steel Manufacturing Business <sup>(2)</sup>	3,734	20,378	18,538
Segment operating income (loss)	26,360	(143,653 )	73,627
Restructuring charges and other exit-related activities	(6,781 )	(13,008 )	(6,830 )
Corporate and eliminations	(27,421 )	(38,868 )	(42,433 )
Operating income (loss)	(7,842 )	(195,529 )	24,364
Interest expense	(8,889 )	\$(9,191 )	(10,597 )
Other income, net	1,226	4,256	1,215
Income (loss) from continuing operations before income taxes	\$(15,505 )	\$(200,464 )	\$14,982

AMR operating income (loss) includes \$1 million, \$2 million and \$1 million in income from joint ventures accounted for by the equity method in fiscal 2016, 2015 and 2014, respectively. The AMR operating income (loss) <sup>(1)</sup> for fiscal 2016, 2015 and 2014 includes a goodwill impairment charge of \$9 million, \$141 million and zero , respectively, and other asset impairment charges of \$18 million, \$44 million and \$1 million, respectively.

<sup>(2)</sup>SMB operating income for fiscal 2016 includes other asset impairment charges of \$2 million.



Table of Contents SCHNITZER STEEL INDUSTRIES, INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The following revenues from external customers are presented based on the sales destination and by major product for the years ended August 31 (in thousands):

	2016	2015	2014
Revenues based on sales destination:			
Foreign	\$683,569	\$984,910	\$1,472,023
Domestic	668,974	930,489	1,062,903
Total revenues from external customers	\$1,352,543	\$1,915,399	\$2,534,926

Major product information:

Ferrous scrap metal	\$619,060	\$922,291	\$1,440,582
Nonferrous scrap metal	340,025	488,036	556,139
Retail and other	123,553	130,035	149,565
Finished steel products	269,355	363,795	377,678
Semi-finished steel products	550	11,242	10,962
Total revenues from external customers	\$1,352,543	\$1,915,399	\$2,534,926

In fiscal 2016, 2015 and 2014, there were no external customers that accounted for more than 10% of the Company's consolidated revenues. Sales to customers in foreign countries are a significant part of the Company's business. The schedule below identifies those foreign countries in which the Company's sales exceeded 10% of consolidated revenues in any of the last three years ended August 31 (in thousands):

	2016	% of Revenue	2015	% of Revenue	2014	% of Revenue
China	\$150,570	11.1 %	\$240,279	12.5 %	\$390,634	15.4 %
Turkey	163,696	12.1 %	225,040	11.7 %	261,558	10.3 %
South Korea <sup>(1)</sup>	N/A	N/A	N/A	N/A	265,912	10.5 %

(1)N/A - sales were less than the 10% threshold.

Table of Contents

## Quarterly Financial Data (Unaudited)

In the opinion of management, this unaudited quarterly financial summary includes all adjustments necessary for a fair statement of the results for the periods represented (in thousands, except per share amounts):

	Fiscal 2016			
	First	Second	Third	Fourth
Revenues	\$321,198	\$289,077	\$351,604	\$390,664
Cost of goods sold	\$284,854	\$259,670	\$294,738	\$336,726
Operating income (loss)	\$(4,028 )	\$(37,076 )	\$14,886	\$18,376
Loss from discontinued operations, net of tax	\$(65 )	\$(1,024 )	\$(116 )	\$(143 )
Net income (loss) attributable to SSI	\$(5,296 )	\$(41,245 )	\$11,000	\$16,132
Basic net income (loss) per share attributable to SSI	\$(0.20 )	\$(1.52 )	\$0.40	\$0.59
Diluted net income (loss) per share attributable to SSI	\$(0.20 )	\$(1.52 )	\$0.40	\$0.58

	Fiscal 2015			
	First	Second	Third	Fourth
Revenues	\$553,624	\$437,449	\$467,309	\$457,017
Cost of goods sold	\$508,015	\$406,649	\$424,312	\$403,702
Operating income (loss)	\$785	\$(201,011)	\$(4,020 )	\$8,717
Loss from discontinued operations, net of tax	\$(838 )	\$(4,242 )	\$(1,234 )	\$(913 )
Net income (loss) attributable to SSI	\$(2,473 )	\$(195,642)	\$(9,626 )	\$10,732
Basic net income (loss) per share attributable to SSI	\$(0.09 )	\$(7.24 )	\$(0.36 )	\$0.40
Diluted net income (loss) per share attributable to SSI	\$(0.09 )	\$(7.24 )	\$(0.36 )	\$0.39

