MSA Safety Inc
Form 10-Q
August 09, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For the quarter ended June 30, 2016
Commission File No. 1-15579

MSA SAFETY INCORPORATED
(Exact name of registrant as specified in its charter)

Pennsylvania	46-4914539
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
1000 Cranberry Woods Drive Cranberry Township, Pennsylvania	16066-5207
(Address of principal executive offices)	(Zip Code)

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

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

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

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

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

As of August 5, 2016, 37,522,927 shares of common stock, of the registrant were outstanding.

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements
MSA SAFETY INCORPORATED
CONDENSED CONSOLIDATED STATEMENT OF INCOME
Unaudited

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands, except per share amounts)	2016	2015	2016	2015
Net sales	$295,998	$287,011	$575,266	$543,719
Cost of products sold	160,143	156,522	318,706	296,407
Gross profit	135,855	130,489	256,560	247,312
Selling, general and administrative	75,716	77,588	154,911	158,956
Research and development	11,144	12,984	21,507	23,898
Restructuring and other charges (Note 4)	1,338	227	1,808	958
Currency exchange (gains) losses, net	(242)	1,557	1,708	(991)
Operating income	47,899	38,133	76,626	64,491
Interest expense	4,201	2,502	8,103	4,975
Other (income), net	(775)	(94)	(1,663)	(735)
Total other expense, net	3,426	2,408	6,440	4,240
Income from continuing operations before income taxes	44,473	35,725	70,186	60,251
Provision for income taxes (Note 10)	15,026	12,350	27,537	27,734
Income from continuing operations	29,447	23,375	42,649	32,517
Income from discontinued operations (Note 19)	2,484	470	1,355	778
Net income	31,931	23,845	44,004	33,295
Net (income) loss attributable to noncontrolling interests	(848)	453	(1,170)	685
Net income attributable to MSA Safety Incorporated	$31,083	$24,298	$42,834	$33,980
Amounts attributable to MSA Safety Incorporated common shareholders:				
Income from continuing operations	$29,306	$23,722	$41,989	$33,038
Income from discontinued operations (Note 19)	1,777	576	845	942
Net income	$31,083	$24,298	$42,834	$33,980
Earnings per share attributable to MSA Safety Incorporated common shareholders:				
Basic				
Income from continuing operations	$0.78	$0.63	$1.12	$0.88
Income from discontinued operations (Note 19)	$0.05	$0.02	$0.02	$0.03
Net income	$0.83	$0.65	$1.14	$0.91
Diluted				
Income from continuing operations	$0.77	$0.62	$1.11	$0.87
Income from discontinued operations (Note 19)	$0.05	$0.01	$0.02	$0.03
Net income	$0.82	$0.63	$1.13	$0.90

Dividends per common share	$0.33	$0.32	$0.65	$0.63

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

MSA SAFETY INCORPORATED
CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
Unaudited

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2016	2015	2016	2015
Net income	$31,931	$23,845	$44,004	$33,295
Foreign currency translation adjustments	(15,056)	3,891	(1,108)	(20,159)
Reclassification from accumulated other comprehensive (loss) into earnings	2,022	—	4,125	—
Pension and post-retirement plan adjustments, net of tax	1,894	2,623	3,786	5,152
Total other comprehensive (loss) income, net of tax	(11,140)	6,514	6,803	(15,007)
Comprehensive income	20,791	30,359	50,807	18,288
Comprehensive (income) loss attributable to noncontrolling interests	(2,252)	649	(2,250)	1,139
Comprehensive income attributable to MSA Safety Incorporated	$18,539	$31,008	$48,557	$19,427

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

MSA SAFETY INCORPORATED
CONDENSED CONSOLIDATED BALANCE SHEET
Unaudited

(In thousands)	June 30, 2016	December 31, 2015
Assets		
Cash and cash equivalents	$103,149	$105,925
Trade receivables, less allowance for doubtful accounts of $7,525 and $8,189	218,221	232,862
Inventories (Note 3)	130,482	125,849
Prepaid income taxes	12,556	8,745
Prepaid expenses and other current assets	32,811	31,231
Total current assets	497,219	504,612
Property, plant and equipment, net (Note 5)	151,919	155,839
Prepaid pension cost	66,715	62,072
Deferred tax assets (Note 10)	24,581	26,455
Goodwill (Note 13)	332,139	340,338
Intangible assets (Note 13)	80,474	90,068
Other noncurrent assets	263,202	243,479
Total assets	$1,416,249	$1,422,863
Liabilities		
Notes payable and current portion of long-term debt, net (Note 12)	$6,822	$6,650
Accounts payable	66,119	68,206
Employees' compensation	32,404	37,642
Insurance and product liability	30,262	57,718
Tax liabilities	16,253	11,658
Other current liabilities	63,309	70,013
Total current liabilities	215,169	251,887
Long-term debt, net (Note 12)	447,087	458,022
Pensions and other employee benefits	160,795	156,160
Deferred tax liabilities (Note 10)	25,964	24,872
Other noncurrent liabilities	14,835	14,794
Total liabilities	$863,850	$905,735
Commitments and contingencies (Note 18)		
Equity		
Preferred stock, 4 1/2% cumulative, $50 par value (Note 7)	3,569	3,569
Common stock, no par value (Note 7)	163,719	157,643
Treasury shares, at cost (Note 7)	(291,610)	(295,070)
Accumulated other comprehensive loss	(202,476)	(208,199)
Retained earnings	877,103	858,553
Total MSA Safety Incorporated shareholders' equity	550,305	516,496
Noncontrolling interests	2,094	632
Total shareholders' equity	552,399	517,128
Total liabilities and shareholders' equity	$1,416,249	$1,422,863

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

MSA SAFETY INCORPORATED
CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
Unaudited

	Six Months Ended June 30,	
(In thousands)	2016	2015
Operating Activities		
Net income	$44,004	$33,295
Depreciation and amortization	17,732	15,664
Pensions (Note 15)	3,396	6,032
Net (gain) from disposal of assets	(2,713)	(1,969)
Stock-based compensation (Note 11)	6,951	6,787
Asset impairment charges	—	2,438
Deferred income tax (benefit) provision	(1,231)	4
Other noncurrent assets and liabilities	(16,294)	(45,125)
Currency exchange losses (gains), net	1,726	(783)
Excess tax provision (benefit) related to stock plans	508	(890)
Other, net	—	1,045
Operating cash flow before changes in certain working capital items	54,079	16,498
Decrease (increase) in trade receivables	9,559	(13,794)
(Increase) in inventories (Note 3)	(11,531)	(33,725)
(Increase) in income taxes receivable, prepaid expenses and other current assets	(5,907)	(12,886)
(Decrease) increase in accounts payable and accrued liabilities	(33,678)	51,620
(Increase) in certain working capital items	(41,557)	(8,785)
Cash Flow From Operating Activities	12,522	7,713
Investing Activities		
Capital expenditures	(10,595)	(16,015)
Property disposals and other investing (Note 19)	16,965	7,969
Cash Flow From (Used in) Investing Activities	6,370	(8,046)
Financing Activities		
Proceeds from short-term debt, net	156	4
Proceeds from long-term debt (Note 12)	234,664	191,000
(Payments on) long-term debt (Note 12)	(238,196)	(173,000)
Restricted cash	1,433	336
Cash dividends paid	(24,284)	(23,522)
Distributions to noncontrolling interests	(759)	—
Company stock purchases	(1,644)	(10,009)
Exercise of stock options	4,387	1,194
Employee stock purchase plan	252	230
Excess tax (provision) benefit related to stock plans	(508)	890
Cash Flow (Used in) Financing Activities	(24,499)	(12,877)
Effect of exchange rate changes on cash and cash equivalents	2,831	(4,654)
(Decrease) in cash and cash equivalents	(2,776)	(17,864)
Beginning cash and cash equivalents	105,925	105,998
Ending cash and cash equivalents	$103,149	$88,134

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

MSA SAFETY INCORPORATED
CONSOLIDATED STATEMENT OF CHANGES IN RETAINED EARNINGS AND ACCUMULATED OTHER COMPREHENSIVE LOSS
Unaudited

(In thousands)	Retained Earnings	Accumulated Other Comprehensive (Loss)
Balances March 31, 2015	$833,255	$ (187,993)
Net income	23,845	—
Foreign currency translation adjustments	—	3,891
Pension and post-retirement plan adjustments, net of tax of $1,477	—	2,623
Loss attributable to noncontrolling interests	453	196
Common dividends	(11,959)	—
Preferred dividends	(10)	—
Balances June 30, 2015	845,584	(181,283)
Balances March 31, 2016	858,368	(190,580)
Net income	31,931	—
Foreign currency translation adjustments	—	(15,056)
Pension and post-retirement plan adjustments, net of tax of $1,042	—	1,894
(Income) attributable to noncontrolling interests	(848)	(756)
Reclassification from accumulated other comprehensive (loss) into earnings	—	2,022
Common dividends	(12,338)	—
Preferred dividends	(10)	—
Balances June 30, 2016	$877,103	$ (202,476)

(In thousands)	Retained Earnings	Accumulated Other Comprehensive (Loss)
Balances December 31, 2014	$835,126	$ (166,730)
Net income	33,295	—
Foreign currency translation adjustments	—	(20,159)
Pension and post-retirement plan adjustments, net of tax of $2,894	—	5,152
Loss attributable to noncontrolling interests	685	454
Common dividends	(23,502)	—
Preferred dividends	(20)	—
Balances June 30, 2015	845,584	(181,283)
Balances December 31, 2015	858,553	(208,199)
Net income	44,004	
Foreign currency translation adjustments	—	(1,108)
Pension and post-retirement plan adjustments, net of tax of $2,086	—	3,786
(Income) attributable to noncontrolling interests	(1,170)	(1,080)
Reclassification from accumulated other comprehensive (loss) into earnings	—	4,125
Common dividends	(24,264)	—
Preferred dividends	(20)	—
Balances June 30, 2016	$877,103	$ (202,476)

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

MSA SAFETY INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
Unaudited
Note 1—Basis of Presentation
The Condensed Consolidated Financial Statements of MSA Safety Incorporated and its subsidiaries ("MSA" or the "Company") are unaudited. These Condensed Consolidated Financial Statements include all adjustments, consisting of normal recurring adjustments, considered necessary by management to fairly state the Company's results. Intercompany accounts and transactions have been eliminated. The results reported in these Condensed Consolidated Financial Statements are not necessarily indicative of the results that may be expected for the entire year. The December 31, 2015 condensed consolidated balance sheet data was derived from the audited consolidated balance sheet but does not include all disclosures required by generally accepted accounting principles (GAAP). This Form 10-Q report should be read in conjunction with MSA's Form 10-K for the year ended December 31, 2015, which includes all disclosures required by GAAP.
Certain segment results in previously issued financial statements were recast to conform to the current period presentation in Note 4, Note 8 and Note 12. Certain line items on the condensed consolidated statement of cash flows have been reclassified from the condensed consolidated statement of cash flows reported in our July 20, 2016 earnings release.
During the second quarter of 2016, the Company corrected its gain calculation on the disposition of the South African personal protective equipment distribution business and its Zambian operations. This resulted in a gain of approximately $2.5 million being recorded during the current quarter in discontinued operations that should have been recorded in the first quarter of 2016. The Company evaluated materiality in accordance with SEC Staff Accounting Bulletins Topics 1.M and 1.N and considered relevant qualitative and quantitative factors. The Company concluded that this modification was not material to the first quarter of 2016 or the trend in earnings over the affected periods. The modification had no effect on cash flows or debt covenant compliance.
Note 2— Recently Adopted and Recently Issued Accounting Standards
In May 2014, the FASB issued ASU 2014-09, Revenue with Contracts from Customers. This ASU clarifies the principles for recognizing revenue such that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-15, Revenue with Contracts from Customers. This ASU defers the effective date of the standard until January 1, 2018. In March 2016, the FASB issued ASU 2016-08, Principal versus Agent Considerations. This ASU clarifies the implementation guidance on principal versus agent considerations. In March 2016, the FASB issued ASU 2016-10, Identifying Performance Obligations and Licensing. This ASU clarifies the means by which a company should recognize revenue for goods and services provided. In May 2016, the FASB issued ASU 2016-11, Rescission of SEC Guidance Because of Accounting Standards Updates 2014-09 and 2014-16 Pursuant to Staff Announcements at the March 3, 2016 EITF Meeting. This ASU rescinds previous revenue recognition guidance upon the adoption of ASU 2014-09. In May 2016, the FASB issued ASU 2016-12, Revenue with Contracts from Customers. This ASU clarifies narrow aspects of the new revenue recognition model, including the collectibility criterion, the presentation of sales taxes and other taxes collected from customers, and non-cash consideration. Additionally, this ASU provides guidance on contract modifications at transition and completed contracts at transition. The Company is currently evaluating the impact that the adoption of these ASUs will have on the consolidated financial statements. We have conducted a risk assessment and are working with outside consultants to develop a transition plan that will enable us to meet the implementation requirement.
In June 2014, the FASB issued ASU 2014-12, Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could be Achieved after the Requisite Service Period. This ASU clarifies the accounting treatment for share based payment awards that contain performance targets. This ASU was adopted on January 1, 2016. The adoption of this ASU did not have a material effect on our consolidated financial statements.
In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements - Going Concern. This ASU clarifies management's responsibility to evaluate whether there is a substantial doubt about the entity's ability to continue as a going concern and provides guidance for related footnote disclosures. This ASU will be effective for the

annual period ending December 31, 2016. The adoption of this ASU is not expected to have a material effect on our consolidated financial statements.