In the second quarter of fiscal 2016, operating results included a goodwill impairment charge of \$9 million, other asset impairment charges of \$18 million and restructuring charges and other exit-related activities of \$5 million. In the fourth quarter of fiscal 2016, operating results included other asset impairment charges of \$2 million and an insurance reimbursement gain of \$6 million.

Net income attributable to SSI for the fourth quarter of fiscal 2015 included a benefit of \$3 million, net of valuation allowances, related to the realization of foreign investment basis for income tax purposes. In the second quarter of fiscal 2015, operating results included a goodwill impairment charge of \$141 million, other asset impairment charges of \$44 million and restructuring charges and other exit-related activities of \$5 million.

See Note 2 - Summary of Significant Accounting Policies, Note 6 - Goodwill and Other Intangible Assets, net, Note 8 - Discontinued Operations, and Note 9 - Commitments and Contingencies.

Table of Contents

Schedule II – Valuation and Qualifying Accounts  
 For the Years Ended August 31, 2016, 2015 and 2014  
 (In thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at beginning of period	Charges to cost and expenses	Deductions	Balance at end of period
Fiscal 2016				
Allowance for doubtful accounts	\$ 2,496	\$ 131	\$ (312 )	\$ 2,315
Deferred tax valuation allowance	\$ 78,304	\$ 8,613	\$ —	\$ 86,917
Fiscal 2015				
Allowance for doubtful accounts	\$ 2,720	\$ (280 )	\$ 56	\$ 2,496
Allowance for notes and other contractual receivables	\$ 7,602	\$ —	\$ (7,602 )	\$ —
Deferred tax valuation allowance	\$ 30,265	\$ 48,039	\$ —	\$ 78,304
Fiscal 2014				
Allowance for doubtful accounts	\$ 2,990	\$ 650	\$ (920 )	\$ 2,720
Allowance for notes and other contractual receivables	\$ 7,803	\$ (201 )	\$ —	\$ 7,602
Deferred tax valuation allowance	\$ 29,696	\$ 2,827	\$ (2,258 )	\$ 30,265

Table of Contents

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”)) that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the Securities and Exchange Commission’s rules and forms and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives. The Company’s management, with the participation of the Chief Executive Officer and Chief Financial Officer, has completed an evaluation of the effectiveness of the design and operation of the Company’s disclosure controls and procedures. Based on this evaluation, the Company’s Chief Executive Officer and Chief Financial Officer have concluded that, as of August 31, 2016, the Company’s disclosure controls and procedures were effective at the reasonable assurance level.

Management’s Annual Report on Internal Control Over Financial Reporting

Management’s Annual Report on Internal Control Over Financial Reporting is presented within Part II, Item 8 of this report and is incorporated herein by reference.

Changes in Internal Control Over Financial Reporting

There was no change in the Company’s internal control over financial reporting (as that term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

Table of Contents

## PART III

## ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by Item 401 of Regulation S-K regarding directors, and information required by Items 405, 407(c)(3), 407(d)(4) and 407(d)(5) of Regulation S-K, will be included under “Election of Directors,” “Corporate Governance” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Company’s Proxy Statement for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference.

## Executive Officers of the Registrant

Name	Age	Office
Tamara L. Lundgren	59	President and Chief Executive Officer
Richard D. Peach	53	Senior Vice President, Chief Financial Officer and Chief of Corporate Operations
Michael Henderson	57	Senior Vice President and Co-President, Auto and Metals Recycling
Steven Heiskell	47	Senior Vice President and Co-President, Auto and Metals Recycling
Jeffrey Dyck	53	Senior Vice President and President, Steel Manufacturing Business
Peter Saba	55	Senior Vice President, General Counsel and Corporate Secretary
Stefano Gaggini	45	Vice President, Corporate Controller and Principal Accounting Officer

Tamara L. Lundgren has been our President and Chief Executive Officer since December 2008. She joined the Company in September 2005 as Vice President and Chief Strategy Officer and held roles of increasing responsibility, including Executive Vice President and Chief Operating Officer. Prior to joining us, Ms. Lundgren was a Managing Director in the Investment Banking Division of JPMorgan Chase, which she joined in 2001, and Deutsche Bank, which she joined in 1996. Ms. Lundgren began her career as an attorney and was a partner at Hogan & Hartson LLP in Washington, D.C.