In January 2015, the FASB issued ASU 2015-01, Income Statement - Extraordinary and Unusual Items. This ASU eliminates the requirement to separately present and disclose extraordinary and unusual items in the financial statements. This ASU was adopted on January 1, 2016. The adoption of this ASU did not have a material effect on our consolidated financial statements.

In February 2015, the FASB issued ASU 2015-02, Amendments to the Consolidation Analysis. This ASU changes the analysis that an entity must perform to determine whether it should consolidate certain types of legal entities. This ASU was adopted on January 1, 2016. The adoption of this ASU did not have a material effect on our consolidated financial statements.

In April 2015, the FASB issued ASU 2015-03, Imputation of Interest - Simplifying the Presentation of Debt Issuance Costs. This ASU simplifies the presentation of debt issuance costs and requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. In August 2015, the FASB issued ASU 2015-15, Imputation of Interest - Simplifying the Presentation of Debt Issuance Costs. This ASU simplifies the presentation of debt issuance costs for line of credit arrangements. These ASUs were adopted on January 1, 2016. The Consolidated Balance Sheet as of December 31, 2015 has been adjusted to apply the change in accounting principle retrospectively, which resulted in a decrease in Prepaid expenses and other current assets of $0.4 million, a decrease in Other noncurrent assets of $1.5 million, a decrease in the current portion of long-term debt, net of $17 thousand, and a decrease in long-term debt of $1.9 million as of December 31, 2015. There was no impact to the Statements of Consolidated Income as a result of the change in accounting principle. Prior year balances in Note 12 were also adjusted to conform with current year presentation.

In April 2015, the FASB issued ASU 2015-04, Retirement Benefits - Practical Expedient for the Measurement Date of an Employer's Defined Benefit Obligation and Plan Assets. This ASU allows entities with a fiscal year end that does not coincide with a month end to use the closest month end for measurement purposes. This ASU also allows entities that have a significant event in an interim period that calls for a remeasurement of defined benefit plan assets and obligations to use the month end date that is closest to the date of the significant event. This ASU was adopted on January 1, 2016. The adoption of this ASU did not have a material effect on our consolidated financial statements.

In April 2015, the FASB issued ASU 2015-05, Goodwill and Other Internal Use Software - Customer's Accounting for Fees Paid in a Cloud Computing Arrangement. This ASU clarifies when entities should account for fees paid in a cloud computing arrangement as a software license or service contract. This ASU was adopted on January 1, 2016 and was implemented on a prospective basis. The adoption of this ASU did not have a material effect on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory. This ASU requires inventory to be measured at the lower of cost and net realizable value. This ASU applies to inventory measured using the first-in, first-out (FIFO) or average cost methods only. This ASU will be effective beginning in 2017. The adoption of this ASU is not expected to have a material effect on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965). This ASU simplifies complexities within employee benefit plan accounting including Fully Benefit-Responsive Investment Contracts, Plan Investment Disclosures, and the Measurement Date Practical Expedient. This ASU was adopted on January 1, 2016. The adoption of this ASU did not have a material effect on our consolidated financial statements.

In September 2015, the FASB issued ASU 2015-16, Simplifying the Accounting for Measurement-Period Adjustments. This ASU simplifies the accounting for adjustments made to provisional amounts recognized in a business combination. The amendments in this Update eliminate the requirement to retrospectively account for those adjustments. MSA elected to early adopt this standard for the period ended December 31, 2015. The adoption of this ASU could have a material effect on our consolidated financial statements to the extent that measurement-period adjustments for business combinations are identified.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes. This ASU simplifies the presentation of deferred income taxes. The amendments in this Update require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. This ASU is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within

those annual periods. Early adoption is permitted. MSA elected to early adopt this standard for the period ended December 31, 2015. We elected to apply the amendments in this update retrospectively.

In February 2016, the FASB issued ASU 2016-02, Leases. This ASU requires lessees to record a right of use asset and a liability for virtually all leases. This ASU will be effective beginning in 2019. The Company continues to evaluate the impact that the adoption of this ASU will have on the consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting. This ASU simplifies the accounting for many aspects associated with share-based payment accounting including income taxes and the use of forfeiture rates. This ASU will be effective beginning in 2017. The Company is currently evaluating the impact that the adoption of these ASU will have on the consolidated financial statements.
In June 2016, the FASB issued ASU 2016-13, Allowance for Loan and Lease Losses. This ASU introduces an approach based on expected losses to estimate credit losses on certain types of financial instruments including loans, held-to-maturity debt securities, loan commitments, financial guarantees and net investments in leases as well as reinsurance and trade receivables. This ASU will be effective beginning in 2020. The Company is currently evaluating the impact that the adoption of these ASU will have on the consolidated financial statements and expects that adoption will result in increased disclosure.
Note 3—Inventories
The following table sets forth the components of inventory:

(In thousands)	June 30, 2016	December 31, 2015
Finished products	$72,601	$74,929
Work in process	6,438	8,979
Raw materials and supplies	95,145	85,643
Inventories at current cost	174,184	169,551
Less: LIFO valuation	(43,702)	(43,702)
Total inventories	$130,482	$125,849

Note 4—Restructuring and Other Charges
During the three and six months ended June 30, 2016, we recorded restructuring charges, net of adjustments, of $1.3 million and $1.8 million, respectively. International segment restructuring charges of $2.2 million during the six months ended June 30, 2016 were related to severance costs for staff reductions associated with ongoing initiatives to right size our operations in Europe and Asia. Americas segment restructuring charges of $0.7 million during the six months ended June 30, 2016 related primarily to severance from staff reductions in Latin America. Favorable adjustments for changes in estimates on employee restructuring reserves of $1.1 million were made during the six months ended June 30, 2016.
During the three and six months ended June 30, 2015, we recorded restructuring charges of $0.2 million and $1.0 million, respectively. International segment charges of $0.8 million for the six months ended June 30, 2015 were primarily related to severance costs for staff reductions associated with ongoing initiatives to right size our operations in China and Australia.
Activity and reserve balances for restructuring charges by segment were as follows:

(in millions)	Americas	International	Corporate	Total
Reserve balances at December 31, 2014	$ 0.2	$ 2.6	$ —	$2.8
Restructuring charges	3.3	7.4	1.6	$12.3
Cash payments	(1.9)	(4.6)	(0.5)	$(7.0)
Reserve balances at December 31, 2015	$ 1.6	$ 5.4	$ 1.1	$8.1
Restructuring charges	0.7	2.2	—	2.9
Adjustments and other	(0.5)	(0.1)	(0.5)	(1.1)
Cash payments	(1.4)	(3.8)	(0.1)	(5.3)
Reserve balances at June 30, 2016	$ 0.4	$ 3.7	$ 0.5	$4.6

Note 5—Property, Plant and Equipment

The following table sets forth the components of property, plant and equipment:

(In thousands)	June 30, 2016	December 31, 2015
Land	$2,794	$2,929
Buildings	113,213	114,324
Machinery and equipment	358,308	345,064
Construction in progress	10,161	12,451
Total	484,476	474,768
Less: accumulated depreciation	(332,557)	(318,929)
Net property, plant and equipment	$151,919	$155,839

Note 6—Reclassifications Out of Accumulated Other Comprehensive Loss

The changes in Accumulated Other Comprehensive Loss by component were as follows:

	MSA Safety Incorporated		Noncontrolling Interests	
	Three Months Ended June 30,		Three Months Ended June 30,	
(In thousands)	2016	2015	2016	2015
Pension and other postretirement benefits				
Balance at beginning of period	$(117,497)	$(123,041)	$—	$—
Amounts reclassified from Accumulated other comprehensive loss:				
Amortization of prior service cost	(90)	17	—	—
Recognized net actuarial losses	3,026	4,083	—	—
Tax benefit	(1,042)	(1,477)	—	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax	1,894	2,623	—	—
Balance at end of period	$(115,603)	$(120,418)	$—	$—
Foreign Currency Translation				
Balance at beginning of period	$(73,083)	$(64,952)	$(3,292)	$(2,457)
Reclassification into earnings	1,252	—	770	—
Foreign currency translation adjustments	(15,042)	4,087	(14)	(196)
Balance at end of period	$(86,873)	$(60,865)	$(2,536)	$(2,653)

(In thousands)	MSA Safety Incorporated Six Months Ended June 30, 2016	2015	Noncontrolling Interests Six Months Ended June 30, 2016	2015
Pension and other postretirement benefits				
Balance at beginning of period	$(119,389)	$(125,570)	$—	$—
Amounts reclassified from Accumulated other comprehensive loss:				
Amortization of prior service cost	(180)	34	—	—
Recognized net actuarial losses	6,052	8,012	—	—
Tax benefit	(2,086)	(2,894)	—	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax	3,786	5,152	—	—
Balance at end of period	$(115,603)	$(120,418)	$—	$—
Foreign Currency Translation				
Balance at beginning of period	$(88,810)	$(41,160)	$(3,616)	$(2,199)
Reclassification into earnings	3,355	—	770	—
Foreign currency translation adjustments	(1,418)	(19,705)	310	(454)
Balance at end of period	$(86,873)	$(60,865)	$(2,536)	$(2,653)

The reclassifications out of accumulated other comprehensive loss are included in the computation of net periodic pension and other post-retirement benefit costs (see Note 15—Pensions and Other Post-Retirement Benefits).

Note 7—Capital Stock

Preferred Stock - The Company has authorized 100,000 shares of $50 par value 4.5% cumulative preferred nonvoting stock which is callable at $52.50. There are 71,340 shares issued and 52,878 shares held in treasury at June 30, 2016. There were no treasury purchases of preferred stock during the six months ended June 30, 2016. The Company has also authorized 1,000,000 shares of $10 par value second cumulative preferred voting stock. No shares have been issued as of June 30, 2016.

Common Stock - The Company has authorized 180,000,000 shares of no par value common stock. There were 62,081,391 shares issued as of December 31, 2015. No new shares have been issued in 2016. There were 37,507,602 and 37,372,474 shares outstanding at June 30, 2016 and December 31, 2015, respectively.