Richard D. Peach joined us in March 2007 and was appointed Chief Financial Officer in December 2007. In September 2016, in addition to his responsibilities as Chief Financial Officer, Mr. Peach assumed the role of Chief of Corporate Operations. Prior to joining us, Mr. Peach was the Chief Financial Officer and Senior Vice President with the Western U.S. energy utility, PacifiCorp, from 2003 to 2006. From 1995 to 2002, he served in a variety of senior management positions with ScottishPower, the international energy company, including Group Controller, Managing Director of United Kingdom Customer Services and Director of Energy Supply Finance. Prior to joining ScottishPower, Mr. Peach was a senior manager with Coopers & Lybrand. Mr. Peach is a member of the Institute of Chartered Accountants of Scotland.

Michael Henderson joined us in April 2012 and served as Chief Operating Officer and President of the Metals Recycling Business, prior to his promotion to Co-President of the Auto and Metals Recycling business in April 2015. Prior to joining Schnitzer, he was Eastern Region President for Sims Metal Management where he was responsible for 26 facilities, including four shredders and five port locations. He began his career with Naparano Iron & Metal and has more than 30 years in the scrap industry, including expertise in both the ferrous and nonferrous sides of the business.

Steven Heiskell joined us in August 2004 and served in a variety of capacities within our Auto Parts Business, including as Vice President Corporate Development, Chief Development Officer, General Manager and Vice President and Managing Director, prior to his promotion to Co-President of the Auto and Metals Recycling business in April 2015. Prior to joining us, Steven served in a variety of executive positions at Simpata, Inc., a venture capital backed internet startup in San Francisco, Enron, and BP/Amoco Oil.

Jeffrey Dyck joined the Steel Manufacturing Business in February 1994 and served in a variety of positions, including Manager of the Rolling Mills and Director of Operations of the Steel Manufacturing Business, before his promotion to President of SMB in June 2005.

## Table of Contents

Peter Saba joined us in July 2015 as Senior Vice President, General Counsel and Corporate Secretary. He is a member of the New York State, District of Columbia and U.S. Supreme Court Bar, not admitted in Oregon State. Prior to joining us, Peter was the Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary for Centrus Energy Corp. (formerly, USEC, Inc.), a global energy company that enriches uranium for nuclear fuel, which he joined in 2008. USEC, Inc. filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in March 2014 and emerged from Chapter 11 as Centrus Energy Corp. on September 30, 2014. Over a 30-year career, Peter has worked in leading international law firms focusing on corporate and project finance, served as Chief Operating Officer and General Counsel at the Export-Import Bank of the United States and as the Principal Deputy Assistant Secretary for Domestic and International Energy Policy at the U.S. Department of Energy, and taught international business transactions as an Adjunct Professor at Georgetown Law School.

Stefano Gaggini joined us in July 2011 as Senior Manager of SEC Reporting and Technical Accounting and became Director of SEC Reporting and Technical Accounting in March 2012. He became Vice President, Corporate Controller and Principal Accounting Officer in December 2013. Prior to joining Schnitzer, Mr. Gaggini was a senior manager at KPMG LLP, where he served in various auditing roles since 1998 in the Portland, Oregon and Zurich, Switzerland offices. He is licensed as a Certified Public Accountant in the State of Oregon.

### Code of Ethics

On April 28, 2010, the Board of Directors approved a revised Company's Code of Conduct that is applicable to all of its directors and employees. It includes additional provisions that apply to the Company's principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions (the "Senior Financial Officers"). This document is posted on the Corporate Governance page of the Company's internet website ([www.schnitzersteel.com](http://www.schnitzersteel.com)) and is available free of charge by calling the Company or submitting a request to [ir@schn.com](mailto:ir@schn.com). The Company intends to satisfy its disclosure obligations with respect to any amendments to or waivers of the Code for directors, executive officers or Senior Financial Officers by posting such information on its internet website set forth above rather than by filing a Form 8-K.