Treasury Shares - In 2015, the Board of Directors adopted a stock repurchase program. The program authorizes up to $100.0 million to repurchase MSA common stock in the open market and in private transactions. The share purchase program has no expiration date. The maximum shares that may be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price. No shares were repurchased during the six months ended June 30, 2016. We do not have any other share purchase programs. There were 24,573,789 and 24,708,917 Treasury Shares at June 30, 2016 and December 31, 2015, respectively.

The Company issues Treasury Shares for all share based benefit plans. Shares are issued from Treasury at the average Treasury Share cost on the date of the transaction. There were 172,237 Treasury Shares issued for these purposes during the six months ended June 30, 2016.

Note 8—Segment Information

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

The Americas and International segments were established on January 1, 2016. The Americas segment is comprised of our operations in North America and Latin America geographies. The International segment is comprised of our operations of all geographies outside of the Americas. Certain global expenses are now allocated to each segment in a manner consistent with where the benefits from the expenses are derived. The 2015 segment results have been recast to conform with current period presentation.

The Company's sales are allocated to each country based primarily on the destination of the end-customer.

Adjusted operating income (loss) and adjusted operating margin are the measures used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income (loss) is defined as operating income from continuing operations excluding restructuring charges and currency exchange gains (losses). Adjusted operating margin is defined as adjusted operating income (loss) divided by segment sales to external customers. Adjusted operating income (loss) and adjusted operating margin are not recognized terms under GAAP and therefore do not purport to be alternatives to operating income or operating margin from continuing operations as a measure of operating performance. Further, the Company's measure of adjusted operating income and adjusted operating margin may not be comparable to similarly titled measures of other companies. Adjusted operating income on a consolidated basis is presented in the following table to reconcile the segment operating performance measure to operating income as presented on the condensed consolidated statement of income.

Reportable segment information is presented in the following table:

(In thousands)	Americas	International	Corporate	Reconciling Items[1]	Consolidated Totals
Three Months Ended June 30, 2016					
Sales to external customers	$177,623	$118,375	$—	$—	$295,998
Intercompany sales	30,037	69,648	—	(99,685)	—
Adjusted operating income (loss)	44,671	12,741	(8,417)		48,995
Adjusted operating margin %	25.1%	10.8%			
Restructuring and other charges					(1,338)
Currency exchange gains, net					242
Operating income					$47,899
Total Assets	$893,997	$516,064	$4,675	$1,513	$1,416,249
Six Months Ended June 30, 2016					
Sales to external customers	$344,965	$230,301	$—	$—	$575,266
Intercompany sales	57,869	130,337	—	(188,206)	—
Adjusted operating income (loss)	76,016	21,148	(17,022)		80,142
Adjusted operating margin %	22.0%	9.2%			
Restructuring and other charges					(1,808)
Currency exchange (losses), net					(1,708)
Operating income					$76,626
Total Assets	$893,997	$516,064	$4,675	$1,513	$1,416,249

(In thousands)	Americas	International	Corporate	Reconciling Items[1]	Consolidated Totals
Three Months Ended June 30, 2015					
Sales to external customers	$179,565	$107,446	$—	$—	$287,011
Intercompany sales	35,242	61,064	—	(96,306)	—
Adjusted operating income (loss)	37,454	10,892	(8,429)		39,917
Adjusted operating margin %	20.9%	10.1%			
Restructuring and other charges					(227)
Currency exchange (losses), net					(1,557)
Operating income					$38,133
Total Assets	$908,868	$363,012	$3,571	$9,919	$1,285,370
Six Months Ended June 30, 2015					
Sales to external customers	$338,067	$205,652	$—	$—	$543,719
Intercompany sales	71,418	112,174	—	(183,592)	—
Adjusted operating income (loss)	61,363	18,461	(15,366)		64,458
Adjusted operating margin %	18.2%	9.0%			
Restructuring and other charges					(958)
Currency exchange gains, net					991
Operating income					$64,491
Total Assets	$908,868	$363,012	$3,571	$9,919	$1,285,370

[1]Reconciling items consist primarily of intercompany eliminations and items not directly attributable to operating segments

The percentage of total sales by product group were as follows:

Three Months Ended June 30,	2016	2015
Total net sales	100%	100%
Breathing Apparatus	27%	23%
Fixed Gas & Flame Detection	18%	22%
Portable Gas Detection	14%	13%
Industrial Head Protection	11%	12%
Fall Protection	8%	4%
Fire & Rescue Helmets	5%	5%
Other	17%	21%

Six Months Ended June 30,	2016	2015
Total net sales	100%	100%
Breathing Apparatus	28%	23%
Fixed Gas & Flame Detection	19%	22%
Portable Gas Detection	13%	14%
Industrial Head Protection	10%	12%
Fall Protection	8%	4%
Fire & Rescue Helmets	5%	5%
Other	17%	20%

Note 9—Earnings per Share

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

Amounts attributable to MSA Safety Incorporated common shareholders:	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands, except per share amounts)	2016	2015	2016	2015
Net income attributable to continuing operations	$29,306	$23,722	$41,989	$33,038
Preferred stock dividends	(9)	(10)	(19)	(20)
Income from continuing operations available to common equity	29,297	23,712	41,970	33,018
Dividends and undistributed earnings allocated to participating securities	(48)	(68)	(67)	(96)
Income from continuing operations available to common shareholders	29,249	23,644	41,903	32,922
Net income attributable to discontinued operations	$1,777	$576	$845	$942
Preferred stock dividends	(1)	—	(1)	—
Income from discontinued operations available to common equity	1,776	576	844	942
Dividends and undistributed earnings allocated to participating securities	(3)	(2)	(2)	(3)
Income from discontinued operations available to common shareholders	1,773	574	842	939
Basic weighted-average shares outstanding	37,411	37,351	37,368	37,323
Stock options and other stock compensation	449	475	439	484
Diluted weighted-average shares outstanding	37,860	37,826	37,807	37,807
Antidilutive stock options	143	492	143	492
Earnings per share attributable to continuing operations:				
Basic	$0.78	$0.63	$1.12	$0.88
Diluted	$0.77	$0.62	$1.11	$0.87
Earnings per share attributable to discontinued operations:				
Basic	$0.05	$0.02	$0.02	$0.03
Diluted	$0.05	$0.01	$0.02	$0.03

Note 10—Income Taxes

The Company's effective tax rate for the second quarter of 2016 and 2015 was 33.8% and 34.6%, respectively. The 33.8% tax rate from the second quarter of 2016 differs from the U.S. federal statutory rate of 35% primarily due to a favorable mix of income sourced from lower tax jurisdictions and benefits associated with U.S. tax credits for research and development and the manufacturing deduction. The 34.6% rate for the second quarter of 2015 differs from the U.S. federal statutory rate of 35% primarily due to income sourced from lower tax jurisdictions.

The effective tax rate for the six month period of 2016 was 39.2%, inclusive of 5.1% associated with exit taxes related to our European reorganization. The 39.2% rate for the six month period of 2016 differs from the U.S. federal statutory rate of 35% primarily due to exit taxes, partially offset by a favorable mix of income sourced from lower tax jurisdictions and benefits associated with U.S. tax credits for research and development and the manufacturing deduction. The effective tax rate for the six month period of 2015 was 46.0%, inclusive of 12.6% associated with exit taxes related to our European reorganization. The 46.0% rate for the six month period of 2015 differs from the U.S. federal statutory rate of 35% primarily due to exit taxes, partially offset by income sourced from lower tax jurisdictions.

At June 30, 2016, the Company had a gross liability for unrecognized tax benefits of $13.1 million. The Company has recognized tax benefits associated with these liabilities of $2.4 million at June 30, 2016. The gross liability includes amounts associated with prior period foreign tax exposure.

The Company recognizes interest related to unrecognized tax benefits in interest expense and penalties in operating expenses. The Company's liability for accrued interest and penalties related to uncertain tax positions was $1.2 million at June 30, 2016.

Note 11—Stock Plans

The 2008 Management Equity Incentive Plan provides for various forms of stock-based compensation for eligible employees through May 2018. Management stock-based compensation includes stock options, restricted stock, restricted stock units, and performance stock units. The 2008 Non-Employee Directors' Equity Incentive Plan provides for grants of stock options and restricted stock to non-employee directors through May 2018. We issue treasury shares for stock option exercises, restricted stock grants, restricted stock unit grants, and performance stock unit grants. Please refer to Note 7 for further information regarding stock compensation share issuance.

Stock compensation expense is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	2016	2015	2016	2015
Stock compensation expense	$1,453	$1,806	$6,951	$6,787
Income tax benefit	563	684	2,695	2,596
Stock compensation expense, net of income tax benefit	$890	$1,122	$4,256	$4,191

Stock options are granted at market value and expire after ten years. Stock options are exercisable beginning three years after the grant date. Stock option expense is based on the fair value of stock option grants estimated on the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2016.

Fair value per option	$11.69
Risk-free interest rate	1.64 %
Expected dividend yield	2.81 %
Expected volatility	33.71 %
Expected life (years)	7.01

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

A summary of stock option activity for the six months ended June 30, 2016 follows:

	Shares	Weighted Average Exercise Price
Outstanding at January 1, 2016	1,694,675	$ 36.69
Granted	235,233	44.50
Exercised	(111,990)	39.17
Forfeited	(6,173)	46.95
Outstanding at June 30, 2016	1,811,745	37.51
Exercisable at June 30, 2016	1,316,322	$ 33.79

Restricted stock and restricted stock units are valued at the market value of the stock on the grant date. A summary of restricted stock and unit activity for the six months ended June 30, 2016 follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2016	217,709	$ 49.70
Granted	80,456	45.12
Vested	(64,570)	48.97
Forfeited	(3,978)	49.33
Unvested at June 30, 2016	229,617	$ 48.20

Performance stock units have a market condition modifier and are valued on the grant date using a Monte Carlo valuation model to determine fair value. The final number of shares to be issued for performance stock units may range from zero to 200% of the target award based on achieving the specified performance targets over the performance period. The following weighted average assumptions were used in the Monte Carlo model for units granted in 2016 with a market condition modifier.

Fair value per unit	$43.77
Risk-free interest rate	0.96 %
Expected dividend yield	2.81 %
Expected volatility	29.00 %
MSA stock beta	1.202

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

A summary of performance stock unit activity for the six months ended June 30, 2016 follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested at January 1, 2016	171,644	$ 50.24
Granted	64,800	44.08
Performance adjustments	(15,594)	58.54
Vested	(31,181)	58.54
Forfeited	(1,903)	46.67
Unvested at June 30, 2016	187,766	$ 46.08

The performance adjustments above relate to the final number of shares issued for the 2013 Management Performance Units, which were 66.6% of the target award based on Total Shareholder Return during the three year performance period, and vested in the first quarter of 2016.

Note 12—Long-Term Debt

On January 1, 2016, the Company adopted ASU 2015-03 Imputation of Interest - Simplifying the Presentation of Debt Issuance Costs and ASU 2015-15 Imputation of Interest - Simplifying the Presentation of Debt Issuance Costs. As a result of the adoption of these ASUs, our debt balances are now reported net of debt issuance costs. December 31, 2015 debt balances have been adjusted to conform with current year presentation.

(In thousands)	June 30, 2016		December 31, 2015	
2006 Senior Notes payable through 2021, 5.41%, net of debt issuance costs	$	40,000	$	39,999
2010 Senior Notes payable through 2021, 4.00%, net of debt issuance costs	100,000		100,000	
2016 Senior Notes payable through 2031, 3.40%, net of debt issuance costs	73,028		—	
Senior revolving credit facility maturing in 2020, net of debt issuance costs	240,716		324,673	
Total	453,744		464,672	
Amounts due within one year, net of debt issuance costs	6,657		6,650	
Long-term debt, net of debt issuance costs	$	447,087	$	458,022

Under the 2015 Amended and Restated Credit Agreement associated with our senior revolving credit facility, the Company may elect either a Base rate of interest (“BASE”) or an interest rate based on the London Interbank Offered Rate (“LIBOR”). The BASE is a daily fluctuating per annum rate equal to the highest of (i) the Prime Rate, (ii) the Federal Funds Open Rate plus one half of one percent (0.5%) or (iii) the Daily Libor Rate plus one percent (1.00%). The Company pays a credit spread of 0 to 175 basis points based on the Company’s net EBITDA leverage ratio and elected rate (BASE or LIBOR). The Company has a weighted average revolver interest rate of 1.97% as of June 30, 2016. At June 30, 2016, $328.8 million of the existing $575.0 million senior revolving credit facility was unused including letters of credit.

On January 22, 2016, the Company entered into a multi-currency note purchase and private shelf agreement, pursuant to which MSA issued notes in an aggregate original principal amount of £54.9 million (approximately $80.0 million). The notes are repayable in annual installments of £6.1 million (approximately $8.9 million), commencing January 22, 2023, with a final payment of any remaining amount outstanding on January 22, 2031. The interest rate on these notes is fixed at 3.4%. The note purchase agreement requires MSA to comply with specified financial covenants including a requirement to maintain a minimum fixed charges coverage ratio of not less than 1.50 to 1.00 and a consolidated leverage ratio not to exceed 3.25 to 1.00; in each case calculated on the basis of the trailing four fiscal quarters. In addition, the note purchase agreement contains negative covenants limiting the ability of MSA and its subsidiaries to incur additional indebtedness or issue guarantees, create or incur liens, make loans and investments, make acquisitions, transfer or sell assets, enter into transactions with affiliated parties, make changes in its organizational documents that are materially adverse to lenders or modify the nature of MSA's or its subsidiaries' business.

The revolving credit facilities and note purchase agreements require the Company to comply with specified financial covenants. In addition, the credit facilities and the note purchase agreements contain negative covenants limiting the ability of the Company and its subsidiaries to enter into specified transactions. The Company was in compliance with all covenants at June 30, 2016.

The Company had outstanding bank guarantees and standby letters of credit with banks as of June 30, 2016 totaling $7.8 million, of which $3.7 million relate to the senior revolving credit facility. The letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. No amounts were drawn on these arrangements at June 30, 2016. The Company is also required to provide cash collateral in connection with certain arrangements. At June 30, 2016, the Company has $1.0 million of restricted cash in support of these arrangements.

Note 13—Goodwill and Intangible Assets

Changes in goodwill during the six months ended June 30, 2016 are as follows:

(In thousands)	Goodwill
Balance at January 1, 2016	$340,338
Disposal	(198)
Currency translation	(8,001)
Balance at June 30, 2016	$332,139

At June 30, 2016, the Company had goodwill of $198.9 million and $133.2 million related to the Americas and International reportable segments, respectively.

During the 2016 first quarter, we sold 100% of the stock of associated with our South African personal protective equipment distribution business and our Zambian operations, as disclosed in Note 19. This transaction resulted in a $0.2 million disposal of goodwill.

Changes in intangible assets, net of accumulated amortization during the six months ended June 30, 2016 are as follows:

(In thousands)	Intangible Assets
Net balance at January 1, 2016	$ 90,068
Amortization expense	(3,947)
Currency translation	(5,647)
Net balance at June 30, 2016	$ 80,474

Note 14—Acquisitions

On October 21, 2015, MSA Safety Incorporated acquired Latchways plc and its affiliated companies, Latchways Australia Pty Limited ("LA"), Latchways Inc. ("LI"), HCL Group Plc ("HCL"), Height Solutions Limited ("HSL"), and Sigma 6 d.o.o. ('Sigma 6"), collectively referred to as ("Latchways"), for $190.9 million. There is no contingent consideration.

The acquisition was funded through cash on hand and borrowings on our $125.0 million unsecured senior revolving credit facility, which was subsequently repaid in December 2015.

Latchways is a global provider of innovative fall protection systems based in the United Kingdom. Latchways solutions are found throughout the aerospace, power transmission, utility and telecommunication sectors, and Latchways products are integrated with major roofing and tower systems. In addition to providing us with greater access to the fall protection market, we believe that the acquisition significantly enhances our long-term corporate strategy in fall protection by providing us with world-class research and development talent and an industry-leading product line. While Latchways products are sold globally, its operations most significantly impact our International segment.

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

(In millions)	October 21, 2015
Current assets (including cash of $10.6 million)	$ 35.7
Property, plant and equipment	9.5
Trade name and acquired technology	14.6
Customer-related intangibles	53.0
Goodwill	98.0
Total assets acquired	210.8
Total liabilities assumed	19.9
Net assets acquired	$ 190.9

The amounts in the table above are subject to change upon completion of the valuation of the assets acquired and liabilities assumed. This valuation is expected to be completed by the 2016 third quarter.

Assets acquired and liabilities assumed in connection with the acquisition have been recorded at their fair values. Fair values were determined by management, based, in part on an independent valuation performed by a third party valuation specialist. The valuation methods used to determine the fair value of intangible assets included the excess earnings approach for customer relationships and technology related intangible assets; the relief from royalty method for trade name; and the cost method for assembled workforce which is included in goodwill. A number of significant assumptions and estimates were involved in the application of these valuation methods, including sales volumes and prices, costs to produce, tax rates, capital spending, discount rates, and working capital changes. Cash flow forecasts were generally based on Latchways pre-acquisition forecasts coupled with estimated MSA sales synergies.

Identifiable intangible assets with finite lives are subject to amortization over their estimated useful lives. The identifiable intangible assets acquired in the Latchways transaction will be amortized over an estimated amortization period of 15 years. Estimated future amortization expense related to these identifiable intangible assets is approximately $4.5 million in each of the next five years. The step up to fair value of acquired inventory as part of the

purchase price allocation totaled $1.6 million. We amortized $0.9 million of this step up in inventory value in 2015, and expect to amortize approximately $0.7 million in 2016. Estimated future depreciation expense related to Latchways property, plant and equipment is approximately $0.9 million in each of the next five years.

Goodwill is calculated as the excess of the purchase price over the fair value of net assets acquired and represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. Among the factors that contributed to a purchase price in excess of the fair value of the net tangible and intangible assets acquired were the acquisition of an assembled workforce, the expected synergies and other benefits that we believe will result from combining the operations of Latchways with our operations. Goodwill related to the Latchways acquisition has been recorded in our reportable segments as follows: $96.6 million in the International segment and $1.4 million in Americas segment. Goodwill is not expected to be tax deductible.

Our results for the six months ended June 30, 2016 include integration costs of $0.5 million ($0.4 million after tax). These costs are reported in selling, general and administrative expenses in the accompanying condensed consolidated statement of income.

The operating results of Latchways have been included in our consolidated financial statements from the acquisition date. Our results for the three and six months ended June 30, 2016 include Latchways sales of $13.2 million and $28.9 million, respectively. Our results for the three and six months ended June 30, 2016 include Latchways net income of $0.5 million and $1.4 million, respectively. Latchways net income for the three and six months ended June 30, 2016 includes an increase in cost of sales of $0.2 million ($0.1 million after tax) and $0.5 million ($0.3 million after tax), respectively, related to the turn of the fair value step-up of inventories acquired as well as interest expense incurred by MSA associated with debt used to fund the acquisition.

The following unaudited pro forma information presents our combined results as if the acquisition had occurred at the beginning of 2015. The unaudited pro forma financial information was prepared to give effect to events that are (1) directly attributable to the merger; (2) factually supportable; and (3) expected to have a continuing impact on the combined company's results. There were no material transactions between us and Latchways during the periods presented that are required to be eliminated. Transactions between Latchways companies during the periods presented have been eliminated in the unaudited pro forma condensed combined financial information. The unaudited pro forma financial information does not reflect any cost savings, operating synergies or revenue enhancements that the combined company may achieve as a result of the acquisitions or the costs to integrate the operations or the costs necessary to achieve cost savings, operating synergies or revenue enhancements.

Pro forma financial information (Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
(In millions, except per share amounts)	2016	2015	2016	2015
Net sales	$296.0	$297.8	$575.3	$568.3
Income from continuing operations	29.3	24.2	42.0	35.7
Basic earnings per share from continuing operations	0.78	0.65	1.12	0.96
Diluted earnings per share from continuing operations	0.77	0.64	1.11	0.94

The unaudited pro forma condensed combined financial information is presented for information purposes only and is not intended to represent or be indicative of the combined results of operations or financial position that we would have reported had the acquisitions been completed as of the date and for the periods presented, and should not be taken as representative of our consolidated results of operations or financial condition following the acquisition. In addition, the unaudited proforma condensed combined financial information is not intended to project the future financial position or results of operations of the combined company.

Note 15—Pensions and Other Postretirement Benefits

Components of net periodic benefit cost consisted of the following:

	Pension Benefits		Other Benefits	
(In thousands)	2016	2015	2016	2015
Three Months Ended June 30,				
Service cost	$2,634	$2,904	$106	$111
Interest cost	4,702	4,593	237	216
Expected return on plan assets	(8,682)	(8,537)	—	—
Amortization of prior service cost	15	17	(105)	(84)
Recognized net actuarial losses	3,009	4,083	17	7
Settlements	20	33	—	—
Net periodic benefit cost	$1,698	$3,093	$255	$250
Six Months Ended June 30,				
Service cost	$5,268	$5,808	$212	$222
Interest cost	9,404	9,186	474	432
Expected return on plan assets	(17,364)	(17,074)	—	—
Amortization of prior service cost	30	34	(210)	(168)
Recognized net actuarial losses	6,018	8,012	34	14
Settlements	40	66	—	—
Net periodic benefit cost	$3,396	$6,032	$510	$500

We made contributions of $3.1 million to our pension plans during the six months ended June 30, 2016. We expect to make total contributions of approximately $6.2 million to our pension plans in 2016 which are primarily associated with our International segment.

Note 16—Derivative Financial Instruments

As part of our currency exchange rate risk management strategy, we may enter into certain derivative foreign currency forward contracts that do not meet the U.S. GAAP criteria for hedge accounting, but which have the impact of partially offsetting certain foreign currency exposures. We account for these forward contracts at fair value and report the related gains or losses in currency exchange gains or losses in the condensed consolidated statement of income. The notional amount of open forward contracts was $67.8 million and $58.6 million at June 30, 2016 and December 31, 2015, respectively.

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

(In thousands)	June 30, 2016	December 31, 2015
Derivatives not designated as hedging instruments:		
Foreign exchange contracts: other current liabilities	$978	$ 581
Foreign exchange contracts: other current assets	329	401

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

		Loss Recognized in Income Six Months Ended June 30,	
(In thousands)	Statement of Income Location	2016	2015
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Currency exchange losses	$ 1,694	$ 1,100

Note 17—Fair Value Measurements

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

- Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets.
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3—Unobservable inputs for the asset or liability.

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

With the exception of fixed rate long-term debt, we believe that the reported carrying amounts of our financial assets and liabilities approximate their fair values. The reported carrying amount of our fixed rate long-term debt (including the current portion) was $213.1 million and $146.7 million at June 30, 2016 and 2015, respectively. The fair value of this debt was $231.4 million and $153.3 million at June 30, 2016 and 2015, respectively. The fair value of this debt was determined by evaluating like rated companies with publicly traded bonds and recent market transactions. The fair value of this debt was determined using Level 2 inputs as described above.

Note 18—Contingencies

Product Liability

The Company categorizes the product liability claims of its subsidiary MSA LLC into two main categories: single incident and cumulative trauma.

Single incident product liability claims involve discrete incidents that are typically known to us when they occur and involve observable injuries, which provide an objective basis for quantifying damages. MSA LLC estimates its liability for single incident product liability claims based on expected settlement costs for reported claims and an estimate of costs for unreported claims (claims incurred but not reported or IBNR). The estimate for IBNR claims is based on experience, sales volumes, and other relevant information. The reserve for single incident product liability claims, which includes reported and IBNR claims, was $3.6 million at June 30, 2016 and $3.5 million at December 31, 2015. Single incident product liability expense was $0.3 million during the six months ended June 30, 2016 and $0.7 million during the six months ended June 30, 2015. Single incident product liability exposures are evaluated on an ongoing basis and adjustments are made to the reserve as appropriate.