## ITEM 11. EXECUTIVE COMPENSATION

The information required by Items 402, 407(e)(4) and 407(e)(5) of Regulation S-K will be included under "Compensation of Executive Officers," "Compensation Discussion and Analysis," "Director Compensation," "Corporate Governance – Assessment of Compensation Risk" and "Compensation Committee Report" in the Company's Proxy Statement to be filed for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to security ownership of certain beneficial owners and management, as required by Item 403 of Regulation S-K, will be included under "Voting Securities and Principal Shareholders" in the Company's Proxy Statement for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference. Information with respect to securities authorized for issuance under equity compensation plans, as required by Item 201(d) of Regulation S-K, will be included under "Compensation Plan Information" in the Company's Proxy Statement for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K will be included under "Certain Transactions" and "Corporate Governance – Director Independence" in the Company's Proxy Statement for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding the Company's principal accountant fees and services required by Item 9(e) of Schedule 14A will be included under "Independent Registered Public Accounting Firm" in the Company's Proxy Statement for its 2017 Annual Meeting of Shareholders and is incorporated herein by reference.



Table of Contents

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) 1 The following financial statements are filed as part of this report:  
The Report of Independent Registered Public Accounting Firm, the Company's Consolidated Financial Statements, the Notes thereto and the quarterly financial data (unaudited) are on pages 52 through 96 of this report.
- 2 The following financial statement schedule is filed as part of this report:  
Schedule II Valuation and Qualifying Accounts is on page 97 of this report.  
All other schedules are omitted as the information is either not applicable or is not required.
- 3 The following exhibits are filed as part of this report:
- 3.1 2006 Restated Articles of Incorporation (as corrected December 2, 2011) of the Registrant. Filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended November 30, 2011, and incorporated herein by reference.
- 3.2 Restated Bylaws of the Registrant. Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 13, 2013, and incorporated herein by reference.
- 10.1 Lease Agreement, dated September 1, 1988, between Schnitzer Investment Corp. and the Registrant, as amended, relating to the Portland Metals Recycling operation and which has terminated except for surviving indemnity obligations. Filed as Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 filed on September 24, 1993 (Commission File No. 33-69352), and incorporated herein by reference.
- 10.2 Purchase and Sale Agreement, dated May 4, 2005, between Schnitzer Investment Corp. and the Registrant, relating to purchase by the Registrant of the Portland Metals Recycling operations real estate. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 10, 2005, and incorporated herein by reference.
- 10.3 Third Amended Shared Services Agreement, dated July 26, 2006, between the Registrant, Schnitzer Investment Corp. and Island Equipment Company, Inc. Filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on July 28, 2006, and incorporated herein by reference.
- 10.4 Third Amended and Restated Credit Agreement dated as of April 6, 2016 among Schnitzer Steel Industries, Inc., as the US Borrower, and Schnitzer Steel Canada Ltd., as a Canadian Borrower, Bank of America, N.A., as Administrative Agent, and the other Lenders party thereto. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended February 29, 2016, and incorporated herein by reference.
- 10.5 Security Agreement dated as of April 6, 2016 among Schnitzer Steel Industries, Inc., the other Grantor's party thereto and Bank of America, N.A., as Administrative Agent. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended February 29, 2016, and incorporated herein by reference.
- 10.6 General Security Agreement dated as of April 6, 2016 between Schnitzer Steel Canada Ltd. and Bank of America, N.A., as Collateral Agent. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended February 29, 2016, and incorporated herein by reference.



- \*10.7 Amended Executive Annual Bonus Plan. Filed as Appendix A to the Registrant's Annual Proxy Report on Form DEF 14A filed on December 17, 2014, and incorporated herein by reference.
- \*10.8 Annual Incentive Compensation Plan, effective September 1, 2006. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended February 28, 2007, and incorporated herein by reference.
- \*10.9 1993 Stock Incentive Plan of the Registrant as Amended and Restated on November 7, 2013. Filed as Appendix A to the Registrant's Definitive Proxy Statement filed on December 18, 2013, and incorporated herein by reference.
- \*10.10 Form of Stock Option Agreement used for option grants to employees under the 1993 Stock Incentive Plan. Filed as Exhibit 10.49 to the Registrant's Annual Report on Form 10-K for the fiscal year ended August 31, 2007, and incorporated herein by reference.