Cumulative trauma product liability claims involve exposures to harmful substances (e.g., silica, asbestos and coal dust) that occurred many years ago and may have developed over long periods of time into diseases such as silicosis, asbestosis, or coal worker’s pneumoconiosis. MSA LLC is presently named as a defendant in 1,937 lawsuits, some of which involve multiple plaintiffs, in which plaintiffs allege to have contracted certain cumulative trauma diseases. These lawsuits mainly involve respiratory protection products allegedly manufactured and sold by MSA LLC or its predecessors. The products at issue were manufactured many years ago and are not currently offered by MSA LLC. Although there is year over year variability in the number and quality of claims defended and resolved, MSA LLC’s aggregate total for cumulative trauma product liability claims (inclusive of settlements and defense costs) for the three years ended December 31, 2015, totaled approximately $156.1 million, substantially all of which was recorded as insurance receivables because the amounts are believed to be recoverable under insurance.

A summary of cumulative trauma product liability lawsuit activity follows:

	Six Months Ended June 30, 2016	Year Ended December 31, 2015
Open lawsuits, beginning of period	1,988	2,326
New lawsuits	183	340
Settled and dismissed lawsuits	(234)	(678)
Open lawsuits, end of period	1,937	1,988

More than half of the open lawsuits at June 30, 2016 have had a de minimis level of activity over the last 5 years. It is possible that these cases could become active again at any point due to changes in circumstances.

Cumulative trauma product liability litigation is inherently unpredictable. It has typically not been until very late in the legal process that it can be reasonably determined whether it is probable that any particular case will ultimately result in a liability. This uncertainty is caused by many factors. Complaints generally do not provide information sufficient to determine if a lawsuit will develop into an actively litigated case. Even when a case is actively litigated, it is often difficult to determine if the lawsuit will be dismissed or otherwise resolved until late in the lawsuit. Moreover, even if it is probable that such a lawsuit will result in a loss; it is often difficult to estimate the amount of actual loss that will be incurred. These actual loss amounts are highly variable and turn on a case-by-case analysis of the relevant facts, which are often not learned until late in the lawsuit. In addition, there are uncertainties concerning the impact of bankruptcies of other companies that are co-defendants in claims, uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, and uncertainties regarding the impact of potential changes in legislative or judicial standards.

The uncertainties noted above relating to cumulative trauma product liability litigation are particularly acute in the case of incurred but not reported claims ("IBNR" claims), which by definition are potential claims that have not yet been filed. Management, after consultation with its valuation consultant and outside legal counsel, continues to be unable to reasonably estimate, and therefore has not recorded any liability for, MSA LLC's cumulative trauma IBNR claims. However, in 2015 Management continued to work with its outside valuation consultant and outside legal counsel to develop a method to provide a reasonable estimate for certain reported claims by using appropriate assumptions based on MSA LLC's particular circumstances. For those reported claims where MSA LLC believes a loss is probable, and it can make a reasonable estimate of such loss, it recorded a liability of $7.1 million as of December 31, 2015. This reserve amount pertains to certain reported claims where MSA LLC's claims experience allowed it to make an estimate of potential liability, but does not take into account all the claims currently pending against MSA LLC. The change in ability to estimate in 2015 was driven by the maturation of MSA LLC's defense efforts and additional claims experience. Certain groups of claims have not been included in the reserve due to a lack of claims experience with the applicable plaintiffs' counsel, low volume of resolution, or lack of confidence in the consistency of claims composition, or other factors which rendered us unable to make a reasonable estimate. Therefore, while this reserve amount covers a substantial portion of MSA LLC's currently reported claims, it does not purport to cover all of MSA LLC's reported claims as discussed above. In addition, the reserve does not include amounts which will be spent to defend these claims.

To arrive at the estimate, it was necessary to employ significant assumptions. In light of these significant assumptions, and all of the uncertainties inherent in cumulative trauma product liability litigation noted above, there can be no assurance that future experience with reported claims will follow MSA LLC's past experience. Because litigation is subject to inherent uncertainties, and unfavorable rulings or developments could occur, there can be no certainty that MSA LLC may not ultimately incur charges in excess of presently recorded liabilities or that costs related to claims not included in the reserve will be consistent either with those for which MSA LLC has been able to make an estimate, and to reserve, or past outcomes. Actual liabilities could vary greatly and we will need to adjust the estimate from time to time based on relevant facts and circumstances. If actual experience is worse than projected, the estimate would increase, and these increases could potentially be material over time.

The $7.1 million estimate added to the cumulative trauma product liability reserve as of December 31, 2015, already contains amounts payable on previously settled claims. In the second quarter of 2016, we reduced this reserve by $2.3 million and the reserve is $4.8 million as of June 30, 2016. Together, the cumulative trauma product liability reserve totaled $20.8 million at June 30, 2016, and is recorded in the insurance and product liability line within other current liabilities section of the condensed consolidated balance sheet.

On February 26, 2016, a Kentucky state court jury in the James Couch claim rendered a verdict against MSA LLC of $7.2 million dollars (comprised of $3.2 million of an apportioned share of compensatory damages and $4.0 million in punitive damages). The Couch claim is a product liability lawsuit involving cumulative trauma exposure to coal dust. Management believes that the verdict against MSA LLC is contrary to Kentucky law and intends to appeal the verdict. The Company and its outside legal counsel have concluded that, based on their assessment of the appellate issues, a reversal of the adverse judgment is reasonably possible and, consequently, a loss contingency is not probable at this time and is not included in the $4.8 million product liability reserve. In the future, if the Company determines that losses with respect to this matter are probable, MSA LLC, consistent with its existing practices, will record an accrual and/or provide appropriate disclosures as required by ASC 450-20-50, Contingencies. In the event that MSA LLC’s appeal of the adverse verdict is unsuccessful or not fully successful, the loss could total the full amount of the verdict, plus additional amounts for post-judgment interest. If so, the $3.2 million compensatory portion of the verdict (and associated interest) would be added to the product liability reserve and the insurance receivable in the consolidated balance sheet. The $4.0 million punitive portion of the verdict (and associated interest) would be expensed because we do not have insurance to cover punitive damages in this case.

Insurance Receivable

MSA LLC purchased insurance policies for the policy years from 1952-1986 from over 20 different insurance carriers that, subject to some common contract exclusions, provide coverage for cumulative trauma product liability losses and, in many instances, related defense costs (the "Occurrence-Based Policies"). The available limits of these policies exceed the recorded insurance receivable balance. After 1986, MSA LLC’s insurance policies have significant per claim deductibles. Based on this, the Company does not expect to be materially reimbursed for any claims alleging exposures that occurred entirely after this date.

In the normal course of business, MSA LLC makes payments to settle product liability claims and for related defense costs and records receivables for the amounts that are covered by insurance. Various factors could affect the timing and amount of recovery of the insurance receivable, including the outcome of negotiations with insurers, the outcome of the coverage litigation, and the extent to which insurers may become insolvent in the future.

Insurance receivables at June 30, 2016 totaled $248.2 million, of which $2.0 million is reported in other current assets and $246.2 million in other non-current assets. Insurance receivables at December 31, 2015 totaled $229.5 million, of which $2.0 million is reported in other current assets and $227.5 million in other non-current assets.

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

(In millions)	Six Months Ended June 30, 2016	Year Ended December 31, 2015
Balance beginning of period	$229.5	$ 220.5
Additions	23.7	17.3
Collections and settlements	(5.0)	(8.3)
Balance end of period	$248.2	$ 229.5

Additions to insurance receivables in the above table represent insured cumulative trauma product liability losses and related defense costs. Uninsured cumulative trauma product liability losses during the three months ended June 30, 2016 and June 30, 2015 were both $0.3 million. Collections primarily represent agreements with insurance companies to pay amounts due that are applicable to cumulative trauma claims. When there are contingencies embedded in these agreements, we apply payments to the insurance receivable in the period when the contingency is met. In cases where the payment stream covers multiple years and there are no contingencies, the present value of the payments is recorded as a note receivable (current and long-term) in the condensed consolidated balance sheet within prepaid expenses and other current assets and other noncurrent assets.

MSA LLC believes that the increase in its insurance receivable balance that it has experienced since 2005 is primarily due to disagreements among its insurance carriers, and consequently with MSA LLC, as to when the individual obligations of insurance carriers to pay are triggered and the amount of each insurer’s obligation, as compared to other

insurers. We believe that successful resolution of insurance litigation with various insurance carriers in recent years demonstrates that we have strong legal positions concerning MSA LLC's rights to coverage.

The collectability of MSA LLC's insurance receivables is regularly evaluated and we believe that the amounts recorded are probable of collection. These conclusions are based on analysis of the terms of the underlying insurance policies, experience in successfully recovering cumulative trauma product liability claims from our insurers under other policies, the financial ability of the insurance carriers to pay the claims, understanding and interpretation of the relevant facts and applicable law and the advice of MSA LLC's outside legal counsel.

Insurance Litigation

MSA LLC is currently involved in insurance coverage litigation with a number of its insurance carriers regarding its Occurrence-Based Policies.

In 2009, MSA LLC (as Mine Safety Appliances Company) sued The North River Insurance Company (North River) in the United States District Court for the Western District of Pennsylvania, alleging that North River breached one of its insurance policies by failing to pay amounts owed to MSA LLC and that it engaged in bad-faith claims handling. MSA LLC believes that North River’s refusal to indemnify it under the policy for product liability losses and legal fees paid by MSA LLC is wholly contrary to Pennsylvania law and MSA LLC is vigorously pursuing the legal actions necessary to collect all due amounts. A trial date has not yet been scheduled.

In 2010, North River sued MSA LLC (as Mine Safety Appliances Company) in the Court of Common Pleas of Allegheny County, Pennsylvania seeking a declaratory judgment concerning their responsibilities under three additional policies. MSA LLC asserted claims against North River for breaches of contract for failures to pay amounts owed to MSA LLC. MSA LLC also alleges that North River engaged in bad-faith claims handling. MSA LLC believes that North River’s refusal to indemnify us under these policies for product liability losses and legal fees paid by MSA LLC is wholly contrary to Pennsylvania law and MSA LLC is vigorously pursuing the legal actions necessary to collect all due amounts. Trial is currently scheduled for September 2016.

In July 2010, MSA LLC (as Mine Safety Appliances Company) filed a lawsuit in the Superior Court of the State of Delaware seeking declaratory and other relief from the majority of its excess insurance carriers concerning the future rights and obligations of MSA LLC and its excess insurance carriers under various insurance policies. The reason for this insurance coverage action is to secure a comprehensive resolution of its rights under the insurance policies issued by the insurers. Trial has recently been rescheduled from May 2016 to April 2017 to accommodate ongoing settlement discussions.

Through negotiated settlements, MSA LLC has resolved claims against certain of its insurance carriers on certain policies. When a settlement is reached, MSA LLC dismisses the settling carrier from the relevant above noted lawsuit(s). Assuming satisfactory resolution, once disputes are resolved with each of the remaining carriers, MSA LLC anticipates having commitments to provide future payment streams which should be sufficient to satisfy its presently recorded insurance receivables due from insurance carriers.

At some point in the next few years, even if insurance coverage litigation is generally successful, MSA LLC will become largely self-insured for costs associated with cumulative trauma product liability claims. The exact point when this transition will happen is difficult to predict and subject to a number of variables, including the pace at which future cumulative trauma product liability costs are incurred and the results of litigation and negotiations with insurance carriers. After it becomes largely self-insured, MSA LLC may still obtain some insurance reimbursement from negotiated coverage-in-place agreements (although that coverage may not be immediately triggered or accessible) or from other sources of coverage. The precise amount of insurance reimbursement available at that time cannot be determined with specificity today.

Note 19—Discontinued Operations

On February 29, 2016, the Company sold 100% of the stock associated with its South African personal protective equipment distribution business and its Zambian operations. The Company received $15.9 million from the closing of this transaction and recorded a loss of approximately $0.3 million during the first quarter of 2016.

During the second quarter of 2016, the Company corrected its gain calculation on the disposition of the South African personal protective equipment distribution business and its Zambian operations. This resulted in a gain of approximately $2.5 million being recorded during the current quarter in discontinued operations that should have been recorded in the first quarter of 2016. The Company evaluated materiality in accordance with SEC Staff Accounting Bulletins Topics 1.M and 1.N and considered relevant qualitative and quantitative factors. The Company concluded

that this modification was not material to the first quarter of 2016 or the trend in earnings over the affected periods. The modification had no effect on cash flows or debt covenant compliance.

The operations of this business qualify as a component of an entity under FASB ASC 205-20 "Presentation of Financial Statements - Discontinued Operations", and thus the operations have been reclassified as discontinued operations and prior periods have been reclassified to conform to this presentation.
Summarized financial information for discontinued operations is as follows:

(In thousands)	Three Months Ended June 30, 2016	2015	Six Months Ended June 30, 2016	2015
Discontinued Operations				
Net sales	$—	$11,384	$5,261	$22,541
Other income, net	2,484	107	2,196	173
Cost and expenses:				
Cost of products sold	—	9,058	4,819	18,048
Selling, general and administrative	—	1,682	937	3,284
Currency exchange losses, net	—	38	18	208
Income from discontinued operations before income taxes	2,484	713	1,683	1,174
Provision for income taxes	—	243	328	396
Income from discontinued operations, net of tax	$2,484	$470	$1,355	$778

Certain balance sheet items that are related to the Company's South African personal protective equipment distribution business and its Zambian operations are reported as discontinued operations. These items are reported in the following consolidated balance sheet lines:

(In thousands)	June 30, 2016	December 31, 2015
Discontinued Operations assets and liabilities		
Trade receivables, less allowance for doubtful accounts	$ —	$ 4,832
Inventories	—	8,499
Net property	—	449
Other assets	—	791
Total assets	—	14,571
Accounts payable	—	2,745
Accrued and other liabilities	—	748
Total liabilities	—	3,493
Net assets	$ —	$ 11,078

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

(In thousands)	Three Months Ended June 30, 2016	2015	Six Months Ended June 30, 2016	2015
Net (income) loss attributable to noncontrolling interests				
(Income) loss from continuing operations	$(141)	$347	$(660)	$521
(Income) loss from discontinued operations	(707)	106	(510)	164
Net (income) loss	$(848)	$453	$(1,170)	$685

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

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

The Americas and International segments were established on January 1, 2016. The Americas segment is comprised of our operations in North America and Latin America geographies. The International segment is comprised of our operations of all geographies outside of the Americas. Certain global expenses are now allocated to each segment in a manner consistent with where the benefits from the expenses are derived. The 2015 segment results have been recast to conform with current period presentation. Please refer to Note 8 Segment Information, for further information.

MSA's South African personal protective equipment distribution business and MSA's Zambian operations had historically been part of the International reportable segment. The results of these operations are excluded from continuing operations and are presented as discontinued operations in all periods presented. Please refer to Note 19 Discontinued Operations, for further commentary on these discontinued operations.

BUSINESS OVERVIEW

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

We tailor our product offerings and distribution strategy to satisfy distinct customer preferences that vary across geographic regions. To best serve these customer preferences, we have organized our business into six geographical operating segments that are aggregated into three reportable geographic segments: Americas, International and Corporate. Each segment includes a number of operating segments. In 2015, 62% and 38% of our net sales were made by our Americas and International segments, respectively.

Americas. Our largest manufacturing and research and development facilities are located in the United States. We serve our North American markets with sales and distribution functions in the U.S., Canada and Mexico. We also have manufacturing facilities in Mexico and Brazil to service our markets across the Americas.

International. Our International segment includes companies in most Western European countries, a number of Eastern European countries, locations in the Middle East, Russia, Africa and the Asia Pacific region, some of which are in developing regions of the world. In our largest European companies, Germany and France, we develop, manufacture and sell a wide variety of products. The technology associated with the development of our products in these countries is owned by our European Principal Operating company which is located in Rapperswil-Jona, Switzerland. Manufacturing operations are also located in China, the U.K., Ireland, and Sweden. These manufacturing entities manufacture products that are sold primarily in each company's home country as well as regional markets. Operations in other International segment countries focus primarily on sales and distribution in their respective home country markets. While some of these companies may perform limited production, most of their sales are of products manufactured in our other plants or are purchased from third party vendors.

Corporate. The corporate segment primarily consists of general and administrative expenses incurred in our corporate headquarters, costs associated with corporate development initiatives, legal expense, interest expense, foreign exchange gains or losses, and other centrally-managed costs. Corporate general and administrative costs comprise the majority of the expense in the corporate segment.

PRINCIPAL PRODUCTS

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

MSA's corporate strategy includes a focus on driving sales of core products, which have leading market positions and a competitive advantage. Core products include fixed gas and flame detection systems, breathing apparatus where SCBA is the principal product, portable gas detection instruments, industrial head protection products, fire and rescue helmets and fall protection devices. These products receive the highest levels of investment and resources as they typically realize a higher gross profit margin and provide higher levels of return on investment than non-core products. Core products comprised approximately 83% of sales in 2016 for the six months ended June 30, 2016.

MSA maintains a portfolio of non-core products, which include both adjacent and peripheral offerings. Adjacent products reinforce and extend the core, drawing upon our customer relationships, distribution channels, geographical presence and technical experience. These products are complementary to the core offerings and have their roots within the core product value chain. Key adjacent products include respirators, eye and face protection, thermal imaging cameras, and gas masks. Gas masks and ballistic helmet sales are the primary purchases from our military customers and were approximately $27.0 million globally during the first six months of 2016. Peripheral products are primarily sold to the mining industry and reflect a small portion of consolidated sales.

A detailed listing of our significant product offerings in the aforementioned product groups above is included in the MSA's Annual Report on Form 10-K for the year ended December 31, 2015.

RESULTS OF OPERATIONS

Three Months Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Net sales. Net sales for the three months ended June 30, 2016 were $296.0 million, an increase of $9.0 million, or 3%, compared with $287.0 million for the three months ended June 30, 2015. The unfavorable translation effects of weakened foreign currencies decreased net sales by 2%. Constant currency sales increased by 5%.

Net Sales	Three Months Ended June 30,		Dollar Increase (Decrease)	Percent Increase (Decrease)
(In millions)	2016	2015		
Consolidated Continuing Operations	$296.0	$287.0	$ 9.0	3 %
Americas	177.6	179.6	(2.0)	(1)%
International	118.4	107.4	11.0	10 %

Net Sales from Continuing Operations	Three Months Ended June 30, 2016 versus June 30, 2015		
(Percent Change)	Americas	International	Consolidated Continuing Operations
GAAP reported sales change	(1)%	10 %	3 %
Plus: currency translation effects	2 %	1 %	2 %
Constant currency sales change	1 %	11 %	5 %
Less: acquisitions	1 %	10 %	5 %
Organic constant currency sales growth	— %	1 %	— %

Note: Organic constant currency sales growth is a non-GAAP financial measure provided by the Company to give a better understanding of the Company's underlying business performance. Organic constant currency sales growth is calculated by deducting the percentage impact from acquisitions and currency translation effects from the overall percentage change in net sales.

Net sales for the Americas segment were $177.6 million in the second quarter of 2016, a decrease of $2.0 million, or 1%, compared to $179.6 million in the second quarter of 2015. Currency translation effects decreased Americas segment sales by 2%, reflecting weakened currencies across Latin America. During the quarter, organic constant currency sales in the Americas segment were flat over the prior year period as continued strong demand for the G1 self-contained breathing apparatus ("SCBA") in the United States and strength in portable gas instruments in the utilities sector was offset by weak conditions in energy-related markets and emerging markets, resulting in a decline in

shipments of industrial head protection and fixed gas and flame detection. Acquisitions provided 1% of sales growth.

Net sales for the International segment were $118.4 million in the second quarter of 2016, an increase of $11.0 million, or 10%, compared to $107.4 million for the second quarter of 2015. Currency translation effects decreased International segment net sales by 1%, reflecting a weaker British pound and Chinese yuan renminbi. Organic constant currency sales in the International segment provided 1% growth during the second quarter, driven by increased shipments of breathing apparatus and portable instruments in Western Europe and the Middle East. Acquisitions provided an additional 10% of sales growth.

Gross profit. Gross profit for the second quarter of 2016 was $135.9 million, an increase of $5.4 million, or 4%, compared to $130.5 million for the second quarter of 2015. The ratio of gross profit to net sales was 45.9% in the second quarter of 2016 compared to 45.5% in the same quarter last year. The higher gross profit ratio during the current quarter is attributable to improved G1 SCBA margins associated with value engineering initiatives as well a higher proportion of G1 accessory sales, which have higher relative margins.

Selling, general and administrative expenses. Selling, general and administrative expenses were $75.7 million during the second quarter of 2016, a decrease of $1.9 million, or 2%, compared to $77.6 million in the second quarter of 2015. Selling, general and administrative expenses were 25.6% of net sales in the second quarter of 2016, compared to 27.0% of net sales in the second quarter of 2015. Currency translation effects decreased current quarter selling, general and administrative expenses by 1%, primarily related to weakened currencies in China and across Latin America. Organic constant currency selling, general, and administrative expense decreased 5% during the quarter, as the Company realizes benefits from the execution of our global cost reduction program. Acquisitions increased selling, general, and administrative expense by 4%.

Selling, general, and administrative expenses	Three Months Ended June 30, 2016 versus June 30, 2015
(Percent Change)	Consolidated Continuing Operations
GAAP reported change	(2)%
Plus: currency translation effects	1 %
Constant currency change	(1)%
Less: acquisitions	4 %
Organic constant currency change	(5)%

Note: Organic constant currency change is a non-GAAP financial measure provided by the Company to give a better understanding of the Company's underlying business performance. Organic constant currency change in selling, general, and administrative expenses is calculated by deducting the percentage impact from acquisitions and currency translation effects from the overall percentage change in GAAP selling, general, and administrative expense. Management believes excluding acquisitions and currency translation effects provide investors with a greater level of clarity into spending levels on a year-over-year basis.

Research and development expense. Research and development expense was $11.1 million during the second quarter of 2016, a decrease of $1.9 million, or 15%, compared to $13.0 million during the second quarter of 2015. Research and development expense was 3.8% of net sales in the second quarter of 2016, compared to 4.5% of net sales in the second quarter of 2015. The Company continues to focus on developing new and innovative technologies for the G1 SCBA, closely aligned with our strategic goals, and for a new FGFD platform, which the Company expects to launch in the fourth quarter. We expect research and development expense to range from 4.0% to 4.5% of sales for the full year ending December 31, 2016.

Restructuring, net of adjustments. During the three months ended June 30, 2016, the Company recorded restructuring, net of adjustments, of $1.3 million, primarily related to severance costs for staff reductions associated with ongoing

initiatives to right size our operations in Europe, Latin America, and Asia. We continue to evaluate our cost structure on a global basis.
During the three months ended June 30, 2015, the Company recorded restructuring, net of adjustments, of $0.2 million.
Currency exchange. Currency exchange gains were $0.2 million in the second quarter of 2016, compared to losses of $1.6 million in the second quarter of 2015. Currency exchange gains in the second quarter of 2016 were due to management of foreign currency exposure related to unsettled inter-company balances. Refer to Note 16 to the Condensed Consolidated Financial Statements in Part I Item I of this Form 10-Q, for information regarding our currency exchange rate risk management strategy.
GAAP operating income. Consolidated operating income for the second quarter of 2016 was $47.9 million, an increase of $9.8 million, or 26%, compared to $38.1 million in the second quarter of 2015.