Table of Contents

- \*10.11 Form of Stock Option Agreement used for option grants to non-employee directors under the 1993 Stock Incentive Plan. Filed as Exhibit 10.15 to the Registrant's Annual Report on Form 10-K/A for the fiscal year ended August 31, 2004, and incorporated herein by reference.
- \*10.12 Form of Deferred Stock Unit Award Agreement under the 1993 Stock Incentive Plan used for non-employee directors. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 28, 2006, and incorporated herein by reference.
- \*10.13 Deferred Compensation Plan for Non-Employee Directors. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on July 28, 2006, and incorporated herein by reference.
- \*10.14 Summary Sheet for 2016 Non-Employee Director Compensation. Filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended February 29, 2016, and incorporated herein by reference.
- \*10.15 Amended and Restated Supplemental Executive Retirement Bonus Plan of the Registrant effective January 1, 2009. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended May 31, 2009, and incorporated herein by reference.
- \*10.16 Form of Change in Control Severance Agreement between the Registrant and executive officers other than Tamara L. Lundgren and used for agreements entered into prior to 2011. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 5, 2008, and incorporated herein by reference.
- \*10.17 Form of Change in Control Severance Agreement between the Registrant and executive officers and used for agreements entered into between 2011 and 2014. Filed as Exhibit 10.19 to the Registrant's Annual Report on Form 10-K filed October 29, 2013 and incorporated herein by reference.
- \*10.18 Form of Change in Control Severance Agreement between the Registrant and executive officers and used for agreements entered into after 2014. Filed as Exhibit 10.16 to the Registrant's Annual Report on Form 10-K filed October 27, 2015, and incorporated herein by reference.
- \*10.19 Amended and Restated Employment Agreement by and between the Registrant and Tamara L. Lundgren dated October 29, 2008. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 4, 2008, and incorporated herein by reference.
- \*10.20 Amendment No. 1 dated June 29, 2011 to Amended and Restated Employment Agreement by and between the Registrant and Tamara L. Lundgren dated October 29, 2008. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended May 31, 2011 and incorporated herein by reference.
- \*10.21 Amended and Restated Change in Control Severance Agreement by and between the Registrant and Tamara L. Lundgren dated October 29, 2008. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on November 4, 2008, and incorporated herein by reference.
- \*10.22 Amended and Restated Change in Control Severance Agreement by and between the Registrant and John D. Carter dated October 29, 2008. Filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on November 4, 2008, and incorporated herein by reference.
- \*10.23

Edgar Filing: SCHNITZER STEEL INDUSTRIES INC - Form 10-K

Form of Indemnification Agreement for Directors and certain officers used for agreements entered into prior to 2016. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on July 28, 2006, and incorporated herein by reference.

\*10.24 Form of Indemnification Agreement for Directors and certain officers used for agreements entered into after 2015. Filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 3, 2016, and incorporated herein by reference.

\*10.25 Amended and Restated Employment Agreement by and between the Registrant and John D. Carter dated June 29, 2011. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended May 31, 2011 and incorporated herein by reference.

\*10.26 Form of Non-Statutory Stock Option Agreement used for premium-priced option grants to executive officers on August 28, 2012 under the 1993 Stock Incentive Plan. Filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on August 31, 2012, and incorporated herein by reference.