Adjusted operating income. Americas adjusted operating income for the second quarter of 2016 was $44.7 million, an increase of $7.2 million, or 19%, compared to $37.5 million in the second quarter of 2015. We saw improvements in gross profit during the second quarter from a higher level of shipments of G1 accessories as well as leverage from lower selling, general, and administrative costs through effective cost management. Currency translation effects decreased current quarter Americas adjusted operating income by 5%, primarily due to a weaker Mexican peso.
International adjusted operating income for the second quarter of 2016 was $12.7 million, an increase of $1.8 million, or 17%, compared to $10.9 million in the prior year quarter. Increased revenues from the acquisition of Latchways as well as growth in the Middle East contributed to results. Lower selling, general, and administrative spend and lower research and development costs provided strong operating leverage. Currency translation effects decreased current quarter International adjusted operating income by 1%, reflecting weakened currencies in China.
Corporate segment adjusted operating loss for the second quarter of 2016 was $8.4 million compared to an operating loss of $8.4 million in the second quarter of 2015, reflective of controlled spending during the period.
The following table represents a reconciliation from GAAP operating income to adjusted operating income. Adjusted operating margin % is calculated as adjusted operating income divided by net sales.
Adjusted operating income

(In millions)	Americas	International	Corporate	Consolidated Continuing Operations
Net sales	$ 177,623	$ 118,375	$ —	$ 295,998
Adjusted operating income	44,671	12,741	(8,417)	48,995
Adjusted operating margin %	25.1 %	10.8 %		
Restructuring and other charges				(1,338)
Currency exchange gains, net				242
GAAP operating income				$ 47,899

Note: Adjusted operating income is a non-GAAP financial measure used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income is reconciled above to the nearest GAAP financial measure, Operating income.
Total other expense, net. Other expense for the quarter ended June 30, 2016 was $3.4 million, an increase of $1.0 million, or 42%, compared to $2.4 million for the same period in 2015. The increase reflects higher interest expense associated with the Latchways acquisition.
Income taxes. The reported effective tax rate for the second quarter of 2016 and 2015 was 33.8% and 34.6%, respectively. The effective tax rate decrease was primarily due to benefits associated with U.S. tax credits for research and development and reduced foreign entity losses in jurisdictions where the Company cannot record tax benefits, partially offset by a less favorable mix of income sourced from lower tax jurisdictions.
Net income from continuing operations attributable to MSA Safety Incorporated. Net income from continuing operations was $29.3 million for the second quarter of 2016, or $0.78 per basic share, an increase of $5.6 million, or 24%, compared to $23.7 million, or $0.63 per basic share, for the same quarter last year.
Net income from discontinued operations attributable to MSA Safety Incorporated. Net income from discontinued operations was $1.8 million for the second quarter of 2016, or $0.05 per basic share, an increase of $1.2 million, or 200%, compared to $0.6 million, or $0.02 per basic share, for the same quarter last year. Please refer to Note 19 to the unaudited condensed consolidated financial statements of this Form 10-Q.

Six Months Ended June 30, 2016 Compared to Six Months Ended June 30, 2015

Net sales. Net sales for the six months ended June 30, 2016 were $575.3 million, an increase of $31.6 million, or 6%, compared with $543.7 million for the six months ended June 30, 2015. The unfavorable translation effects of weakened foreign currencies decreased sales by 3%. Constant currency sales increased by 9%, of which 6% was attributable to acquisitions and 3% was attributable to organic sales growth.

Net Sales	Six Months Ended June 30,		Dollar Increase	Percent Increase
(In millions)	2016	2015		
Consolidated Continuing Operations	$575.3	$543.7	$ 31.6	6 %
Americas	345.0	338.1	6.9	2 %
International	230.3	205.6	24.7	12 %

Net Sales from Continuing Operations	Six Months Ended June 30, 2016 versus June 30, 2015		
(Percent Change)	Americas	International	Consolidated Continuing Operations
GAAP reported sales change	2 %	12 %	6 %
Plus: currency translation effects	3 %	2 %	3 %
Constant currency sales change	5 %	14 %	9 %
Less: acquisitions	1 %	12 %	6 %
Organic constant currency sales growth	4 %	2 %	3 %

Note: Organic constant currency sales growth is a non-GAAP financial measure provided by the Company to give a better understanding of the Company's underlying business performance. Organic constant currency sales growth is calculated by deducting the percentage impact from acquisitions and currency translation effects from the overall percentage change in net sales.

Net sales for the Americas segment were $345.0 million for the six months ended June 30, 2016, an increase of $6.9 million, or 2%, compared to $338.1 million for the same period in 2015. Currency translation effects decreased Americas segment sales by 3%, reflecting weakened currencies across Latin America. During the quarter, organic constant currency sales in the Americas segment increased 4% over the prior year period attributable to strong invoicing of the G1 self-contained breathing apparatus ("SCBA") in the United States. While we expect continued demand in fire service markets, the strong growth rates over the prior year in breathing apparatus are expected to moderate over the second half of this year. These increases were partially offset by weak conditions in energy-related markets, resulting in a decline in shipments of fixed gas and flame detection, industrial head protection, and portable instruments.

Net sales for the International segment were $230.3 million during the six months ended June 30, 2016, an increase of $24.7 million, or 12%, compared to $205.6 million for the same period in 2015. Currency translation effects decreased International segment sales by 2%, reflecting a weaker euro, British pound, and Chinese yuan renminbi. Organic constant currency sales in the International segment provided 2% growth during the period on increased shipments of breathing apparatus and portable instruments in Europe and China and increased shipments of breathing apparatus and fixed gas and flame detection in the Middle East. Acquisitions provided 12% growth during the period.

Gross profit. Gross profit for the six months ended June 30, 2016 was $256.6 million, an increase of $9.3 million, or 4%, compared to $247.3 million for the same period in 2015. The ratio of gross profit to net sales was 44.6% for the six months ended June 30, 2016 compared to 45.5% during the same period last year. The lower gross profit ratio during the period was primarily related to a less favorable product mix from invoicing higher levels of SCBA and invoicing a higher level of large orders that tend to carry a lower margin than base business.

Selling, general and administrative expenses. Selling, general and administrative expenses were $154.9 million during the six months ended June 30, 2016, a decrease of $4.1 million, or 3%, compared to $159.0 million in the same period

of 2015. Currency translation effects decreased current quarter selling, general and administrative expenses by 3%, primarily related to a weaker euro. Organic constant currency selling, general, and administrative expense decreased 5% during the period as the Company is beginning to realize the results of the restructuring steps we have taken to reduce operating costs, both through headcount reduction and implementation of discretionary spending controls. Acquisitions increased selling, general, and administrative expense by 5%. Selling, general and administrative expenses were 26.9% of net sales in the six months ended June 30, 2016, compared to 29.2% of net sales for the same period in 2015.

Selling, general, and administrative expenses	Six Months Ended June 30, 2016 versus June 30, 2015
(Percent Change)	Consolidated Continuing Operations
GAAP reported change	(3)%
Plus: currency translation effects	3 %
Constant currency change	— %
Less: acquisitions	5 %
Organic constant currency change	(5)%

Note: Organic constant currency change is a non-GAAP financial measure provided by the Company to give a better understanding of the Company's underlying business performance. Organic constant currency change in selling, general, and administrative expenses is calculated by deducting the percentage impact from acquisitions and currency translation effects from the overall percentage change in selling, general, and administrative expense. Management believes excluding acquisitions and currency translation effects provide investors with a greater level of clarity into spending levels on a year-over-year basis.

Research and development expense. Research and development expense was $21.5 million during the six months ended June 30, 2016, a decrease of $2.4 million, or 10%, compared to $23.9 million for the same period in 2015. Research and development expense was 3.7% of net sales during the six month period in 2016, compared to 4.4% of net sales for the same period in 2015. The Company continues to focus on developing new and innovative technologies for the G1 platform, closely aligned with our strategic goals, and for a new FGFD platform, which the Company expects to launch in the fourth quarter. We expect research and development expense to range from 4.0% to 4.5% of sales for the full year ending December 31, 2016.

Restructuring, net of adjustments. During the six months ended June 30, 2016, the Company recorded restructuring, net of adjustments, of $1.8 million, primarily related to severance costs for staff reductions associated with ongoing initiatives to right size our operations in Europe, Latin America, and Asia. We continue to evaluate our cost structure on a global basis.

During the six months ended June 30, 2015, the Company recorded restructuring, net of adjustments, of $1.0 million, primarily related to severance costs from staff reductions associated with ongoing initiatives to right size our operations in Latin America, Asia, and Australia.

Currency exchange. Currency exchange losses were $1.7 million during the six months ended June 30, 2016, compared to gains of 1.0 million for the same period in 2015. Currency exchange losses for the period in 2016 and gains for the period in 2015 were mostly unrealized and related primarily to the effect of the strengthening euro on unsettled inter-company balances. Refer to Note 16 to the Condensed Consolidated Financial Statements in Part I Item I of this Form 10-Q, for information regarding our currency exchange rate risk management strategy.

GAAP operating income. Consolidated operating income for the six months ended June 30, 2016 was $76.6 million, an increase of $12.1 million, of 19%, compared to $64.5 million in the same period of 2015.

Adjusted operating income. Americas adjusted operating income for the six months ended June 30, 2016 was $76.0 million, an increase of $14.6 million, or 24%, compared to $61.4 million for the same period in 2015. Revenue growth associated with the G1 SCBA as well as controlled discretionary spending contributed to operating income growth during the current period. Currency translation effects decreased current period Americas adjusted operating income by 4%, primarily due to a weaker Mexican peso.

International adjusted operating income for the six months ended June 30, 2016 was $21.1 million, an increase of $2.6 million, or 14%, compared to $18.5 million for the same period in 2015. Higher revenues associated with acquisitions and growth in the Middle East as well as realized benefits from cost reduction initiatives contributed to

operating income growth during the current period. Currency translation effects decreased current period International adjusted operating income by 6%, reflecting a weaker euro.
Corporate adjusted operating loss for the six months ended June 30, 2016 was $17.0 million, an increase of $2.4 million, or 16%, compared to an operating loss of $15.4 million for the same period in 2015. The increase reflects higher corporate development spend, higher legal spend, as well as higher compensation expense.

The following table represents a reconciliation from GAAP operating income to adjusted operating income. Adjusted operating margin % is calculated as adjusted operating income divided by net sales.
Adjusted operating income

(In millions)	Americas	International	Corporate	Consolidated Continuing Operations
Net Sales	$344,965	$230,301	$ —	$575,266
Adjusted operating income	76,016	21,148	(17,022)	80,142
Adjusted operating margin %	22.0 %	9.2 %		
Restructuring and other charges				(1,808)
Currency exchange (losses), net				(1,708)
GAAP operating income				$76,626

Note: Adjusted operating income is a non-GAAP financial measure used by the chief operating decision maker to evaluate segment performance and allocate resources. Adjusted operating income is reconciled above to the nearest GAAP financial measure, Operating Income.
Total other expense, net. Other expense for the six months ended June 30, 2016 was $6.4 million, an increase of $2.2 million, or 52%, compared to $4.2 million for the same period in 2015. The increase reflects higher interest expense associated with the Latchways acquisition.
Income taxes. The reported effective tax rate for the six months ended June 30, 2016 was 39.2%, inclusive of 5.1% associated with exit taxes related to our European reorganization. The reported effective tax rate for the six months ended June 30, 2015 was 46.0%, inclusive of 12.6% associated with exit taxes related to our European reorganization. The effective tax rate decrease was primarily due to less exit taxes in 2016, greater benefits associated with U.S. tax credits for research and development and reduced foreign entity losses in jurisdictions where the Company cannot book tax benefits, partially offset by a less favorable mix of income sourced from lower tax jurisdictions.
Net income from continuing operations attributable to MSA Safety Incorporated. Net income from continuing operations was $42.0 million for the six months ended June 30, 2016, or $1.13 per basic share, an increase of $9.0 million, or 27%, compared to $33.0 million, or $0.88 per basic share, for the same period last year.
Net income from discontinued operations attributable to MSA Safety Incorporated. Net income from discontinued operations was $0.8 million for the six months ended June 30, 2016, or $0.02 per basic share, a decrease of $0.1 million, or 11%, compared to $0.9 million, or $0.03 per basic share, for the same quarter last year. Please refer to Note 19 to the unaudited condensed consolidated financial statements of this Form 10-Q.
Non-GAAP Financial Information
We may provide information regarding organic constant currency changes, financial measures excluding the impact of acquisitions, and adjusted operating income, which are not recognized terms under U.S. GAAP and do not purport to be alternatives to net sales, selling, general and administrative expense, operating income, or net income as a measure of operating performance. We believe that the use of these non-GAAP financial measures provide investors with additional useful information and provide a more complete understanding of the underlying results. Because not all companies use identical calculations, these presentations may not be comparable to similarly titled measures from other companies. For more information about these non-GAAP measures and a reconciliation to the nearest GAAP measure, please refer to the reconciliations referenced above in Management's Discussion & Analysis section and in Note 8 to the unaudited condensed consolidated financial statements of this Form 10-Q.
We also refer to certain financial measures on a constant currency basis, which is a non-GAAP financial measure. These references to a constant currency basis do not include operational impacts that could result from fluctuations in foreign currency rates, which are outside of management's control. To provide information on a constant currency basis, the applicable financial results are adjusted by translating current and prior period results in local currency to a fixed foreign exchange rate. This approach is used for countries where the functional currency is the local country currency. This information is provided so that certain financial results can be viewed without the impact of fluctuations in foreign currency rates, thereby facilitating period-to-period comparisons of business performance. Constant currency information is not recognized under U.S. GAAP, and it is not intended as an alternative to U.S.

GAAP measures.

LIQUIDITY AND CAPITAL RESOURCES

Certain line items on the condensed consolidated statement of cash flows have been reclassified from the condensed consolidated statement of cash flows reported in our July 20, 2016 earnings release.

Our main source of liquidity is operating cash flows, supplemented by borrowings. Our principal liquidity requirements are for working capital, capital expenditures, principal and interest payments on debt, acquisitions and dividend payments. Approximately 47% of our long-term debt is at fixed interest rates with repayment schedules through 2031. The remainder of our long-term debt is at variable rates, primarily on our unsecured revolving credit facility that is due in 2020. At June 30, 2016, approximately 81% of our borrowings are denominated in US dollars, which limits our exposure to currency exchange rate fluctuations.

At June 30, 2016, we had cash and cash equivalents totaling $103.1 million, of which $97.5 million was held by our foreign subsidiaries. Cash and cash equivalents are held by our foreign subsidiaries whose earnings are considered indefinitely reinvested at June 30, 2016. These funds could be subject to additional income taxes if repatriated. It is not practicable to determine the potential income tax liability that we would incur if these funds were repatriated to the U.S. because the time and manner of repatriation is uncertain. We believe that domestic cash and cash equivalents, domestic cash flows from operations, annual repatriation of a portion of the current period’s foreign earnings, and availability of our domestic line of credit continue to be sufficient to fund our domestic liquidity requirements.

Cash and cash equivalents decreased $2.8 million during the six months ended June 30, 2016, compared to decreasing $17.9 million during the same period in 2015. The decrease in cash primarily relates to payments on our revolving credit facility, quarterly dividends, and cumulative trauma product liability payments.

On January 22, 2016, the Company entered into a multi-currency note purchase and private shelf agreement, by amending and drawing upon its existing shelf facility previously amended in 2014. MSA has issued notes in an aggregate principal amount of £54.9 million (approximately $80.0 million). Proceeds from this facility were used to repay a portion of the existing revolver. The interest rate on these notes is fixed at 3.4%. Please refer to the Form 8-K filed on January 28, 2016 for additional details on the terms and conditions surrounding these notes.

The Company currently has access to approximately $673.8 million of capital at June 30, 2016. Refer to Note 12 to the Condensed Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Operating activities. Operating activities provided cash of $12.5 million during the six months ended June 30, 2016, compared to providing $7.7 million during the same period in 2015. Cash generated from the collection of trade receivables in accordance with our continued focus on working capital management was offset set by $49.1 million of cash settlements paid related to the cumulative trauma product liability during the six months ended June 30, 2016. This compares to $3.2 million of cash settlements paid related to the cumulative trauma product liability in the same period in 2015. At June 30, 2016, the cumulative trauma product liability reserve totaled $20.8 million, compared to $50.1 million at December 31, 2015. Insurance receivables related to cumulative trauma product liability losses at June 30, 2016 totaled $248.2 million, compared to $229.5 million at December 31, 2015.

Investing activities. Investing activities provided cash of $6.4 million during the six months ended June 30, 2016, compared to using $8.0 million in the same period last year. The change is primarily due to the sale of our South African personal protective equipment distribution business and its Zambian operations and properties in the Netherlands and Singapore.

Financing activities. Financing activities used cash of $24.5 million during the six months ended June 30, 2016, compared to using $12.9 million during the same period in 2015. During the six months ended June 30, 2016, we had net repayments of $3.4 million, primarily from our long-term line of credit. This compared to net borrowings of $18.0 million in the same period in 2015. We paid cash dividends of $24.3 million in the first half of 2016 compared to $23.5 million in the same period last year.

CUMULATIVE TRANSLATION ADJUSTMENTS

The position of the U.S. dollar relative to international currencies at June 30, 2016 resulted in a translation loss of $1.4 million being recorded to the cumulative translation adjustments shareholders' equity account during the six months ended June 30, 2016, compared to a loss of $19.7 million during the same period in 2015. The translation loss during the first half 2015 was primarily related to the strengthening of the U.S. dollar against the euro.

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COMMITMENTS AND CONTINGENCIES

We made contributions of $3.1 million to our pension plans during the six months ended June 30, 2016. We expect to make total contributions of approximately $6.2 million to our pension plans in 2016 which are primarily associated with our International segment.

The Company had outstanding bank guarantees and standby letters of credit with banks as of June 30, 2016 totaling $7.8 million, of which $3.7 million related to the senior revolving credit facility. These letters of credit serve to cover customer requirements in connection with certain sales orders and insurance companies. No amounts were drawn on these arrangements at June 30, 2016. The Company is also required to provide cash collateral in connection with certain arrangements. At June 30, 2016, the Company has $1.0 million of restricted cash in support of these arrangements.

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

Please refer to Note 18 to the Condensed Consolidated Financial Statements in Part I Item 1 of this Form 10-Q for further discussion on the Company's product liabilities.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We prepare our consolidated financial statements in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosures. We evaluate these estimates and judgments on an on-going basis based on historical experience and various assumptions that we believe to be reasonable under the circumstances. However, different amounts could be reported if we had used different assumptions and in light of different facts and circumstances. Actual amounts could differ from the estimates and judgments reflected in our consolidated financial statements.

The more critical judgments and estimates used in the preparation of our consolidated financial statements are discussed in Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2015.

RECENTLY ADOPTED AND RECENTLY ISSUED ACCOUNTING STANDARDS

Please refer to Note 2 to the Condensed Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

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

Currency exchange rate sensitivity. We are subject to the effects of fluctuations in currency exchange rates on various transactions and on the translation of the reported financial position and operating results of our non-U.S. companies from local currencies to U.S. dollars. A hypothetical 10% strengthening or weakening of the U.S. dollar would decrease or increase our reported sales and net income by approximately $13.5 million and $1.0 million, respectively, for the three months ended June 30, 2016.

When appropriate, we may attempt to limit our transactional exposure to changes in currency exchange rates through contracts or other actions intended to reduce existing exposures by creating offsetting currency exposures. At June 30, 2016, we had open foreign currency forward contracts with a U.S. dollar notional value of $67.8 million. A hypothetical 10% increase in June 30, 2016 forward exchange rates would result in a $6.8 million increase in the fair value of these contracts.

Interest rates. We are exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. Because of the relatively short maturities of temporary investments, these financial instruments are reported at carrying values that approximate fair values.

At June 30, 2016, we had $213.1 million of fixed rate debt which matures at various dates through 2031. The incremental increase in the fair value of fixed rate long-term debt resulting from a hypothetical 10% decrease in interest rates would be approximately $16.4 million. However, our sensitivity to interest rate declines and the corresponding increase in the fair value of our debt portfolio would unfavorably affect earnings and cash flows only to the extent that we elected to repurchase or retire all or a portion of our fixed rate debt portfolio at prices above carrying values.

At June 30, 2016, we had $242.5 million of variable rate borrowings under our revolving credit facility. A 100 basis point increase or decrease in interest rates could impact our future earnings under our current capital structure.

Item 4. Controls and Procedures

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

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

PART II. OTHER INFORMATION

Item 1A. Risk Factors

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

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

In the normal course of business, one of our subsidiaries, Mine Safety Appliances Company, LLC ("MSA LLC"), makes payments to settle product liability claims and for related defense costs, and records receivables for the amounts believed to be recoverable under insurance. MSA LLC has recorded insurance receivables totaling $248.2 million at June 30, 2016. As described in greater detail in Note 18 to our unaudited condensed consolidated financial statements included in this report, MSA LLC is currently involved in insurance coverage litigation regarding the rights and obligations of numerous insurance policies, and for amounts recorded as insurance receivables. Various factors could affect the timing and amount of recovery of insurance receivables, including: the outcome of coverage litigation, the outcome of negotiations with insurers, and the extent to which insurers may become insolvent in the future. Failure to recover amounts due from MSA LLC’s insurance carriers would result in it being unable to recover amounts already paid to resolve claims (and recorded as insurance receivables) and could have a materially adverse effect on our business, consolidated operating results, financial condition and liquidity.

At some point in the next few years, even if insurance coverage litigation is generally successful, MSA LLC will become largely self-insured for costs associated with cumulative trauma product liability claims. The exact point when this transition will happen is difficult to predict and subject to a number of variables, including the pace at which future cumulative trauma product liability costs are incurred and the results of litigation and negotiations with insurance carriers. After it becomes largely self-insured, MSA LLC may still obtain some insurance reimbursement from negotiated coverage-in-place agreements (although that coverage may not be immediately triggered or accessible) or from other sources of coverage. However, the precise amount of insurance reimbursement available at that time cannot be determined with specificity today.

As discussed in greater detail in Note 18 to our unaudited condensed consolidated financial statements included in this report, subsidiary MSA LLC recently had an adverse verdict entered against it in a product liability lawsuit involving cumulative trauma exposure to coal dust. MSA LLC is appealing the verdict. Companies faced with multiple mass tort lawsuits can experience an increase in newly filed claims, more aggressive demands from plaintiffs in settlement negotiations or a greater inclination by plaintiffs to pursue judicial trials of certain claims in periods immediately following the incurrence of an adverse verdict. Should MSA LLC have a similar experience, its product liability settlement and defense costs could increase in the future, and such events could also accelerate the point at which MSA LLC becomes self-insured for cumulative trauma product liability claims.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds
(c) Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased As Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs
April 1 - April 30, 2016	353	$ 45.18	—	1,931,721
May 1 - May 31, 2016	192	48.09	—	1,844,281
June 1 - June 30, 2016	569	51.33	—	1,768,445

In 2015, The Board of Directors adopted a stock repurchase program. The program authorizes up to $100.0 million in repurchases of MSA common stock in the open market and in private transactions. The share purchase program has no expiration date. The maximum shares that may be purchased is calculated based on the dollars remaining under the program and the respective month-end closing share price.
Shares purchased during the quarter relate to stock compensation transactions.
We do not have any other share repurchase programs.
Item 6. Exhibits
(a) Exhibits

31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. (S)1350
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURE

Pursuant to the requirements 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.

MSA SAFETY INCORPORATED

August 9, 2016 /s/ Kenneth D. Kraause

Kenneth D. Krause
Vice President of Finance and Chief Financial Officer
Duly Authorized Officer and Principal Financial Officer