102 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

- \*10.27 Form of Restricted Stock Unit Award Agreement used for award to chief executive officer on August 30, 2012 under the 1993 Stock Incentive Plan. Filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on August 31, 2012, and incorporated herein by reference.
- \*10.28 Form of Restricted Stock Unit Award Agreement under the 1993 Stock Incentive Plan used for award to chief executive officer on October 28, 2015. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended November 30, 2015 and incorporated herein by reference.
- \*10.29 Form of Restricted Stock Unit Award Agreement under the 1993 Stock Incentive Plan used for awards granted prior to fiscal 2013. Filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2008 and incorporated herein by reference.
- \*10.30 Form of Restricted Stock Unit Award Agreement under the 1993 Stock Incentive Plan used for awards granted after fiscal 2012 through the first half of fiscal 2016. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2012 and incorporated herein by reference.
- \*10.31 Form of Restricted Stock Unit Award Agreement under the 1993 Stock Incentive Plan used for awards granted after the first half of fiscal 2016. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended May 31, 2016 and incorporated herein by reference.
- \*10.32 Form of Long-Term Incentive Award Agreement under the 1993 Stock Incentive Plan used for awards granted in fiscal 2014. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2013 and incorporated herein by reference.
- \*10.33 Form of Long-Term Incentive Award Agreement under the 1993 Stock Incentive Plan used for awards granted in fiscal 2015. Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2014 and incorporated herein by reference.
- \*10.34 Form of Long-Term Incentive Award Agreement under the 1993 Stock Incentive Plan used for awards granted in first half of fiscal 2016. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2015 and incorporated herein by reference.
- \*10.35 Form of Long-Term Incentive Award Agreement under the 1993 Stock Incentive Plan used for awards granted in second half of fiscal 2016. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended May 31, 2016 and incorporated herein by reference.
- \*10.36 Fiscal 2015 Annual Performance Bonus Program for Tamara L. Lundgren. Filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2014 and incorporated herein by reference.
- \*10.37 Fiscal 2016 Annual Performance Bonus Program for Tamara L. Lundgren. Filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended November 30, 2015 and incorporated herein by reference.
- \*10.38 Amendment No. 1 to Fiscal 2016 Annual Performance Bonus Program for Tamara L. Lundgren. Filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended February 28, 2016 and incorporated herein by reference.

- 21.1 Subsidiaries of Registrant.
- 23.1 Consent of Independent Registered Public Accounting Firm.
- 24.1 Powers of Attorney.
- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

103 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

32.2 Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101 The following financial information from Schnitzer Steel Industries, Inc.'s Annual Report on Form 10-K for the year ended August 31, 2016, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Operations for the years ended August 31, 2016, 2015 and 2014, (ii) Consolidated Balance Sheets as of August 31, 2016, and August 31, 2015, (iii) Consolidated Statements of Comprehensive Income (Loss) for the years ended August 31, 2016, 2015 and 2014, (iv) Consolidated Statements of Cash Flows for the years ended August 31, 2016, 2015 and 2014, and (v) the Notes to Consolidated Financial Statements.

\*Management contract or compensatory plan or arrangement.

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

104 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

SIGNATURES

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

SCHNITZER STEEL INDUSTRIES, INC.

Dated: October 25, 2016 By: /s/ RICHARD D. PEACH

Richard D. Peach

Senior Vice President, Chief Financial Officer and Chief of Corporate Operations

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant on October 25, 2016 in the capacities indicated.

Signature Title

Principal Executive Officer:

/s/ TAMARA L. LUNDGREN President and Chief Executive Officer and Director

Tamara L. Lundgren

Principal Financial Officer:

/s/ RICHARD D. PEACH Senior Vice President, Chief Financial Officer and Chief of Corporate Operations

Richard D. Peach

Principal Accounting Officer:

/s/ STEFANO GAGGINI Vice President, Corporate Controller and Principal Accounting Officer

Stefano Gaggini

Directors:

Director

\*DAVID J. ANDERSON

David J. Anderson

\*JOHN D. CARTER

Director

John D. Carter

\*WAYLAND R. HICKS

Director

Wayland R. Hicks

\*DAVID L. JAHNKE

Director

David L. Jahnke

105 / Schnitzer Steel Industries, Inc. Form 10-K 2016

---

Table of Contents

Signature	Title
*JUDITH A. JOHANSEN Judith A. Johansen	Director
*WILLIAM D. LARSSON William D. Larsson	Director
*MICHAEL SUTHERLIN Michael Sutherlin	Director
*By: /s/ RICHARD D. PEACH Attorney-in-fact, Richard D. Peach	

106 / Schnitzer Steel Industries, Inc. Form 10-K 2016